МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ ДЕРЖАВНА ЛЬОТНА АКАДЕМІЯ УКРАЇНИ

Авіаційна англійська мова для льотного складу

навчальний посібник

Кіровоград – 2006

Авіаційна англійська мова для льотного складу, що виконує польоти на МПЛ / Укладачі Вітряк А.М. Омельяненко Н.В., Гріденко Н.О., Семенюк Н.Г.// За редакцією Вітряка А.М. – Кіровоград, 2006. - 215 с.

Навчальний посібник є результатом багаторічної праці фахівців кафедри іноземних мов Державної льотної академії України по створенню навчальнометодичного комплексу.

В основу комплексу укладено принцип багаторівневої підготовки авіаційних спеціалістів з надійного ведення радіообміну англійською мовою у міжнародних аеропортах і на міжнародних авіалініях.

Навчально-методичний комплекс передбачає послідовну підготовку за п'ятьма основними блоками: загальній англійській мові, авіаційній англійській мові, професійно-орієнтованій, авіаційній фразеології, матеріалами фірми Джеппесен.

Навчальний посібник призначений для підготовки льотного складу, що виконує польоти на МПЛ. Він містить матеріали фірми Джеппесен та вправи до них. Посібник складається з 8 глав.

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UNIT 1 ENTRY REQUIREMENTS PART 1

Exercise 1

Read the ENTRY REQUIREMENTS for LITHUANIA and translate them into your language. Use the word list given after the document.

LITHUANIA

1. AIRCRAFT ENTRY REQUIREMENTS:

Permission is required for all aircraft intending to operate within Lithuanian airspace. Enterprises, organizations and other legal representatives and individuals, who are interested in using the airspace, should submit a request for airspace use (a schedule, a request, a plan, a table) in accordance with established forms to the Civil Aviation Department of the Ministry of Transport of the Lithuanian Republic (CAD), Gedimino Av. 17, 2679 Vilnius, Lithuania; Telephone/-fax: (370-2) 225082,

AFTN: EYVAYAYX,

and to Directorate of Civil Aviation of the Lithuanian Republic (DCA),

Airport, Rodunes K.2, 2023 Vilnius, Lithuania;

Telephone/-fax: (370-2) 263483

Telex: 261165 VILIA,

AFTN: EYVLZDZX, EYVLZGZX.

Requests shall be submitted before the beginning of planned flights as follows:

- a) for operating a special flight, such as government flights or military aircraft flights of States, which have no diplomatic relations with the Lithuanian Republic - not later than 5 working days prior;
- b) flight schedules of all airlines not later than 30 working days before the beginning of the season;
- c) permanent changes of an approved flight schedule not later than 7 working days prior;
- d) a single change of an approved flight schedule with respect to each individual flight - not later than 30 minutes prior in form of a flight plan on ATC communication channels;
- e) for operating a non-scheduled commercial flight not later than 5 working days prior;
- f) for operation of a general aviation flight 24 hours but not later than 12 hours prior.

The request for operating a flight and making a landing on Lithuanian territory shall contain the following details in the order listed:

- Name and address of the person/operator submitting the request;
- A: State of registry and aircraft type;

B: Aircraft identification;

- C: Pilot-in command's surname;
- D: Aerodrome of departure and time (UTC);
- E: Date, time (UTC) and entry point in Lithuanian Rep. airspace;
- F: Flight route within Lithuanian airspace;
- G: Destination aerodrome;

Items H to L are not filled in if a transit flight is planned without landing on Lithuanian aerodromes.

- H: Estimated time of arrival (UTC);
- I: Date of return or flight continuation;
- J: Estimated time of departure;
- K: Flight route;
- L: Destination aerodrome;
- M: Estimated time (UTC) and exit point from the Lithuanian Rep. airspace;
- N: Objective of the flight;
- O: Communication, navigation equipment;
- P: Availability of arms, photographic equipment aboard;
- R: Additional data;

Note: Under this item the method of payment for air navigation services or a juridical operator's address is to be indicated.

- Responsible person, signature and surname.

If requests for carrying out flight activities are cancelled the "DCA" shall be informed immediately.

2. AIRPORTS OF ENTRY:

Kaunas Intl, Palanga Intl, Siauliai Intl, Vilnius Intl.

3. SPECIAL NOTICES:

- a) Flights of aircraft not equipped with radio communication facilities are prohibited within Lithuanian airspace.
- b) For flights of aircraft not equipped with an SSR transponder a special permission from the "DCA" is required.

WORD LIST

(in) accordance with	[E7kO:dEns]	в соответствии с
additional data	[E7diSEnl 7deitE]	дополнительные сведе- ния
approved flight schedule	[E7pru:vd]	утведжденное расписа- ние полетов
arms	[a:mz]	вооружение, оружие
as follows	[Ez 7fOlouz]	следующее, в следую- шем виле

availability	[E6veilE7biliti]	наличие
carry out	[7kXri6aut]	ВЫПОЛНЯТЬ
contain	[kEn7tein]	содержать
DCA (Department of Civil Aviation)		Управление гра- жданской авиации (МНПО)
diplomatic relations	[6diplE7mXtik ri7leiSn]	дипломатические отно- шения
enterprise	[7entErpraiz]	предприятие
entry point	[7entri 7pOint]	точка входа
equip	[i7kuip]	оборудовать
established form	[is7tXbliSt]	установленная форма
exit point	[7eksit, 7egzit]	точка выхода
fill in	[7fil 6in]	заполнять
flight continuation	[7flait kEn6tin- ju7eiSn]	продолжение полета
government flight	[7gVvEnmEnt 7flait]	правительственный по- лет
indicate	[7indikeit]	указывать
(be) interested	[7intErEstid]	быть заинтересован- ным
Intl (International)		международный
juridical	[d3uE7ridikl]	юридический
legal	[7li:gEl]	легальный, законный, юридический, узако- ненный
notice	[7nEutis]	замечание, примечание
objective of the flight	[Eb7d3ektiv]	цель полета
(in) order listed	[70:dE7listid]	в порядке перечисле- ния
payment	[7peimEnt]	оплата
permanent changes	[7pE:mEnEnt 7tSeind3- iz]	постоянные изменения
permission	[pE7miSn]	разрешение
pilot-in-command	[7pailEt 6in kE7ma:nd]	командир корабля

prior	[praiE]			до, раньше, прежде
prohibit	[prE7hibi	t]		запрещать
representative	[6repri7z	entEt	iv]	представитель
(with) respect to	[ri7spekt]		что касается
responsible	[ri7spOns	ibl]		ответственный
signiture	[7signEtS]	E]		подпись
state of registry	[7steit tri]	6Ev	7red3is-	государство регистра- ции воздушного судна
submit	[sEb7mit]			представлять на рассмотрение

Give the English equivalents in the text:

Представитель, установленная форма, утвержденное расписание полетов, в порядке перечисления, командир корабля, в соответствии с, государство регистрации воздушного судна, дополнительные сведения, дипломатические отношения, продолжение полета, ответственный, постоянные изменения, точка входа.

Exercise 3

What do the following abbreviations stand for?

DCA, UTC, SSR, AFTN, CAD

Exercise 4

True or false?

The request for operating a flight shall contain the following details:

- Name and address of the person answering the request.
- State of registry and aircraft callsign.
- Aircraft identification.
- Pilot -in-command's surname and first name.
- Base aerodrome and time of departure (UTC).
- Time (UTC) and entry point in Lithuanian Rep. airspace.
- Flight route within Lithuanian airspace.
- Destination aerodrome.
- Date of return or flight continuation.
- Slot time.
- Number of people on board and the objective of the flight.
- Navigation equipment.
- Availability of arms and photographic equipment on board.

Exercise 5

Answer the questions:

- 1. Is the permission necessary for all the aircraft?
- 2. What should the legal representatives submit?
- 3. Must the requests be submitted before or during the planned flights?

- 4. How many days prior must the states which have no diplomatic relations with the Lithuanian Republic submit their requests for operating a government flight?
- 5. Which flights is it necessary to coordinate with the Lithuanian authorities not later than 30 working days before the beginning of the season?
- 6. What is the usual procedure to make a single change of an approved flight schedule?
- 7. Is it possible to make permanent changes of an approved flight schedule 5 days prior?
- 8. Is there any difference in the procedures between a non-scheduled commercial flight and a general aviation flight?
- 9. What are the airports of entry in Lithuania?

Give the synonyms for:

Permission, enterprise, schedule, submit, approved, non-scheduled, prior, aircraft identification, objective, responsible person.

Exercise 7

Which elements do the following words consist of? What parts of speech are they? Find in the dictionary the related words.

Representatives, accordance, government, navigation, availability, equipped, prohibited, required.

Exercise 8

What parts of speech are the underlined words in the following sentence fragments?

- a) for <u>operating</u> a special flight _____.
- b) aircraft intending to operate _____.
- c) for airspace <u>use</u> _____.
- d) permanent <u>changes</u> _____.

Exercise 9

Make up sentences using the following words:

- a) within, intending, permission, aircraft, all, for, airspace, operate, Lithuanian, to, required, is;
- b) submit, organizations, should, use, for, request, a, airspace;
- c) equipped, facilities, prohibited, radio, not, flights, are, aircraft, airspace, within, Lithuanian, of, with, communication;

Exercise 10

Fill in the gaps choosing the necessary word:

a) Permission is ____ for all aircraft ____

(asked, required, granted, formulated)

b) Enterprises, organizations and other ____ representatives and individuals ____. (necessary, official, legal, state)

c) If request for carrying out flight activities are ____ the DCA shall be informed immediately.

(cancelled, approved, established, added)

- d) Flights of aircraft not _____ with an SSR transponder a special permission is required.
 - (used, established, permitted, equipped)
- e) The request for _____ a flight shall contain the following details. (operating, following, proceeding, making)
- f) Individuals who are interested in ____ the airspace ____ . (carrying out, forming, giving, using)

Exercise 11

Fill in the gaps in the following sentences:

- a) Requests shall _____ before the beginning of planned flights.
- b) If request for carrying out flight activities _____ the DCA shall _____ immediatelly.
- c) For flights of aircraft ____ with a SSR transponder ____ a special permission from the DCA ____.

Exercise 12

Make up your own sentences using the following words:

Permanent changes, government flight, to fill in, objective of the flight, availability, arms, to contain, notice, to equip, to prohibit, signature, payment.

PART 2

Exercise 1

Read and translate the ENTRY REQUIREMENTS for UNITED ARAB EMIRATES. Use the WORD LIST after of the document.

UNITED ARAB EMIRATES

1. PASSPORT:

Required.

2. **VISA:**

Required.

NOTE: Licenses and crew member certificates are accepted in lieu of passport and visa, provided that the holder will stay at the airport or within the confines of the cities adjacent thereto and that he will depart on his next regularly scheduled flight.

3. HEALTH:

Valid vaccination certificates are required as follows:

- a) ABU DHABI:
 - yellow fever, when arriving from, or via, infected local areas;
 - cholera, when arriving from infected local areas.
- b) DUBAI:
 - smallpox;
 - yellow fever, plague, cholera, typhus or relapsing fever, when arriving from an infected area.
- c) FUJAIRAH:
 - yellow fever, plague, cholera, typhus or relapsing fever, when arriving from an infected area;
- d) RAS AL KHAIMAH:
 - yellow fever, plague, cholera, typhus or relapsing fever, when arriving from an infected area;
- e) SHARJAH:
 - yellow fever, when arriving from, or via, infected local areas;
 - cholera, when arriving from infected local areas.

4. AIRCRAFT ENTRY REQUIREMENTS:

a) Scheduled Air Traffic

Scheduled operation are governed by bilateral or multilateral agreements or by special authorization.

b) Non-Scheduled Air Traffic

No prior permission is required for over-flights or non-traffic stops it the aircraft is registered in ICAO-member states.

Commercial landings require prior permission. Application shall be sent at least two clear working days in advance to the following address:

Abu Dhabi:

The Undersecretary Department of Civil Aviation, P.O. Box 20, Abu Dhabi, U.A.E.; Telefax: (02) 757285, Telex: 24406 ABUDCA EM, AFTN: OMAAYAYX, Telegraphic address: CIVILAIR ABU DHABI. **Dubai:** The President Department of Civil Aviation, P.O. Box 2525, Dubai, U.A.E.; Telefax: (04) 246074, Telex: 46678 CIVAN EM, AFTN: OMDBYAYX, Telegraphic address: CIVILAIR DUBAI. Fujairah: The Chairman, Department of Civil Aviation, P.O. Box 977, Fujairah, U.A.E.; Telefax: (09) 224205, Telex: 89080 FJRDCA EM, AFTN: OMFJYAYX, Telegraphic address: CIVILAIR Fujairah. **Ras al Khaimah:** The Chairman, Department of Civil Aviation P.O. Box 501, Ras al Khaimah, U.A.E; Telefax: (07) 448199, AFTN: OMRKYAYX, Telegraphic address: CIVILAIR Ras AL Khaimah. Sharjah: The Director of Civil Aviation P.O. Box 8, Sharjah, U.A.E.; Telefax: (06) 581167, Telex: 68185 AIRPT EM, AFTN: OMSJYAYX, Telegraphic address: CIVILAIR Sharjah. The application shall include the following information: - name of operator;

- type of aircraft and registration marks;

- date and time of intended arrival and departure;
- duration of stay;
- places of embarkation or disembarkation abroad of passengers and/or freight;
- purpose of flight and number of passengers and/or nature and amount of freight;
- name, address and business of charterer, if any.

Non-traffic operation over or into the territory of the U.A.E. by aircraft of non-ICAO States require prior permission which may be obtained by applying the same procedure as specified for commercial landings.

c) Private Flights

For flights by aircraft registered in ICAO States the information contained in the filed flight plan is accepted as adequate information of the intended operation (in case of Abu Dhabi at least 2 hours, for Dubai at least 24 hours prior to arrival) and the landing is carried out at a previously designated airport.

Flights by aircraft registered in non-ICAO States require prior permission as specified for non-scheduled flights.

d) Flights of Military, State and State VIP Aircraft

All foreign military, State and State VIP aircraft intending to ovefly U.A.E. airspace or land at any of the U.A.E. airports have to obtain prior permission (Diplomatic Clearance) through the Ministry of Foreign Affairs. Requests must be received at least two weeks in advance except in cases of emergency where a minimum of 72 hours notice is required.

Applications for clearance should be made to the Ministry of Foreign Affairs U.A.E, through the normal diplomatic channels, Telex: 22217 KARJIA EM, Telefax: (02) 668015.

All requests should include:

- aircraft type, registration and call sign;
- captain's name, details of crew and nationalities;
- purpose of flight;
- cargo and passenger details;
- whether or not armament and/or camera carried and details of dangerous cargo, if any;
- date, time and place of departure;
- altitude and aircraft speed;
- route, time and place of entry into U.A.E. airspace;
- ETA at landing airport in U.A.E. and destination;
- in the case of overtflight: date, time and entry into U.A.E. airspace; route; date, time and exit from U.A.E. airspace.

5. AIRPORTS OF ENTRY:

Aircraft shall first land at and finally depart from an international airport.

6. SPECIAL NOTICES:

No aircraft constructed in Israel or departing from airports in Israel will be allowed to service, refuel or land at any airport or aerodrome within Emirates FIR, nor will any aircraft be cleared from any airport or aerodrome within the Emirates FIR to any airport in Israel.

WORD LIST

accept	[Ek7sept]	принимать
(in) advance	[Ed7va:ns]	заранее
adjacent	[E7d3eisEnt]	примыкающий, смежный, соседний
agreement	[E7gri:ment]	соглашение
amount	[E7maunt]	количество
application	[6Xpli7keiSn]	прошение, заявление, заявка
authority concerned	[O:7QOrEtikEn7sE:nd]	соответствующая адми- нистрация (орган); орган, имеющий отношение к
authorization	[60:QErai7zeiSn]	санкция, разрешение, уполномочивание
aviation authority	[6eivi7eiSn O:7QOrEti]	авиационная администра- ция ОАЭ
bilateral	[bai7lXtErEl]	двусторонний
(in) cases of emergency	[i7mE:d3Ensi]	в случаях крайней необ- ходимости
certificate	[sE7tifikEt]	сертификат, удостовере- ние
charterer	[7tSa:tErE]	фрахтователь (заказчик)
cholera	[7kOlErE]	холера
(within the) confines of	[kEn7fainz]	в пределах
crew member	[7kru: 6membE]	член экипажа
dangerous	[7deind3ErEs]	опасный
designated airport	[7dezigneitid]	намеченный (указанный) аэропорт
Diplomatic Clearance		дипломатическое разре- шение
disembarkation	[6disemba:7keiSn]	высадка пассажиров (раз- грузка)
duration of stay	[dju7reiSn]	продолжительность пре- бывания
embarkation	[im7ba:keiSn]	отправление (в рейс), по- садка (пассажиров), по-

		грузка
except	[ik7sept]	кроме, за исключением
freight	[freit]	груз
holder	[houldE]	владелец, держатель
however	[hau7evE]	однако
govern	[7gVvEn]	регулировать
infected local areas	[in7fektid]	зараженные местные рай- оны
intended flight	[in7tendid]	планируемый полет
(at) least	[li:st]	по крайней мере
license	[7laisns]	свидетельство, допуск, разрешение, лицензия
(in) lieu of	[lju:]	вместо
multilateral	[6mVlti7lXtErEl]	многосторонний
nature of freight	[7neitSE]	тип груза (происхо- жде-ние груза)
non-scheduled air traffic	[6non7Sedju:1]	рейсы вне расписания (нерегулярные)
non-traffic stop	[6nOn7trXfik 7stOp]	остановка с некоммерче- скими целями
operation	[60pE7reiSn]	зд. полет
overflight	[7ouvEflait]	пролет
plague	[pleig]	чума
previously	[7pri:viEsli]	заранее, предварительно
private flights	[/praivit]	частные полеты
provided	[prE/vaidid]	при условии, в том слу- чае
purpose of flight	[7pE:pEs]	цель полета
refuel	[6ri:7fju:El]	заправка
relapsing fever	[ri/lXpsiN/fi:vE]	возвратный тиф
respective	[ris/pektiv]	соответственный
scheduled air traffic	[7Sedju:1]	рейсы по расписанию (регулярные)
smallpox	[7smOlpoks]	оспа
(as) specified	[7spesifaid]	указанных, отмеченных
stay	[stei]	оставаться

suffice	[sE7fais]	быть достаточным, хва- тать, удовлетворять
thereto	[69BE7tu:]	к тому, у этому, туда
typhus	[7taifEs]	сыпной тиф
vaccination	[6vXksi7neiSn]	вакцинация, прививка
valid	[7vXlid]	действительный
visa	[7vi:zE]	виза
yellow fever	[7jelou7fi:vE]	желтая лихорадка

Give the English equivalents for:

Свидетельство (лицензия), холера, двусторонний, пролет, чума, остановка с некоммерческими целями, регулировать, санкция, оспа, прививка, заранее, заправка, намеченный аэропорт, продолжительность пребывания, тип груза, в случае крайней необходимости, быть достаточным, заранее, погрузка, разгрузка, планируемый полет, желтая лихорадка, тиф.

Exercise 3

What do the following abbreviations stand for?

ICAO, UAE, FIR, EAT, ETA, VIP.

Exercise 4

True or false?

Valid vaccination certificates are required as follows:

- Abu Dhabi: yellow fever and small pox.
- Dubai: only plague, cholera and typhus.
- Fujairah: yellow and relapsing fever and some other diseases.
- Ras Al Khaimah: yellow fever, plague, cholera, typhus or relapsing fever whichever the departing aerodrome may be.
- Sharjah: yellow fever and cholera.

The request should include:

- Details of crew and nationalities.
- No cargo and passenger details.
- Whether or not some armament and camera are carried.
- Only route and time of entry into UAE airspace.
- EAT of the aircraft.

Exercise 5

Answer the questions:

- 1. Are passports required for all the crew members?
- 2. What papers are accepted instead of a passport and visa?

- 3. What kind of certificates are also required?
- 4. Which documents are the scheduled operations governed by?
- 5. Is the prior permission required for overflights or non-traffic stops for all the aircraft?
- 6. How long in advance should the application be sent for the aircraft intending to make commercial landings?
- 7. What kind of information should the application include?
- 8. Where is all the necessary information for private flights by aircraft registered in ICAO contained?
- 9. What is the English term for the permission which military aircraft should obtain before overflying UAE airspace?
- 10. How should the application for clearance be made?
- 11. What are the restrictions for the aircraft constructed in Israel or departing from airports in Israel?
- 12. Where may the aircraft first land at and finally depart from?

Give the synonyms for:

In lieu of, provided that _____, confine, adjacent, (scheduled) operations, authorization, permission, overflight, in advance, purpose, traffic operations, to carry out, camera.

Exercise 7

Which elements do the following words consist of? What parts of speech are they? Find in the dictionary the related words.

Certificates; regularly; infected; relapsing; argument; application; commercial; contained; received.

Exercise 8

What parts of speech are the underlined words in the following sentence fragments?

- a) <u>infected</u> local areas;
- b) the information <u>contained</u> in the flight plan;
- c) ____ may be obtained by <u>applying</u> the same procedure;
- d) _____ the landing is carried out at a <u>previously</u> designated airport;
- e) 72 hour <u>notice;</u>
- f) two clear <u>working</u> days.

Exercise 9

Make up sentences using the following words:

a) Airport, the, landing, out, a, previously, carried, designated, is, at;

- b) to, prior, intending, aircraft, have, permission, to, foreign, obtain, all, UAE, air-space, overfly, military;
- c) foreign, applications, to, of, affairs, the, made, clearance, be, for, should, ministry;
- d) permission, commercial, prior, require, landings;
- e) and, visa, licenses, of, passport, are, in, lieu, accepted.

Fill in the gaps choosing the necessary word:

- a) Licenses are accepted _____ of passport ans visa. (because, in lieu, adequate, prior)
- b) The landing is carried out at a <u>designated airport</u>. (prior, emergency, regularly, previously)
- c) The _____ shall include the following information: name of operator etc. (application, certificate, operation, permission)
- d) No aircraft ____ in Israel will be allowed to service within Emirates FIR. (bought, seen, constructed, applied)

Exercise 11

Fill in the gaps in the following sentences:

- a) The holder will stay at the airport or _____ the confines of the cities.
- b) He will depart on his next regularly _____ flight.
- c) Valid _____ certificates are required when ariving from _____ local areas.
- d) Scheduled _____ are governed by bilateral or _____ agreements.
- e) _____ shall be sent at least two clear working day in advance.
- f) The information _____ in the flight plan is accepted as adequate information.

Exercise 12

Make up your own sentences using the following words:

Small pox, to govern, agreement, plague, valid, vaccination, holder, to accept, crew member, license, at least, in advance, freight, charter, application.

PART 3

Exercise 1.

Read the ENTRY REQUIREMENTS for COLOMBIA and translate them into your language. Use the word list given after the document.

COLOMBIA

1. PASSPORT AND VISA

No documents or visas are required of passengers arriving or departing on the same through flight or transferring to another flight at the same or a nearby airport. If travel to another city is necessary, a provisional permit of transit will be issued.

Temporary visitors must be in possession of a valid passport from the country of origin and a visa. A tourist or transit card and a return ticket to the country of origin are also required.

Exceptions to the above requirements are:

- (a) Laissez Passer issued by the United Nations.
- (b) Official document of travel given by OEA.
- (c) Colombia official document of travel given to foreigners living in Colombia.
- (d) Certificate or license as a member of a crew for regular airline service.

Aircraft crew members of a regular airline service, while on duty, may use their licenses in lieu of a passport. This provision applies only if there is a reciprocal privilege for Colombian air crews between the country of origin and Colombia.

Crew members entering Colombia by other means of transport to join the regular air crew of an aircraft, must have the same documents that are required of arriving passengers.

2. HEALTH

Vaccination certificates are not required for cholera, yellow fever or viruela unless coming from an infected area. However, yellow fever vaccinations are recommended for all travelers to most rural areas of the Country, except for extreme southwestern Colombia. The U.S. Public Health Service advises that malaria (including chloroquine resistant P. Falciparum) exists in all parts of the country below 800 meters, except for the city of Bogota.

3. OTHER

A tourist card, valid for 90 days, and 2 photographs are required.

4. EMBASSY INFORMATION

A. COLOMBIA'S EMBASSY IN THE UNITED STATES

ADDRESS: Embassy of Colombia, 2118 Leroy Place, N.W., Washington, D.C. 20008. TELEPHONE: (202) 387-8338

B. UNITED STATES EMBASSY IN COLOMBIA

ADDRESS: Calle 38, 8-61, Bogota, Colombia TELEPHONE: 285-1300/1688 TELEX: 44843 PUBLIC HOURS: 8:00 am to 5:00 pm.

5. AIRCRAFT ENTRY REQUIREMENTS

A. GENERAL

All flights to, from, or over the territory of Colombia and landings in such territory will be conducted in conformity with the civil aviation regulation in effect in Colombia. Aircraft landing or departing the territory of Colombia must first land at or finally depart from an international airport. (see para. 7 AIRPORTS OF ENTRY)

B. SCHEDULED FLIGHTS

- (1) Regular, scheduled international flights operated by foreign airlines into or in transit through Colombia must comply with the following requirements:
 - (a) If the State of the airline has an existing treaty with Colombia, then all aspects of the flight, both administrative and operational, will first be subject to the agreement in effect and then subject to Colombian rules and regulations.
 - (b) When there is no treaty or agreement with the State of the airline, the principle of reciprocity prevails when considering a permit for operations.
 - (c) All requests for permission to operate regular scheduled flights must be presented to the Departmento Administrativo de Aeronautica Civil.
 - (d) All contracting states of the Convention on International Civil Aviation (Chicago 1,944) with regular commercial aircraft without traffic rights in Colombia, may overflight Colombian territory mak-

ing technical stops, without commercial purposes, provided they have filed a flight plan in advance. All technical stop must be at an International airport as listed under paragraph 7.

AIRPORTS OF ENTRY.

(2) Documentary Requirements for Clearance of Aircraft

(a) It is necessary that the following documents be presented by the operators of the airline company for clearance to enter or depart Colombia. All documents must use the ICAO format shown in the *Appendixes to Annex 9, and written in legible form in Spanish.

(b) Aircraft Documents Required (Arrival/Departure)

Required for:	General declaration	Passengers manifest	Cargo manifest
Immig. Police	-	1	-
Customs	2	1	8*

*When the cargo is to transfer at the same airport, four (4) copies.

NOTES:

- 1. Customs endorses and returns one copy of the General Declaration authorizing the dispatch.
- 2. If no passenger is boarded or deplaned, or if no merchandise is loaded or unloaded, it is not necessary to present the aircraft documents to the authorities mentioned above except the copies of the General Declaration.

(3) Public Health Measures Applied to Aircraft

Aircraft arriving from areas considered to be epidemic may be required to be sterilized immediately upon arrival. Normally, health inspections are conducted when the cargo consists of food, biological and pharmaceutical products.

C. NON SCHEDULED FLIGHTS

All Contracting States of the Convention on International Civil Aviation (Chicago 1944) with non-scheduled commercial aircraft without traffic rights in Colombia, may overfly Colombian territory making technical stops, without commercial purposes, provided they have filed a flight plan in advance. All technical stops must be at an International airport as listed under paragraph 7. AIRPORTS OF ENTRY.

(1) **Documentary Requirements for Clearance of Aircraft** Same requirements as B.(2)(a)(b).

(2) **Public Health Measures Applied to Aircraft** Same requirements as B.(3).

D. PRIVATE FLIGHT

(1) **Notification Prior to Arrival**

All contracting states of the Convention on International Civil Aviation (Chicago 1944) with private registered aircraft without traffic rights in Colombia, may overfly Colombian territory making technical stops, without commercial purposes, provided they have filed a flight plan in advance. All technical stops must be at an International airport as listed under paragraph 7. AIRPORTS OF ENTRY.

(2) **Documentary Requirements for Clearance of Aircraft.**

Same requirements as B.(2) (a)(b).

6. SPECIAL NOTICES

A. All itinerant aircraft stopping in Colombia

must obtain a temporary import permit. Failure to meet this requirement may result in the aircraft being impounded. The following steps are required before permission will be granted for a plane to exceed the 5 day limit:

- (1) obtain authorization from the Departamento Administrativo de Aeronautica Civil for the aircraft to remain in Colombia, including the duration and location of stay;
- (2) obtain authorization from customs authorities for the temporary importation of the aircraft, including duration of stay which may not exceed 90 day; and
- (3) supply the customs authorities with a bond issued by a Colombian bank or insurance company.
- B. Aircraft overflying Colombia airspace without landing are subject to an overflight service fee with the exception of private aircraft on tourist flights, passengers of which should have tourist cards or other proof of tourist status.
- C. Pilots of arriving flights are to report to the Aerodrome Administration upon arrival.
- D. Pilots should be prepared to properly respond to international interception signals from Colombian Air Force interception signals since the Air Force is prepared to fire upon aircraft failing to heed these instructions. Passport, airmen certificates, airworthiness certificates, proof of owner-

ship or lease agreement, manifest and name of consignee, if applicable, must be available in the aircraft.

E. **Non-scheduled flights** to Colombia will be routinely rejected while the state of siege, directed at narcotics trafficking, is in effect.

WORD LIST

apply	[E7plai]	применять, являться при- емлемым
agreement in effect	[E7gri:ment]	действующее соглашение
applicable	[7XplikEbl, E7plikEbl]	применимый, пригодный, подходящий
airworthiness	[7BEwE:7Einis]	летная годность
authorize	[70:QEraiz]	уполномачивать, пору- чать, санкционировать, разрешать
bond	[bOnd]	таможенная закладная
chloroquine resistant	[7klOrEkwain ri7zist- Ent]	стойкий к хлорхинину
conduct	[kEn7dVkt]	осуществлять, выполнять
(in) conformity with	[kEn7fO:miti]	в соответствии с
considering	[kEn7sidEriN]	учитывая, принимая во внимание
consignee	[6kOsai7ni:]	грузополучатель
contacting states of the Convention on International Civil Aviation (Chicago 1944)		государства, подписав- шие Конвенцию о Меж- дународной гражданской авиации (Чикаго 1944)
country of origin	[7Orid3in]	страна, из которой при- был
deplane	[6di:7plein]	производить высадку из воздушного судна
dispatch	[dis7pXtS]	отправка, отправление
embassy	[7embEsi]	посольство
endorse	[in7d0:s]	расписываться на оборо- те документа

exceed	[ik7si:d]	превышать, превосходить
exception	[ik7sepSn]	исключение
exist	[ig7zist]	существовать
extreme	[ik7stri:m]	крайний
foreigner	[7fOrEnE]	иностранец
heed	[hi:d]	обращать внимание, вни- мательно следить
impound	[im7paund]	конфисковать, заключать, запирать
including	[inklu:diN]	включая
insurance company	[in7SuErns7kVmpEni]	страховая компания
issue	[7iSu:,7isju:]	выдавать, издавать
itinerant	[ai7tinErEnt]	маршрутный
Laissez Passer	[7leisei]	пропуск без ограничений
lease agreement	[li:s]	договор об аренде воз- душных судов
legible	[7led3Ebl]	разборчивый, четкий
malaria	[mE7lBEriE]	малярия
means of transport	[7mi:nz6Ev7trXnsp0:t]	средство транспорта
measure	[7me3E]	мера
mention	[7menSn]	упоминать, называть
merchandise	[7mE:tSEndaiz]	товары
narcotics trafficking	[na:7kOtiks7trXfikiN]	торговля наркотиками
nearby	[7niEbai]	близкий, соседний
notification	[6noutifi7kEiSn]	извещение, сообщение, предупреждение
overflight service fee	[7ouvEfliait7sE:vi s7fi:]	сбор за обслуживание пролета
passenger manifest	[7pXsind3E7mXnifest]	пассажирская декларация
P. Falciparum		один из возбудителей ма- лярии
(in) possession of	[pE7zESn]	владеющий (чемл.)
principle of recipro- city	[7prinsEpl 6Ev6 resi7- prOsiti]	принцип обратимости

provision	[nrF7wi3n]	VALADUA
provision		условие
provisional	[prE7vi3Enl]	временный
proof	[pru:f]	доказательство
properly	[7prOpEli]	правильно
reciprocal	[ri7siprikEl]	обратный
regulations in effect	[6regju7leiSnz]	действующие правила, предписания
reject	[ri7d3ekt]	отвергать, отказывать
routinely	[ru:7ti:nli]	в установленном порядке
rural areas	[7ruErEl]	сельские местности
siege	[7si:d3]	осада
subject to	[7sVbd3ikt]	подчиненный, подвласт- ный, подлежащий
supply	[sE7plai]	снабжать
temporary	[7tempErEri]	временный
treaty	[7tri:ti]	договор
(the) United Nations	[ju:7naitid 7neiSEnz]	Организация Объедин- ненных Наций

Find the English equivalents in the text:

Временный, условие, средство транспорта, малярия, посольство, выдавать, пропуск без ограничений, владеющий, стойкий к хлорхинину, преимущество, товары, снабжать, четкий, расписываться на обороте документа, таможенная закладная, конфисковать, принцип обратимости, учитывая, превышать, действующие правила, грузополучаталь, договор об аренде воздушных судов.

Exercise 3

True or false?

- 1. Visas are required of pessengers transferring to another flight at the same airport.
- 2. A tourist or transit card is required of temporary visitors.
- 3. If you are a holder of Laissez Passer issued by the United Nations you don't need a valid passport from the country of origin.
- 4. Aircraft crew members of a regular airline service may use their licenses instead of a passport all the time.
- 5. Crew members entering Colombia by other means of transport to join the regular air crew of an aircraft must have the same documents as the arriving passengers.
- 6. Vaccination certificates are always required for cholera, yellow fever or viruela.
- 7. Malaria exists in all parts of Colombia below 800 metres.

- 8. A tourist card is valid for 60 days.
- 9. All fights are conducted in conformity with the civil aviation regulations in effect in Colombia.
- 10. Aircraft landing or departing the territory of Colombia must first land or finally depart from an international airport.
- 11. All requests for permission to operate regular scheduled flights must be presented to the Ministry of Foreign Affairs.
- 12. Technical stops may be made at any airport of Colombia.
- 13. If no passengers are boarded or deplaned, it is not necessary to present the aircraft documents except the general Declaration.
- 14. Aircraft arriving from areas considered to be epidemic may be required to be sterilized immediately upon arrival.
- 15. If an itinerant aircraft doesn't obtain a temporary import permit it may be impounded.
- 16. Non-scheduled flights to Colombia are sometimes rejected while the state of siege is in effect.
- 17. If the aircraft is to exceed the 5-day limit for a stop in Colombia it should supply the customs authorities with a bond issued by a Colombian bank or insurance company.

Answer the questions:

- 1. Are any documents required of passengers arriving or departing on the same through flight?
- 2. What kind of document will be issued if travel to another city is necessary?
- 3. What must the temporary visitors be in prossession of?
- 4. Is a return ticket also required?
- 5. What kind of document may crew members of a regular airline service use instead of a passport?
- 6. When does this provision apply?
- 7. Which vaccinations are recommended for all trevellers to most rural areas?
- 8. Does malaria exist in Bogota?
- 9. Where does malaria exist according to the U.S. Public Health Service?
- 10. How long is the tourist card valid?
- 11. How many photographs are required for it?
- 12. What will all the flights to Colombia be conducted in conformity with?
- 13. Where must the aircraft first land or finally depart from?
- 14. What will the regular flights be subject to if the state of the airline has a treaty with Colombia?
- 15. What principle prevails when there is no agreement with the state of the airline?
- 16. Who may overfly Colombian territory making technical stops?
- 17. How must the document be written?

- 18. When are normally health inspections conducted?
- 19. When may non-scheduled commercial aircraft overfly Colombian territory making technical stops?
- 20. What kind of permission must all itinerant aircraft stopping in Colombia obtain?
- 21. Are the aircraft overflying Colombia airspace without landing subject to any fee?
- 22. What signals should pilots be prepared to respond to?
- 23. When will the non-scheduled flights to Colombia be rejected?

Give the synonyms for:

Cargo, merchandise, to conduct, provided, to remain, to exceed, to fire, to heed instructions, to reject, to recommend, reciprocal privilege, rural area, in conformity with, in prossession of, temporary, regulation, to deplane, fee.

Exercise 6

What parts of speech are the underlined words in the following sentence fragments?

- a) <u>through</u> flight;
- b) a <u>reciprocal</u> privilege;
- c) ____ coming from an infected area;
- d) chloroquine resistant P. Falciparum;
- e) all <u>contracting</u> states;
- f) the <u>following</u> document;
- g) _____ should obtain <u>authorization</u>.

Exercise 7

Which elements do the following words consist of? What parts of speech are they? Find in the dictionary the related words

Issued, arriving, including, regulations, administrative, reciprocity, commercial, technical, presented, inspections, importation, interception, prepared.

Exercise 8

Make up sentences using the following words:

- a) Colombia, authorization, to, all, must, remain, aircraft, obtain, itinerant, in;
- b) arrival, pilots, administration, the, of, flights, are, arriving, to, aerodrome, upon, report;
- c) force, signals, should, respond, pilots, be, interception, Colombian, international, air, prepared, to properly, from;
- d) present, manifest, if, loaded, is the cargo, no, to, is, it, inloaded, merchandise, not, necessary, or;
- e) advance, has, crew, technical, in, made, stops, filed, plan, a, may, provided, be, crew, flight.

Fill in the gaps choosing the necessary word:

- a) Temporary ____ must be in prossession of a valid passport. (visitors, crew, authorities, flights)
- b) This _____ applies only if there is a reciprocal privilege for Colombian air crews. (flight plan, license, transit card, provision)
- c) The U.S. Public Health service advises that malaria ____ in all parts of the country. (exists, receives, obtains, meets)
- d) All documents must use the ICAO _____.

(formula, list, format, schedule)

Exercise 10

Fill in the gaps in the following sentences:

- a) No documents are required of _____ arriving or departing on the same _____ flight.
- b) If travel to another city is necessary, a ____ permit of transit will be issued.
- c) Aircraft crew members of a _____ airline service may use their licenses _____ of a pass-port.
- d) Yellow _____ vaccination are recommended to all travellers.
- e) When there is no treaty or ____ with the State of the airline, the principle of __ pre-vails.
- f) It is necessary that the following documents be ____ by the operators of the airline company.
- g) All _____ states of the Confention on International Civil Aviation may overflight Colombian territory.
- h) Aircraft overflying Colombia airspace without landing are _____ to an overflight service _____.

Exercise 11

Make up your own sentences using the following words:

Legible, agreement, treaty, dispatch, to mention, notification, to exceed, to supply, insurance company, in effect, in conformity with, consignee, routinely, narcotics trafficing, to apply, rural area, exception, nearby, extreme, to exist, embassy, malaria, privilege, foreigner.

PART 4

Exercise 1.

Read the ENTRY REQUIREMENTS for MALDIVES, MYANMAR, NEPAL and *translate them into your language. Use the word list given after the document.*

MALDIVES

1. PASSPORT:

Required.

2. VISA:

A temporary permit, valid for 30 days, is to be obtained on arrival at Male International Airport.

3. HEALTH:

No vaccination certificates are required except of persons who within six days of arrival have come from or have passed a yellow fever infected area.

4. AIRCRAFT ENTRY REQUIREMENTS

a) Scheduled Flights

Scheduled operations are governed by bilateral or multilateral agreements and are subject to a special authorization issued by the Civil Aviation Authority.

b) Non-Scheduled Flights

An operator intending to carry out a (series of) non-scheduled flight(s) in transit across, or making non-traffic stops in the territory of Maldives, or intending to take on or discharge passengers, cargo or mail, shall apply for prior permission to the Department of Civil Aviation, Male 20-05, Republic of Maldives, ATFM: VRMMYAYX, Telex: 66034 CIVAV MF, not less than 72 hours prior intended landing.

The application must include the following information:

- aircraft nationality and registration mark;
- aircraft type;
- aircraft callsign;

- name, address and nationality of aircraft operating agency;

- name and nationality of commander;

- number and nationality of crew and passengers;

- general description of goods carried;

- purpose of flight;

- flight plan details, i.e. point of last departure, route, cruising altitude/level, time estimating first reporting point to Male if landing, estimates for overhead/abeam Male if overflying, next point of landing and final destination.

c)

Private Flights

For safety reasons special permission is required in addition to the filing of a flight plan. Applications, made at least 7 days prior to intended entry into Maldives' airspace, should be submitted to the Civil Aviation Authority, Male.

5. AIRPORTS OF ENTRY:

First landing and final departure shall be made at Male (Intl).

MYANMAR

1. PASSPORT:

Required.

2. VISA:

Required:

3. HEALTH:

Certificates of vaccination against smallpox and yellow fever are required of persons who, within the preceding 14 days (in the case of smallpox) or 6 days (in the case of yellow fever) prior to arrival in Myanmar, had been in an infected area.

4. AIRCRAFT ENTRY REQUIREMENTS:

a) Scheduled Air Traffic

Scheduled operations are governed by bilateral or multilateral air agreements.

b) Non-Scheduled Air Traffic

1. If an operator intends to perform non-scheduled flight(s) into Myanmar for the purpose of taking on or discharging passengers, cargo or mail, he shall apply for permission not less than 7 days in advance to the Director General, Department of Civil Aviation, 104 Strand Road, Yangon; ATFM: VBRRYA; Telegraphic address: CIVILAIR Yangon. The operator has to state fuel required and confirmation of fuel available must be obtained before flight.

The application must include the following information:

I) name of operator;

- II) type of aircraft and registration marks;
- III) date and time of arrival at, and departure from Yangon;
- IV) place or places of embarkation or disembarkation abroad, as the case may be, of passengers and/or freight;
- V) purpose of flight and number of passengers and/or nature and amount of freight;
- VI) name, address and business of charterer, if any.
- 2. If an operator intends to carry out non-scheduled flight(s) in transit across, or making non-traffic stops in the territory of Myanmar, he shall apply for permission as described above. The application must include items I), II), III) and V) only.

c) Private Flights

An advance notification of arrival or transit is required.

Additional requirements are the same as described in para b) 2. above.

5. AIRPORTS OF ENTRY:

Aircraft landing in or departing from the territory of Burma must first land at or finally depart from an international airport (Yangon).

NEPAL

1. PASSPORT:

Required, except from citizens of India.

2. VISA:

Required.

A temporary visa, valid for 7 days, is to be obtained on arrival.

NOTE: Licences and crew member certificates are accepted in lieu of passport and visa, provided that the holder will stay at the airport or within the confines of the cities adjacent thereto and that he will depart on his next regularly scheduled flight.

3. AIRCRAFT ENTRY REQUIREMENTS:

a) Scheduled Air Traffic

Scheduled flights are governed by bilateral interstate agreements and are subject to an authorization to operate into Nepal.

b) Non-Scheduled Air Traffic

Prior permission required for all non-scheduled flights. Application shall be submitted to the Department of Civil Aviation, Babar Mahal, Kathmandu, Nepal, telegraphic address: AIRCIVIL Kathmandu, Telex: 2553 DCA NP, ATFM: VNKTYAYX.

If an operator intends to perform a (series of) non-scheduled flight(s) into Nepal for commercial purposes application for such operations shall be submitted not less than 72 hours prior to the intended landing and shall include the following information:

- name of operator;
- type of aircraft and registration marks;
- radio frequencies;
- name and nationality of pilot, crew, and passengers;
- place or places of embarkation or disembarkation abroad, as the case may be, of passengers and/or nature and amount of freight;
- time and date of entry and departure;
- fuel requirement;
- AUW of aircraft and tyre pressure.
- such other information as may be required by the competent authority.

c) Private Flights

The information contained in the flight plan is accepted as adequate advance notification of the arrival of incoming aircraft. Such information shall be submitted so as to reach the public authorities at least 72 hours in advance.

4. AIRPORT OF ENTRY:

First landing and final departure shall be made at Kathmandu (Tribhuvan IntI) Airport.

WORD LIST

aircraft operating agency	[7eid3Ensi]	летно-эксплуатационное предприятие
AUW (all-up weight)		полная полетная масса
Burma	[7bE:mE]	Бирма
citizen	[7sitizn]	гражданин, житель
confirmation	[6kOnfE7meiSn]	подтверждение
discharge	[dis7tSa:d3]	выгружать, разгружать
general description	[7d3enErEil dis- 7kripSn]	- общее описание
incoming aircraft	[7inkVmiN7BEkra:ft]	воздушное судно на под- ходе к аэродрому
interstate agreement	[6intE7steit E7- gri:mEnt]	- межгосударственное со- глашение
mail	[meil]	почта

preceding	[pri7si:diN]	предшествующий
(for) safety reasons	[7seifti7ri:znz]	по причинам безопасно- сти
tyre pressure	[7taiE7preSE]	давление в пневматике

Find the English equivalents in the text:

- а) Временное разрешение, общее описание, летно-эксплуатационное предприятие, по причинам безопасности, почта, разгружать, двустороннее соглашение, многостороннее соглашение, несколько рейсов, предварительное разрешение, предполагаемый вход, должны быть представлены;
- b) предшествующий, подтверждение, заранее, генеральный директор, уведомление;
- с) временная виза, межгосударственное соглашение, полная полетная масса, давление в пневматике, воздушное судно на подходе к аэродрому, заявка, требуемое топливо, достаточное предварительное уведомление.

Exercise 3

What do the following abbreviation mean?

AUW

Exercise 4

True or false?

- A. 1. A temporary permit, valid for 2 weeks, is to be obtained on arrival at Male International Airport.
 - 2. No vaccination certificates are required.
 - 3. Vaccination certificates are required of persons who within six days of arrival have come from a small pox infected area.
 - 4. Scheduled flights are subject to a special authorization.
 - 5. An operator intending to carry out a non-scheduled flight shall apply for prior permission to the Ministry of Foregn Affairs.
 - 6. This application must include aircraft nationality and registration mark, name and nationality of crew members, general description of goods carried.

7. For safety reasons special permission is required of private pilots in addition to filing a flight plan.

- B. 1. Certificates of vaccination against small pox and yellow fever are required of some people.
 - 2. The operator has to state fuel required.
 - 3. If an operator intends to perform a non-scheduled flight to Myanmar for the purpose of taking or discharging passengers he shall apply for permission 6 days in advance to the Department of Civil Aviation.

- C. 1. Licences are accepted in lieu of passport and visa without any exception.
 - 2. The application shall include name of operator, radio frequencies, fuel requirement, tyre pressure.
 - 3. The information contained in the flight plan is not accepted as adequate advance notification of the arrival of incoming aircraft.

4.

Answer the questions:

- A. 1. Is a visa required of people who arrive at Male International Airport?
 - 2. Who needs vaccination certificates?
 - 3. What are scheduled operations governed by?
 - What kind of authorization are they subject to?
 - 5. Who must the operators apply to for prior permission to carry out a non-scheduled flight?
 - 6. Must the application include the general description of goods?
 - 7. What are the flight plan details that ia necessary to include into the application?
 - 8. What is the airport of entry at the Maldives?
- B. 1. What kind of sertificates do some people need?
 - 2. Who are those people?
 - 3. How many days in advance does the operator have to apply for permission to perform a non-scheduled flight?
 - 4. Who does he have to apply to?
 - 5. What else does the operator need to obtain after stating fuel required for his flight?
 - 6. Must the application include the purpose of flight and number of passengers?
 - 7. An advance notification of arrival or transit is not necessary, is it?
- C. 1. How long is the temporary visa valid?
 - 2. What are the cases when lisences and crew member certificates are accepted instead of visas?
 - 3. What kind of agreement are scheduled flights governed by?
 - 4. How many hours in advance is it necessary to submit a commercial purpose application?
 - 5. The radio frequencies should also be included, shouldn't they?
 - 6. What is accepted as adequate advance notification of the arrival?
 - 7. When does it have to be submitted?

Exercise 6

Give the synonyms for:

To obtain, persons, to arrive, to carry out, prior to, goods carried, purpose, to require, to discharge, to depart, provided that, incoming, aircraft.

Exercise 7

Which elements do the following words consist of? What parts of speech are they? Find in the dictionary the related words.

Vaccination, multilateral, discharge, nationality, description, commander, estimating, addition, disembarkation, accepted, regularly, application.

Exercise 8

What parts of speech are the underlined words in the following sentence fragments?

- a) <u>Scheduled</u> operations;
- b) non-<u>traffic</u> stops;
- c) general description of goods <u>carried;</u>
- d) in addition to <u>filing</u> of a flight plan;
- e) in transit across the territory of Burma;
- f) as the <u>case</u> may be;
- g) shall be <u>submitted</u>.

Exercise 9

Make up sentences using the following words:

- a) Passengers, of, flight, include, the, application, number, must, purpose, and;
- b) international, land, aircraft, in, at, an, airport, landing, the, of, Burma, territory, must;
- c) agreements, scheduled, by, bilateral, are, governed, flights, interstate;
- d) arrival, be, days, for, temporary, a, on, obtained, valid, visa, is, to, seven;

e) required, operators, the, fuel, state, to, has.

Exercise 10

Fill in the gaps choosing the necessary word:

- a) An operator _____ to carry out a non-scheduled flight ____ . (making, intending, beginning, obtaining)
- b) The application must _____the following information _____. (include, take, ask, request)
- c) The operator has to _____ fuel required _____. (ask, require, request, state)
- d) Confirmation of fuel _____ must be obtained before flight. (being bought, requested, available, remaining)
- e) If an operator intends to make _____ stops in the territory of Myanmar _____. (non-scheduled, not requested, non-trafiic, not wanted)

Exercise 11

Fill in the gaps in the following sentences:

- a) The application must include place of embarkation and _____.
- b) The operator shall apply for _____ as described above.
- c) Aircraft _____ in or departing from the territory of Burma _____.
- d) Scheduled flights are governed by _____ interstate agreement.
- e) Permission _____ for all non-scheduled flights.
- f) The application shall be _____ not less than 72 hours prior_____

g) Such information should reach the public _____ 72 hours in advance.

Exercise 12 Make up your own sentences with the following words:

Discharge, confirmation, safely, mail, preceeding, discription, interstate, pressure, tyre, citizen.

PART 5

Exercise 1.

Read the ENTRY REQUIREMENTS for TANZANIA and translate them into your language. Use the word list given after the document.

TANZANIA

1. PASSPORT: (Requirements for Tanzania Mainland)

All passengers except holders of Inter-State Passes are required to be in possession of valid passports. Recognized passes are: Visitors Passes, Dependants Passes, Special Passes, In-Transit Passes, Re-Entry Passes, Interstate Passes, Landing Passes.

A visitor's pass or transit pass may be issued provided the person seeking entry is in possession of an onward or return ticket or able to make a certain cash deposit.

2. VISA: (Requirements for Tanzania Mainland)

Any person, other than a British Subject, a British Protected Person, a national of a Commonwealth state, a national of Iceland, Sudan, Scandinavian countries, Pakistan and Madagascar who is travelling through Tanzania in transit is required to be in possession of a transit visa as well as a visa for the country of his ultimate destination.

However, a visa is not required for:

- a) Aliens whose passports bear valid Immigration Re-entry passes or Residents Certificates;
- b) Holders of United Nations laissez-passer, when travelling on official business;
- c) Passengers entering in the course of a continuous and uninterrupted journey and leaving by the same aircraft, except stateless persons or South African nationals;

- d) Resident aliens of one of the following territories holding valid Immigration Inter-State Passes issued by the governments of Kenya, Uganda and Tanzania;
- e) Members of African Tribes indigenous to Kenya, Uganda, Rwanda, Zambia and Malawi.

3. PASSPORT: (Requirements for Zanzibar)

All persons, except citizens of Tanzania, Kenya, Uganda and Zambia holding valid passports or Interstate passes are required to be in possession of a valid entry permit as well as a valid passport bearing all necessary visas. An entry permit may be obtained from: The Principal Immigration Officer, P.O. Box 237, Zanzibar.

4. VISA: (Requirements for Zanzibar)

Any person other than a British Subject or a British Protected Person who is travelling through Zanzibar in transit is required to be in possession of a transit visa as well as a visa for the country of his ultimate destination. However, a visa is not required for:

- a) Citizens of Belgium, Denmark, Spain, Sweden, Netherlands, Turkey, Liechtenstein, Luxembourg, San Marino, Iceland, Italy, Switzerland, Norway, Australia (for a stay not exceeding 3 months).
- b) Aliens whose passport bears valid Immigration Re-entry passes or who possess certificates of permanent residence.
- c) Resident aliens of Kenya, Uganda or Tanzania holding valid Immigration Inter-State Passes issued by the governments of the respective countries.

NOTE: Holders of United Nations laissez-passer who travel to Zanzibar on official business should obtain an entry permit from: The Principal Secretary, Ministry of External Affairs, P.O. Box 239, Zanzibar.

5. AIRCRAFT ENTRY REQUIREMENTS:

a) Scheduled Air Traffic

Scheduled operations are governed by interstate air agreements or special authorization.

b) Non-Scheduled Air Traffic

All non-scheduled flights require prior permission to overfly or land in Tanzania. Such permission can be obtained (for Tanzania Mainland) from: The Director General of Civil Aviation, P.O. Box 2819, Dar-Es-Salaam, Telegraphic address: DIRAIR DAR ES SALAAM, or (for Zanzib-ar) from: The Principal Secretary, President's Office, P.O. Box 4220, Zan-zibar, Telephone 30716/7, Telex: 57311 AWK ZNZ TZ.

For non-scheduled flights into Tanzania for the purpose of taking on or discharging passengers, cargo or mail (commercial flights involving traffic rights) application by letter or reply paid telegram for Air Service License must be made to the Secretary, Civil Aviation Board (CAB), P.0. Box 2819,

Dar-Es-Salaam, Telegraphic address: DIRAIR, Telex: 41120.

Application must be received not less than 14 days in advance for license validity of more than 14 days and not less than 7 days in advance for license validity of less than 14 days.

WORD LIST

African Tribes	[7XfkikEn7traibz]	африканские племена
Air Service License	[7laisn]	лицензия на обслужи- вание
alien	[7eiljEn]	чужестранец; иностра- нец; проживающий в данной стране; поддан- ный другого государ- ства
bear	[7bBE]	носить, нести, иметь
British Subject	[7britiS7sVbd3Ekt]	подданный Соединен- ного королевства Ве- ликобритании и Север- ной Ирландии
cash deposit	[7kXSdi7pOzit]	денежный вклад, зада- ток
certain	[7sE:tn]	определенный
Commonwealth State	[7kOmEnwelQ]	государство, входящее в Британское Содруже- ство (Наций)
dependant	[di7pendEnt]	подчиненный, под- властный
indigenous	[In7did3inEs]	туземный, местный, природный
involve	[in7vOlv]	затрагивать, вовлекать
license validity	[vE7lidEti]	срок действия лицен- зии
national	[7nXSnEl]	подданный, гражданин
onward ticket	[70nwEd]	билет в пункт назначе- ния
other that		кроме как
pass	[pa:s]	пропуск, бесплатный билет
permanent residence	[7pE:mEnEnt7rezidEnz]	постоянное прожива- ние
recognized	[7rekEgneizd]	признанный
reply-paid telegram	[ri7plaipeid]	телеграмма с оплачен- ным ответом
---------------------	-------------------	--------------------------------------
resident	[7rezidEnt]	постоянный житель
respective country	[ris7pektiv]	соответствующая стра- на
return ticket	[ri7tE:n]	билет туда и обратно
seek	[si:k]	искать
stateless person	[7steitlis]	человек без гра- жданства
traffic rights		коммерческие права авиакомпании
ultimate	[7Vltimit]	окончательный, конеч- ный
uninterrupted	[7Vn6intE7rVptid]	беспрерывный
visitor	[7vizitE]	посетитель, гость

Find the English equivalents in the text:

Основная территория, пропуск, владеть чем-либо, признанный, выдавать, искать, задаток, кроме, Содружество наций, чужестранец, человек без гражданства, племя, превышать, специальное разешение, телеграмма с оплаченным ответом, срок действия лицензии, временный посетитель, двустороннее/многостороннее соглашение, количество груза, предварительное уведомление, пребывающий самолет, конечный пункт назначения.

Exercise 3

True or false?

- 1. All passengers are required to be in possession of valid passports.
- 2. A transit pass may be issued provided the person seeking entry is able to make a cash deposit.
- 3. A British protected person is required to be in possession of a transit visa.
- 4. A visa is not required for all the holders of United Nations laissez-passer.
- 5. Immigration interstate passes may be used instead of a valid passport.
- 6. Members of African tribes indigenous to Kenya, Uganda, and Egypt do not need any visas.
- 7. Aliens who possess certificates of permanent residence do not require any visas.
- 8. Holders of United Nations laissez-passer should obtain an entry permit from the Ministry of Internal affairs.
- 9. Scheduled operations are governed by interstate air agreements only.

- 10. For non-scheduled flights into Tanzania for the purpose of taking on or discharging passengers application must be made by letter or reply-paid telegram.
- 11. Application must be received 14 days in advance for license validity of less than 14 days.
- 12. Prior notification is required for private flights to Swaziland.

Answer the questions:

- 1. Who needs valid passports to enter Tanzania Mainland?
- 2. What are the recognized passes?
- 3. Does a national of a Commonwealth state need to have a transit visa?
- 4. Who is a visa not required for?
- 5. Where may an entry permit for Zanzibar be obtained?
- 6. What is the duration of stay in Zanzibar for the Citizens of Belgium, Switzerland and Italy?
- 7. What are the scheduled operations governed by?
- 8. What do all non-scheduled flights require before overflying or landing in Tanzania?
- 9. Which may be the purposes for non-scheduled flights?
- 10. What kind of application is necessary for non-scheduled flights to Tanzalia?
- 11. How long in advance must the application be received?
- 12. Are any vaccination certificates required to fly to Swaziland?
- 13. Are the scheduled operations governed only by bilateral agreements?
- 14. Is it necessary to obtain a prior permission for overflights and non-traffic stops in Swaziland?
- 15. Which flights require prior permission?
- 16. What kind of information must be submitted?
- 17. Who needs to submit a prior notification?
- 18. Where may the adequate information be contained?

Exercise 5

Give the synonyms for:

A holder, to be in possession of ____, recognize, a visitor, provided, to seek, to issue, as well, ultimate, an alien, bear, indigenous, to overfly, to involve, in advance, a cable, incoming, a notification, a national, a resident.

Exercise 6

What parts of speech are the underlined words in the following sentence patterns?

- a) <u>Onward</u> ticket;
- b) stateless persons;
- c) African <u>Tribes;</u>
- d) valid entry <u>permit;</u>
- e) principal_immigration afficer;
- f) ultimate <u>destination;</u>

- g) telegraphic address;
- h) reply-paid telegram;
- i) <u>shall</u> be submitted;
- j) <u>charterer;</u>
- k) <u>incoming</u> aircraft.

Which elements do the following words consist of? What parts of speech are they? Find in the dictionary the related words.

Possession, onward, uninterrupled, stateless, residence, authorization, discharding, validity, directly, infected, disembarcation, notification.

Exercise 8

Fill in the gaps choosing the necessary word:

- a) Any person, _____ than a British subject _____. (except, different, other, another)
- b) Members of African Tribes _____ to Kenya _____. (indigenous, living, flying, involving)
- c) Holders of United Nations _____ .

(passports, visas, laisez-passer, boarding cards)

- d) Recidents _____ of one of the following territories _____. (citizens, guests, visitors, aliens)
- e) _____ the country of his _____ destination. (ultimate, constant, continuos, flying)
- f) The _____ shall be submitted 24 hours in advance. (letter, telegram, application, telephone call)
- g) Avisa is not required from _____ visitors. (charter, temporary, adequate, flying)

Exercise 9

Make up sentences using the following words:

- a) Visa, possession, person, a, to, of, required, is, be, in, not, British, transit, protected;
- b) official, holders, an, should, business, laissez-passer, who, Nations, of United, obtain, permit, entry, an, travel;
- c) have, entry, are, all, permit, persons, valid, holding, a, to, passer, required, interstate;

- d) visa, an, journey, passenger, uninterrupted, of, course, entering, the, in, need, a, not, need;
- e) Commonwealth, of, a, from, countries, visa, temporary, not, is, all, requiired, visitors;
- f) reply, cable, prepaid, be, must.

Fill in the gaps in the following sentences:

- a) All passengers except holders of _____ Passer need passports.
- b) A visitor's pass or _____ pass may be issued.
- c) Aliens who own passports _____ Valid Re-entry passes do not need visas.
- d) All persons holding valid passports are required to be in _____ of a valid entry permit.
- e) An entry permit may be obtained from Ministry of _____ affairs.
- f) An application by letter or _____ telegram must be made.
- g) Application must be received 14 days _____ for license validity of more than 14 days.
- b) Vaccination certificates are not required excepted when arriving _____ from an infected area.

Exercise 11

Make up your own sentences with the following words:

Recognized, dependant, to seek, alien, to bear, resident, tribe, deposit, to involve, license validity, national.

PART 6

Exercise 1.

Read the ENTRY REQUIREMENTS for GUINEA BISSAU, IVORY COAST and KENYA and translate them into your language. Use the word list given after the document.

GUINEA-BISSAU

AIRCRAFT ENTRY REQUIREMENTS:

a) Scheduled Air Traffic

Scheduled air operations must be authorized by the Government of Guinea-Bissau.

b) Non-Scheduled Air Traffic

All overflights and landings are subject to prior permission. Application must be sent at least 5 days in advance of the intended overflight or landing to the Direction Generale de l'Aeronautique Civile; telegraphic address: AEROCIVILE; AFTN: GGBSYA.

IVORY COAST

1. PASSPORT

Required, except of citizens of France and French speaking African states, of whom national identity cards or passports which have expired since less than 5 years are accepted.

2. VISA:

Required. Exceptions: Citizens of Germany (FRG) for a stay not exceeding 1 month. Foreigners and their spouses with an administration employment contract, provided they possess a mission order and a transportation requisition. A "stop-over visa", which is valid for 7 days, is accepted from nationals of the following countries, provided those passengers are in possession of

an onward ticket: Andorra, Belgium, Bolivia, Brazil, Canada, Chile, Colombia, Cuba, Denmark, Ireland, Iceland, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Paraguay, Peru, San Marino, Sweden, Switzerland, United Kingdom, Uruguay, USA and Venezuela. For tourists travelling in groups organized by travel agencies or transportation companies the same regulation applies. A transit visa is required of all persons except from citzens of France and French speaking African states.

3. HEALTH:

Smallpox certificate is required. Yellow fever certificate is only required if the stay exceeds 15 days.

4. AIRCRAFT ENTRY REQUIREMENTS:

For non-scheduled flights overflight and landing permission should be requested through diplomatic channels.

KENYA

1. PASSPORT:

All persons are required to be in possession of a valid pass or permit. A visitor's pass for a period not exceeding 3 months may be received from the Principal Immigration Officer, P.O. Box 30191, Nairobi, or on arrival at the port of entry, provided the visitor is in possession of a valid visa for Kenya, if required. He must be able to make a certain cash deposit or be in possession of a valid return or onward ticket. Also he is required to carry a certain amount of convertible foreign currency.

2. VISA:

Required except as follows:

- a) Citizens of the Commonwealth countries and Ireland, except nationals of Nigeria, Australia and British passport holders of Indian, Pakistan and Bangladesh origin.
- b) Nationals of Denmark, Ethiopia, Germany, Italy, Norway and colonies, San Marino, Spain, Sweden, Turkey and Uruguay.
- c) Aliens whose passports bear valid re-entry passes for Kenya.
- d) Passengers in transit through Kenya arriving and leaving by the same aircraft or transferring to another aircraft for a destination other than Tanzania or Uganda providing they hold confirmed onward bookings and the appropriate entry facilities for their country of destination and will not leave the transit area of Nairobi (Jomo Kenyatta) airport.
- e) Holders of United-Nations laissez-passers while travelling on official U.N. business.
- f) Holders of Organization of African Unity laissez-passers while travelling on official O.A.U. business.
- g) Holders of valid Inter-State passes issued by Tanzania and Uganda when entering Kenya either from Tanzania or Uganda.

3. HEALTH:

Vaccination against yellow fever, cholera and smallpox is required of passengers arriving from infected local areas.

4. AIRCRAFT ENTRY REQUIREMENTS:

a) Scheduled Air Traffic

Scheduled operations are governed by interstate air agreements, bilateral and multilateral agreements and must have a permit to operate into or in transit across Kenya. Application for air service license should be made by letter, reply-paid telegram or telex and must reach the Chief Executive Officer/Secretary, Civil Aviation Board, P.O. Box 52692, Nairobi; Tele-graphic address: TRANSCOMM NAIROBI; Telex: 22272 TRANSCOMM not less than 28 days prior to the proposed date of operation. Applications received via the AFTN will not be handled. The application must contain the following details:

- name and address of operator;
- type of flight (e.g. inclusive tour);
- type of aircraft and registration marks;
- date and place of origin of flight;
- complete route itinerary including dates and times (UTC);
- number of passengers and/or freight details;
- whether in conformity with IATA Resolution 045;
- name or local agents, if any;
- full details of passengers and/or freight to be uplifted or set down in Kenya.

In the case of air service licenses required for a period of validity of not more than 7 days, applications should reach the Chief Executive Officer/Secretary, Civil Aviation Board, not less than 14 days prior to the required date of issue of the license, except in most exceptional circumstances.

b) Non-Scheduled Air Traffic

Non-scheduled commercial flights shall comply with the requirements of application for air service license as specified for scheduled commercial flights under a).

All non-scheduled overflights, technical landings where no Traffic Rights are excercised, and private flights should seek permission in writing or reply-paid telegram from the Ministry of Transport and Communications; P.O. Box 52692, Nairobi; telegraphic address: TRANSCOMM NAIROBI; Telex: 22272 TRANSCOMM. Applicaton for permission must include the following details:

- name and address of operator;
- type of aircraft and registration marks;
- type of flight (e.g. technical landing);
- date and place of origin of flight;
- complete route itinerary including dates and times (UTC);
- name of pilot-in-command and number of crew;

- number of passengers and/or freight.

c) State Aircraft Flights

Foreign military aircraft must obtain prior clearance from the Permanent Secretary, Ministry of Foreign Affairs and International Coorperation, and foreign diplomatic flights from the Permanent Secretary, Ministry of Foreign Affairs, P.O. Box 30551, Nairobi. Applications shall be made by letter or reply-paid telegram and must reach the Permanent Secretary 14 days prior to the intended flight. Applications received via the AFTN will not be attended.

The application shall contain the information as specified for scheduled flights under a), except items "type of flight" and "IATA Resolution 045".

5. AIRPORTS OF ENTRY:

Nairobi (Jomo Kenyatta), Mombasa (Moi).

6. SPECIAL NOTICES:

Aircraft registered in the South African Rep. are not permitted to land in or overfly Kenya. No aircraft shall operate at a private airstrip (airstrip not owned by the Kenya Government) unless the airstrip has been cleared for the use by the Director of Civil Aviation. Application forms for clearance of these airstrips are obtainable from the Licensing Section, Directorate of Civil Aviation Headquaters, or by application to the Director of Civil Aviation, P.O. Box 30163, Nairobi, Telex 25239.

WORD LIST

AFTN (aeronautical fixed telecommunica-tion network)		наземная сеть авиацион- ной фикстрованной свя- зи
airstrip	[7BEstrip}	взлетно-посадочная по- лоса
attend	[E7tend]	уделять внимание
booking		бронирование места на рейс
(in) conformity with	[kEn7fO:miti]	в соответствии с
contain	[kEn7tein]	содержать
convertible foreign currency	[kEn7vE:tEbl7fOrEn 7kVrEnsi]	конвертируемая ино- странная валюта
employment contract	[im7plOimEnt7kOn- trXkt]	соглашение (договор) о приеме на работу
exceptional circumstances	[ik7sepSEnl]	исключительные обсто- ятельства

exercise	[7eksEsaiz]	использовать, осуще- ствлять (права), пользо- ваться (правами)
expire	[iks7paiE]	кончаться, истекать (о сроке)
handle	[7hXndl]	оформлять, обрабаты- вать, обслуживать
IATA (International Air Transport Association)		Международная ассоци- ация воздушного транс- порта
identity card	[ai7dentiti7ka:d]	удостоверение личности
if any		если таковые имеются
inclusive	[in7klu:siv]	включающий в себя
itineraly	[ai7tinErEri]	маршрут; пункт; пункты следования по маршру- ту, указанные в билете
mission order	[7miSn70:dE]	командировочное пред- писание
own	[oun]	владеть собственностью
set down		сажать, приземлять
spouse	[spauz]	супруг, супруга
transportation requisition	[6trXnspO:7teiSn 6rekwi7ziSn]	официальное предписа- ние, требование, заявка на перевозку
uplift	[6Vp7lift]	принимать на борт

Find the English equivalents in the text:

Предполагаемый перелет, франкоязычный, удостоверение личности, просроченный не более 5 лет, супруг/супруга, командировочное задание, соглашение о приеме на работу, заявка на перевозку, виза для остановки в стране, правило превышать, дипломатический канал, слоновая кость, конвертируемая валюта, бронирование билета, подтвержденный, средство, обрабатываться, осуществлять право, исключительные обстоятельства, принимать на борт, список пунктов маршрута, все подробности, выполнять, в письменной форме, командир экипажа, взлетно-посадочная полоса, в соответствии с _____, исполнительный секретарь.

Exercise 3

What do the following abbreviations stand for?

IATA, AFTN.

Exercise 4

True or false?

- 1. Scheduled air operations do not have to be authorized by the government of Guinea-Bissau.
- 2. Applications for non-scheduled flights should be sent at least 15 days in advance.
- 3. Passport is required of all passengers wishing to fly to Ivory Coast except of citizens of France and French speaking African states.
- 4. A "stop-over" visa, which is valid for 10 days is accepted from nationals of Canada.
- 5. Yellow fever certificate is required of all passengers and crew members.
- 6. Permission for non-scheduled flights should be requested through diplomatic channels.
- 7. A visitor's pass to enter Kenya may be received from the principal immigration officer.
- 8. Passengers need a certain amount of convertible foreign currency.
- 9. Applications received via the aeronautical fixed telecommunication network are not handled.
- 10. Application for permission to operate a non-scheduled flight to Kenya must include complete route itinerary.
- 11. Foreign military aircraft must obtain prior clearance from the Defence Ministry.
- 12. Aircraft registered in the South African Republic are not permitted to land in Kenya.

Exercise 5

Answer the questions:

- 1. Who must the scheduled air operations be authorized by?
- 2. Are all non-scheduled air overflight subject to prior permission?
- 3. What passengers wishing to fly to Ivory Coast do not need passports?
- 4. Which regulation applies for tourists travelling in groups?
- 5. Do the citizens of Sweden and Norway need a "stop-over" visa?
- 6. What kind of vaccination certificates are required in Ivory Coast?
- 7. Which duration may a visitor's pass have for passengers intending to fly to Kenya?
- 8. What kind of money should such passengers have?
- 9. Who doesn't need any visas to enter Kenya?

10.	Is	the	vaccination	against	cholera	necessary	for
people flying to Kenya?							

What are the scheduled operations governed by?
 What kind of applications are not handled?
 What details must the applications contain?
 Which form must the applications for private flights

be sent in?

15. the flight?	Must they contain the information about the type of
16. papers, mustn't it?	The name of the captain must be also given in the
17.	What are the airports of entry in Kenya?
18.	Who is not permitted to land in Kenya?

Give the synonyms for:

Intended, to expire, regulation, to exceed, cash, currency, to bear, to confirm, to reach, proposed, complete, in conformity with, to attend.

Exercise 7

What parts of speech are the underlined words in the following sentence patterns?

- a) <u>Transportation</u> requisition;
- b) <u>following</u> countries;
- c) a stay not <u>exceeding</u> one month;
- d) groups <u>organized</u> by travel agencies;
- e) <u>convertible</u> foreign currency;
- f) confirmed onward bookings;
- g) <u>infected</u> local areas;
- h) <u>inclusive</u> tour;
- i) freight to be <u>uplifted;</u> should <u>seek</u> permission;
- j) foreign <u>diplomatic</u> flights, private <u>airstrip</u>.

Exercise 8

Which elements do the following words consist of? What parts of speech are they? Find in the dictionary the related words.

Expired, employment, provided (meaning "except"), transportation, certificate, Commonwealth, convertible, exceeding, bookings, holder, inclusive, specifield.

Exercise 9

Fill in the gaps in the following sentences:

- a) Scheduled operations must have _____ to operate into or in transit across Kenya.
- b) Non-scheduled commercial flights shall _____ with the requirements of application.
- c) Applications shall be made by letter or _____ telegram.
- d) Applications forms for clearance of private airstrips are _____ from the Licensing Section.
- e) He is required to carry a certain _____ of convertible foreign currency.
- f) A "stop-over" visa which is _____ for 7 days is accepted from nationals of Belgium.

- g) A visitors pass for a period not _____ 3 months may be received from the Principal Immigration Officer.
- h) All over flights and landings are _____ to prior permission.

Make up sentences using the following words:

- a) Overfly, into, Republic, land, aircraft, permitted, in, registered, the, are, African, or, Kenya, South, not;
- b) headquarters, from, of, application, private, are, for, aviation, forms, clearance, airstrips, the, obtainable, Civil, Directorate;
- c) French, a, cetizens, is, visa, and, speaking, from, persons, transit, all, of, France, states, African, required;
- d) multilateral, bilateral, operations, and, scheduled, by, governed, are, agreements, interstate;
- e) fourteen, Chief, license, the, issue, reach, Secretary, than, of, prior, Executive, applications, required, should, less, of, date, not days, to;
- f) international, prior, foreign, clearance, ministry, foreing, of, cooperation, affairs, the, and, must, military, from, aircraft, obtain.

Exercise 11

Fill in the gaps choosing the necessary word:

- a) Foreigners and their _____ with an administration employment contract _____. (spouses, friends, relatives, bosses)
- b) To make a certain cash _____.

(price, allowance, grant, deposit)

- c) Holders of valid inter-state passes ____ by Tanzania and Uganda ____. (asked, issued, requested, obtained)
- d) _____ is required of passengers arriving from infected local areas. (ticket, mission order, permit vaccinations)
- e) For tourists _____ in groups organized by travel egencies _____.

(travelling, going, passing, departing)

f) They hold _____ onward bookings _____.

(valid, issued, prepaid, confirmed)

g) Complete route _____ including dates and times _____.

(list, initeraly, chart, booking)

Exercise 12

Make up your own sentences with the following words:

Identity card, to expire, employment, transportation, contract, appropriate, booking, convertible currency, to handle, itinerary, in conformity with, exceptional circumstances, to attend, to contain, airstrip, mission order.

PART 7

Exercise 1

Read the ENTRY REQUIREMENTS for SUDAN and translate them into your language. Use the word list after the document.

SUDAN

1. PASSPORT & VISA:

Foreign passengers must be in possession of a valid passport and an entry visa. An exit visa is required from all nationals having spent more than 3 months in the Sudan.

Crew member's licence is accepted in lieu of passport or visa for temporary admission into the Sudan. This provision is not applicable if the crew member enters the Sudan as a passenger.

2. HEALTH:

Certificates of vaccination against yellow fever are required of all passengers, the vaccination for which should be at least 10 days before arriving or departing Sudan.

3. AIRCRAFT ENTRY REQUIREMENTS:

a) Scheduled Air Traffic

Scheduled operations are governed by interstate air agreements or special authorization. Applications shall be submitted to Director General, Civil Aviation Department, P.O. Box 430, Khartoum.

b) Non-Scheduled Air Traffic

Prior permission is required of any foreign civil aircraft intending to carry out a non-scheduled or a series of non-scheduled flights in transit or for the purpose of making commercial or non-commercial landings in Sudan, discharging or taking on passengers, cargo or mail. Application for permission shall be submitted to the Civil Aviation Department, P.O. Box 430, Khartoum, telegraphic address: CIVAIR KHARTOUM; Telex: 22650 DGCA SD, AFTN: HSSSYAYX. The application should reach the authority at least 7 days before the time of proposed entry. This procedure is applicable to operators who have a representation in the Sudan while other operators must apply through Civil Aviation Department Approved Agents. The application for permission must include following information:

- name, nationality and postal address of applicant;
- aircraft registration marks or service number; (executive and private flights are to include names and nationalities of crew members and passengers);
- type of aircraft;
- purpose of flight and nature of load;
- last aerodrome of departure and date/time group;
- point of entry into Khartoum FIR and estimated time;
- destination within Khartoum FIR and ETA & ETD. (If not landing within the Sudan insert "OVERFLYING");
- point of exit from Khartoum FIR and time;
- first point of intended landing after leaving Sudan.

c) Military, Para-Military, Diplomatic and State aircraft

Application for permission to overfly or land in the Sudan shall be made through diplomatic channels at least two weeks in advance of the proposed flight. Application must include the details described above.

4. AIRPORTS OF FIRST ENTRY AND FINAL DEPARTURE:

Dongola, Geneina, Juba, Kassala, Khartoum, Port Sudan.

5. SPECIAL NOTICES:

- a) No permission shall be granted to overfly Sudan territory for any foreign registered aircraft unless the operator has a representation in the Sudan or a Sudanese Civil Aviation Department Approved Agent.
- b) Aircraft shall not fly over or land within Sudan territory unless in possession of a valid permission and shall keep as close as possible to the times specified in the permission (maximum tolerance 2 hr). Delay outside these limits will render the clearance void and violation will be dealt with severely.
- c) The operation of scheduled or non-scheduled air services shall not be destined to or originate from the territory of Israel or the South African Republic. The performance of air services by aircraft registered, chartered, hired, leased, borrowed or owned by legal entities established

in either Israel or the South African Republic is hereby prohibited by the Sudan Boycott Act.

d) The following procedure for DOMESTIC FLIGHTS must be strictly adhered to: The operators have to submit a weekly, fortnightly or monthly schedule of their flights at least 72 hours in advance to Khartoum ACC. Changes to the schedule have to be coordinated 48 hours prior to departure. Emergency operations must be co-ordinated with Khartoum ACC 24 hours in advance, if possible. Concerning round trips, operators are requested to include all points of intermediate landings in their request and to stick to the planned route.

WORD LIST

adhere	[Ed7hiE]		придерживаться
admission	[Ed7miSn]		принятие, вход, допуще- ния
applicable	[7XplikEbl, likEbl]	E7p-	применимый, пригод- ный, подходящий
applicant	[7XplikEnt]		проситель
borrow	[7bOrou]		взять взаймы
concerning round trips	[kEn7sE:niN]		что касается полетов по
			замкнутому маршруту, полет "туда-обратно"
(be) dealt with severely	[si7viEli]		строго наказываться
describe	[dis7kraib]		описывать
destine	[7destin]		предназначать, направ- ляться
executive flight	[ig7zekjutiv]		административный рейс
grant permission	[7gra:nt pE7miSn]		представлять разреше- ние
hire	[haiE]		нанимать
insert	[in7sE:t]		вписать
lease	[li:z]		арендовать
legal entity	[7li:gEl7entiti]		юридическое лицо
para-military	[6pXrE7militEri]		военизированный, полу- военный
(be) in possession	[pE7zeSn]		владеть, иметь
postal address	[7poustl E7dres]		почтовый адрес
proposed entry	[prE7pouzd7entri]		предполагаемого входа (прибытия)

provision	[prE7vi3n]	положение, условие
render the clearance	[vOid]	делать разрешение не-
void		действительным
representation	[6reprizen7teiSn]	представительство
spend (spent, spent)	[spend]	проводить (время)
stick	[stik]	приклеивать, прикреп-
		ЛЯТЬ
tolerance	[7tOlErEns]	допустимое отклонение
violation	[6vaiE7leiSn]	нарушение
weekly, fortnightly or		расписание (график) на
monthly schedule		неделю, на две недели
		или месяц

Find the English equivalents in the text:

Въездная виза, выездная виза, временное разрешение на въезд, применимый, условие, намеревающийся, специальное разрешение, заявка, несколько полетов, предполагаемый, лицо, выполняющее полет, проситель, административный рейс, вписывать, почтовый адрес, военизированный, давать разрешение, делать разрешение недействительным, нарушение, допустимое отклонение, строго на-казываться, направлять, юридическое лицо, придерживаться, две недели, нанимать, арендовать, полет по замкнутому маршруту, придерживаться полета внутри страны, задержка.

Exercise 3

What do the following abbreviations mean?

ACC, FIR, ETA, ETD.

Exercise 4

True or false?

- 1. Every foreign passenger needs a passport, an entry and an exit visa.
- 2. Crew member's license is accepted instead of passport or visa.
- 3. Every passenger needs a vaccination certificate agains cholera and malaria.
- 4. Non-scheduled air trafiic's permission must include the purpose of flight and nature of load.
- 5. Diplomatic aircraft's application for permission to enter or land in the Sudan must be made at least a fortnight in advance.
- 6. Maximum tolerance as for the times specified in the permission is 3 hours.
- 7. Operators performing round trips are requested to include all points of intermediate landings.
- 8. Aircraft shall not fly or land within Sudan territiry unless in possession of a valid permission.
- 9. All non-scheduled air traffic must include point of entry in Khartoum FIR and estimated time in the application.

- 10. Operators intending to perform domestic flights have to submit a weekly, fortnightly or monthly schedule of their flights.
- 11. Emergency operations must be coordinated with Khartoum ACC 12 hours in advance, if possible.
- 12. If a crew member enters the Sudan as a passenger he doesn't need a visa.

Answer the questions:

- 1. What do every foreign passeger need?
- 2. Who is an exit visa required of?
- 3. What is accepted instead of a passport or visa from the crew members?
- 4. Who is this provision not applicable to?
- 5. What kind of vaccination does a person need before travelling to the Sudan?
- 6. How many days before the flight does a person have to be vaccinated?
- 7. What are scheduled operations governed by?
- 8. Who does a person have to submit an application to?
- 9. When should the application for a non-scheduled flight reach the appropriate authority?

10.	Which operators is this procedure applicable to?
11.	What information must the application include?

12. How should the application for a military, para-military, diplomatic and state aircraft be made? How long in advance?

13. What is the airport of the first entry and final departure in the Sudan?
14. What is the maximum tolerance as for the times specified in the permission?

	1	
15.		What may happen if the delay exceeds these limits?
16.		When do a person have to coordinate any changes to
	0	

the schedule?

Exercise 6

Give the synonyms for:

Foreign, be in possession of, to require, national, to accept, in lieu of, admission, provision, vaccination, to submit, purpose, destination, aerodrome, to grant, tolerance, to violate, to deal with, a fortnight, in advance, to stick to _____.

Exercise 7

What parts of speech are the underlined words in the following sentence patterns?

- a) <u>Valid</u> passport, b) aircraft <u>registration</u> marks,
- b) in <u>lieu</u> of,
- c) yellow <u>fever</u>,

- i) <u>intended</u> landing,
- d) interstate <u>air</u> agreements,
- j) _____ shall not be <u>destined</u>,
- k) is prohibited,

e) <u>prior</u> permission,

1) <u>emergency</u> operations,

f) <u>telegraphic</u> address,

m) planned route.

g) operators must <u>apply</u>,

Exercise 8

Which elements do the following words consist of? What parts of speech are they? Find in the dictionary the related words.

Telegraphic, commercial, permission, nationality, destination, granted, representation, established, strictly, monthly, leased.

Exercise 9

Fill in the gaps in the following sentences:

- a) Crew member _____ is accepted in lieu of passport.
- b) This provision is not ______ if the crew member enters the Sudan as a passenger.
- c) Certificates of _____ against yellow fever are required of all passengers.
- d) The application for _____ must include the following information.
- e) Point of _____ from Khartoum FIR.
- f) Delay outside the limits will render the clearance _____.
- g) _____ will be dealt with severely.
- h) The following procedure must be strictly _____ to.

Exercise 10

Make up sentences using the following words:

- a) Clearance, the, render, delay, will, outside, of, hours, limits, two, void;
- b) route, operators, stick, requested, to, are, planned, the;
- c) Israel, performance, entities, by, the, air, established, legal, aircraft, in, prohibited, is, of, services, registered;
- d) made, channels, application, be, diplomatic, shall, through;
- e) department, be, for, submitted, to, application, shall, aviation, permission, civil, the;
- f) marks, the, must, aircraft, numbers, or, registration, include, service, application;
- g) three, the, an, having, required, nationals, months, in, is, from, Sudan, all, visa, than, spend, exit, more.

Exercise 11

Fill in the gaps choosing the necessary word:

- a) Foreign passengers must be in possession of an _____ visa to fly to the Sudan. (exit, entry, own, appointed)
- b) _____ of vaccination against yellow fever is required of all passengers. (permission, possession, filling, certificate)
- c) Scheduled operations are _____ by interstate air agreements. (governed, regulated, apponed, carried out)

d) _____ permission is required of any foreigh aircraft intending to carry out a non-scheduled flight.

(before, prior, necessary, applicable)

- e) Aircraft shall keep as close as possible to the times _____ in the permission. (specified, appointed, mentioned, written)
- f) Changes to the schedule have to be _____ 48 hours prior to departure. (applied for, asked, granted, coordinated)

Exercise 12

Make up your own sentences with the following words:

To spend, admission, applicable, representation, to describe, to grant, violation, to destine, to hire, to lease, to borrow, to own, to stick, to adhere.

UNIT 2

CHART GLOSSARY

This glossary provides definitions that are unique and abbreviations commonly used in Jeppesen publications. No attempt has been made to list all the terms of basic aeronautical nomenclature.

Because of the international nature of flying, terms used by the FAA (USA) are included when they differ from International Civil Aviation Organization (ICAO) definitions.

ACCELERATE STOP DISTANCE AVAIL-ABLE (ASDA) — The length of the take-off run available plus the length of the stopway, if provided.

ADEQUATE VIS REF (Adequate Visual Refer-ence) — Runway markings or runway lighting that provides the pilot with adequate visual reference to continuously identify the take-off surface and maintain directional control throughout the take-off run.

ADVISORY ROUTE (ADR) — A designated route along which air traffic advisory service is available.

NOTE: Air traffic control service provides a much more complete service than air 'traffic advisory service; advisory areas and routes

are therefore not established within controlled airspace, but air traffic advisory service may be provided below and above control areas.

ADVISORY SERVICE — Advice and information provided by a facility to assist pilots in the safe conduct of flight and aircraft movement.

AERODROME FLIGHT INFORMATION SERVICE (AFIS) — A directed traffic information and operational Information service provided within an aerodrome flight information zone, to all radio equipped aircraft, to assist in the safe and efficient conduct of flight.

AERODROME TRAFFIC FREQUENCY (ATF) — A

frequency designated at an uncontrolled airport. An ATF is used to ensure all radio equipped aircraft operating within the area, normally within a 5 NM radius of the airport, are listening on a common frequency. The ATF is normally the ground station frequency. Where a ground station does not exist, a common frequency is designated. Radio call sign is that of the ground station, or where no ground station exists, a broadcast is made with the call sign "Traffic Advisory." Jeppesen charts list the frequency and the area of use when other than the standard 5 NM.

AERODROME TRAFFIC ZONE

(ATZ) - An

airspace of detailed dimensions established around an aerodrome for the protection of aerodrome traffic.

AERONAUTICAL RADIO, INCORPOR-ATED (ARINC) — An international radio network providing air-to-ground communications available on a sub-scription (see) basis.

AIRCRAFT APPROACH CATEGORY (USA-TERPS) — A grouping of aircraft based on a speed of 1.3 times the stall speed in the landing configuration at maximum gross landing weight. An aircraft shall fit in only one category. If it is necessary to maneuver at speeds in excess of the upper limit of a speed range for a category, the minimums for the next higher category should be used. For example, an aircraft which falls in Category A, but is circling to land at a speed in excess of 91 knots, should use the approach Category B minimums when circling to land. The categories are as follows:

Category A - Speed less than 91 knots.

Category B - Speed 91 knots or more but less than 121 knots.

Category C - Speed 121 knots or more but less than 141 knots.

Category D - Speed 141 knots or more but less than 166 knots.

Category E - Speed 166 knots or more.

Category E includes only certain Military Aircraft and is not included on Jeppesen Approach Charts.

AIRCRAFT APPROACH CATEGORY (ICAO) — sumed

The following ICAO table indicates the specified range of handling speeds (IAS in Knots) for each category of aircraft to perform the maneuvers

specified. These speed ranges have been as-

for use in calculating airspace and obstacle clearance for each procedure.

Aircraft Category	V _{at}	Range of Speeds for Initial	Range of Final Approach	MAX SPEEDS for Visual Man- euvering (Circ-	MAX SPI for Missed Ap	EEDS proach
		Approach	Speeds	ling)	Intermediate	Final
А	<91	90/150(110*)	70/100	100	100	110
В	91/120	120/180(140*)	85/130	135	130	150
C	121/140	160/240	115/160	180	160	240
D	141/165	185/250	130/185	205	185	265
Е	166/210	185/250	155/230	240	230	275

 V_{at} — Speed at threshold based on 1.3 times stall speed in the landing configuration at maximum certificated landing mass.

*Maximum speed for reversal and racetrack procedures.

Category E contains only certain Military Aircraft and is not included on Jeppesen Approach Charts.

NOTE: The speed table applies to the new ICAO approach procedures which are identifiable by the OCA(H) figures and the PANS OPS notation on the lower left corner of the approach chart. Old ICAO approach procedures show an OCL instead of OCA(H). Deviations are listed in the Air Traffic Control section.

AIR DEFENSE IDENTIFICATION ZONE —

The area of airspace over land or water, extending upward from the surface, within which the ready identification, the location, and the control of aircraft are required in the interest of national security.

AI R PORT ELEVATION/FIELD ELEVA-

TION — The highest point of airports usable runways measured in feet from mean sea level. In a few countries, the airport elevation is determined at the airport reference point.

AIRPORT REFERENCE POINT (ARP) — A point on the airport designated as the official airport location.

AIRPORT SURVEILLANCE RADAR (ASR)

Approach control radar used to detect and display an aircraft's position in the terminal area. ASH provides range and azimuth information but does not provide elevation data. Coverage of the ASR can extend up to 60 miles. **AIR TRAFFIC CONTROL CLEARANCE** — An authorization by air traffic control, for the purpose of preventing collision between known aircraft, for an aircraft to proceed under specified traffic conditions within controlled airspace.

AIR TRAFFIC CONTROL ASSIGNED AIR-SPACE (ATCAA) — Airspace of defined vertical/lateral limits, assigned by ATC, for the purpose of providing air traffic segregation between the specified activities being conducted within the assigned airspace and other IFR air traffic.

AIRWAY (ICAO) — A control area or portion thereof established in the form of a corridor equipped with radio navigation aids.

AIRWAY (USA) — A Class E airspace area established in the form of a corridor, the centerline of which is defined by radio navigational aids.

ALONG TRACK DISTANCE — The distance measured from a point-in-space by systems using area navigation reference capabilities that are not subject to slant range errors.

ALTERNATE AERODROME (ICAO) — An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing.

NOTE: The aerodrome from which a flight departs may also be an enroute or a destination alternate aerodrome for that flight.

ALTERNATE AIRPORT (USA) — An airport at which an aircraft may land if a landing at the intended airport becomes inadvisable.

ALTIMETER SETTING — The barometric pressure reading used to adjust a pressure altimeter for variations in existing atmospheric pressure or to the standard altimeter setting (29.92 inches of mercury, 1013.2 hectopascals or 1013.2 millibars).

ALTITUDE (ICAO) — The vertical distance of a level, a point, or an object considered as a point, measured from Mean Sea Level (MSL).

ALTITUDE (USA) — The height of a level, point or object measured in feet Above Ground Level (AGL) or from Mean Sea Level (MSL).

- 1. AGL Altitude Altitude expressed In feet measured above ground level (QFE).
- 2. MSL Altitude Altitude expressed in feet measured from mean sea level (QNH).
- **3**. Indicated Altitude The Altitude as shown by an altimeter. On a pressure barometric altimeter it is altitude as shown uncorrected for instrument error and uncompensated for variation from standard atmospheric conditions.

AREA NAVIGATION/RNAV — A method of navigation that permits aircraft operations on any desired course within the coverage of station referenced navigation signals or within the limits of self contained system capability.

ARRIVAL ROUTES (ICAO) — Routes on an instrument approach procedure by which aircraft may proceed from the enroute phase of flight to the initial approach fix.

ATS ROUTE — specified route designated for channeling the flow of traffic as necessary for the provision of air traffic services.

NOTE: The term "ATS Route" is used to mean variously, airway, advisory route, controlled or uncontrolled route, arrival or departure route, etc.

AUTOMATED SURFACE OBSERVATION SYSTEM (ASOS) — The Automated Surface Observation System, in the United States, is a surface weather observing system implemented by the National Weather Service, the Federal Aviation Administration and the Department of Defense. It is designed to support aviation operations and weather forecast activities. The ASOS provides continuous minute-by-minute observations and performs the basic observing functions necessary to generate an aviation routine weather report (METAR) and other aviation weather information. ASOS information may be transmitted over a discrete VHF radio frequency or the voice portion of a focal NAVAID.

AUTOMATED WEATHER OBSERVING SYSTEM (AWOS) — An automated weather reporting system which transmits local real-time weather data directly to the pilot.

AWOS-A only reports altimeter setting

AWOS-1 Usually reports altimeter setting, wind data, temperature, dewpoint and density altitude.

AWOS-2 Reports same as AWOS-1 plus visibility.

AWOS-3 Reports the same as AWOS-2 plus cloud/ceiling data.

BRAKING ACTION (GOOD, FAIR, POOR, NIL) —

A report of conditions on the airport movement area providing a pilot with a degree/quality of braking that might be expected. Braking action is reported in terms of good, fair, poor, or nil.

CARDINAL ALTITUDES OR FLIGHT LEVELS —

"Odd" or "Even" thousand-foot altitudes or flight levels; e.g., 5000, 6000, 7000, FL6O, FL250, FL260, FL270.

CEILING (ICAO) — The height above the ground or water of the base of the lowest layer of cloud below 6000 meters (20,000 feet) covering more than half the sky.

CEILING (USA) — The height above the earth's surface of the lowest layer of clouds or obscuring phenomena that is reported as "broken", "overcast", or "obscuration", and not classified as "thin", or "partial".

CHART NOTAMS — Jeppesen Chart NOTAMs include significant information changes affecting Enroute, Area, and Terminal charts. Entries are published until the temporary condition no longer exists, or until the permanent change appears on revised charts. Enroute chart numbers / panel numbers / letters and area chart identifiers are included for each entry in the enroute portion of the chart. NOTAMs To avoid duplication of information in combined Enroute and Terminal Chart NOTAMs, navaid conditions, except for ILS components, are listed only in the Enroute portion of the Chart NOTAMs. All times are local unless otherwise indicated. Arrows indicate new or revised information. Chart NOTAMs are only an abbreviated service. Always ask for pertinent NOTAMs prior to flight.

COMMON TRAFFIC ADVISORY FRE-QUENCY (CTAF) (USA) — A frequency designed for the purpose of carrying out airport advisory practices while operating to or from an uncontrolled airport.. The CTAF may be a UNI-COM, Multicom, FSS. or tower frequency.

COMMUMTY AERODROME RADIO STATION (CARS) — An aerodrome radio that provides weather, field conditions, accepts flight plans and position reports.

COMPULSORY REPORTING POINTS — Reporting points which must be reported to ATC. They are designated on aeronautical charts by solid triangles or filed in a flight plan as fixes selected to define direct routes. These points are geographical locations which are defined by navigation aids/fixes. Pilots should discontinue position reporting over compulsory reporting points when informed by ATC that their aircraft is in "radar contact"

CONDITIONAL ROUTES (CDR) - (Europe) — Category 1,2,3

Category 1. Permanently plannable CDR during designated times.

Category 2. Plannable only during times designated in the Conditional Route Availability Mes- sage (CRAM) published at 1500Z or the 24 hour period starting at 0600Z the next day

Category 3. Not plannable Useable only when directed by ATC.

CONTROL AREA (ICAO) — A controlled airspace extending upwards from a specified limit above the earth.

CONTROLLED AIRSPACE — An airspace of defined dimensions within which air traffic control service is provided to IFR flights and to VFR flights in accordance with the airspace classification.

NOTE: Controlled airspace is a generic term which covers ATS airspace Classes A, B, C, D, and E.

CONTROL ZONE (ICAO) — A controlled airspace extending upwards from the surface of the earth to a specified upper limit

COURSE -

1. The Intended direction of flight in the horizontal plane measured in degrees from north.

2. The ILS localizer signal pattern usually specified as front course or back course.

3. The intended track along a straight, curved, or segmented MLS path.

CRITICAL HEIGHT — Lowest height in relation to an aerodrome specified level below which an approach procedure cannot be continued in a safe manner solely by the aid of instruments.

DECISION ALTITUDE/HEIGHT (DA/H) (ICAO) —

A specified altitude or height (A/H) in the precision approach at which a missed approach must be initiated if the required visual reference to continue the approach has not been established.

NOTE 1: Decision altitude (DA) is referenced to *mean sea level (MSL) and decision height (DH) is referenced to the threshold elevation*

NOTE 2: The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path.

DECISION HEIGHT (DH) (USA) — With respect to the operation of aircraft, means the height at which a decision must be made, during an ILS or PAR instrument approach, to either continue the ap- proach or to execute a missed approach.

NOTE: Jeppesen approach charts use the abbreviation DA(H) The decision altitude "DA" is referenced to mean sea level (MSL) and the parenthetical decision height (DH) is referenced to the TDZE or threshold elevation A DA(H) of 1,440' (200') is a Decision Altitude of 1,440' and a Decision Height of 200'

DIRECT ROUTE - D — A requested route published on a Jeppesen Enroute or Area chart to assist pilots who have previous knowledge of acceptance of these routes by ATC. Use of a direct route may require prior ATC approval and may not provide ATC or Advisory services, or be acceptable in flight plans.

DISPLACED THRESHOLD — A threshold that is located at a point on the runway other than the designated beginning of the runway.

DIVERSE DEPARTURES — At some airports a prescribed departure route is not required for ATC purposes nor as the only suitable route to avoid obstacles. In spite of this, there may be obstacles in the vicinity of the airport that should be considered in determining departures. When obstacles do exist, restrictions are provided by describing restricted sectors and or by specifying climb gradients required to clear the obstacles. In areas where obstacles and terrain avoidance is assured, Radar vectors below the MVA may be issued to departing aircraft.

ENROUTE FLIGHT ADVISORY SERVICE (FLIGHT WATCH) — A service specifically designed to provide, upon pilot request, timely weather information pertinent to the type of flight, intended route of flight, and altitude. The FSSs providing this service are indicated on Jeppesen Enroute and Area charts.

FAA AIR CARRIER OPERATIONS SPE-CIFICA-TIONS — Document issued to users operating under Federal Aviation Administration Regulations (FAR) Parts 121, 125, 127, 129, and 135. Operations Specifications are established and formalized by FARs. The primary purpose of FAA Air Carrier Operations Specifications is to provide a legally enforceable means of prescribing an authorization, limitation and/or procedures for a specific operator. Operations Specifications are subject to expeditious changes. These changes are usually too time critical to adopt through the regulatory process.

FEEDER FIX — The fix depicted on instrument approach procedure charts which establishes the starting point of the feeder route.

FEEDER ROUTE — Routes depicted on instrument approach procedure charts to designate routes for aircraft to proceed from the enroute structure to the initial approach fix (IAF).

"FINAL APPROACH COURSE — A bearing/radial/ track of an instrument approach leading to a runway or an extended runway centerline all without regard to distance.

FINAL APPROACH (ICAO) — That part of an instrument approach procedure which commences at the specified final approach fix or point, or where such a fix or point is not specified,

1. at the end of the last procedure turn, base turn or inbound turn of a racetrack procedure, if specified; or

- 2. at the point of interception of the last track specified in the approach procedure; and ends at a point in the vicinity of an aerodrome from which:
 - a. a landing can be made; or
 - b. a missed approach procedure is initiated.

FINAL APPROACH FIX (FAF) — The fix from which the final approach (IFR) to an airport is executed and which identities the beginning of the final approach segment. It is designated in the profile view of Jeppesen Terminal charts by the Maltese Cross symbol for nonprecision approaches and by the glide slope/path intercept point on precision approaches. The glide slope/path symbol starts at the FAF. When ATC directs a lower-than-published Glide Slope/Path Intercept Altitude, it is the resultant actual point of the glide slope/path intercept.

FINAL APPROACH FIX (FAF) (AUS-TRALIA) — A

specified point on a non-precision approach which identifies the commencement of the final segment. The FAF is designated in the profile view of Jeppesen Terminal charts by the Maltese Cross symbol.

FINAL APPROACH - IFR (USA) — The flight path of an aircraft which is inbound to an airport on a final instrument approach course, beginning at the final approach fix or point and extending to the airport or the point where a circle-to-land maneuver or a missed approach is executed.

FINAL APPROACH POINT (FAP) (USA) —

The point, applicable only to a nonprecision approach with no depicted FAF (such as an on-airport VOR), where the aircraft is established inbound on the final approach course from the procedure turn and where the final approach descent may be commenced. The FAP serves as the FAF and identifies the beginning of the final approach segment.

FINAL APPROACH FIX OR POINT (FAP) (ICAO)

— That fix or point of an instrument approach procedure where the final approach segment commences.

FINAL APPROACH POINT (FAP) (AUS-TRALIA) —

A specified point on the glide path of a precision instrument approach which identifies the commencement of the final segment.

NOTE: The FAP is co-incident with the FAF of a localizer based non-precision approach.

FLIGHT INFORMATION REGION (FIR, UIR) — An airspace of defined dimensions within which Flight Information Service and Alerting Service are provided.

1. flight Information Service (FIS) - A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

2. Alerting Service - A service provided to notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required.

FLIGHT WATCH (USA) — A shortened term for use in air-ground contacts to identify the flight service station providing Enroute Flight Advisory Service; e.g., "Oakland Flight Watch."

FLY-BY WAYPOINT — A fly-by waypoint requires the use of turn anticipation to avoid overshoot of the next flight segment.

FLY-OVER WAYPOINT — A fly-over waypoint precludes any turn until the waypoint is overflown and is followed by an intercept maneuver of the next flight segment.

GLIDE PATH (ICAO) — A descent profile determined for vertical guidance during a final approach.

GLIDE SLOPE (GS) (USA) — Provides vertical guidance for aircraft during approach and landing. The glide slope/glidepath is based on the following:

- 1. Electronic components emitting signals which provide vertical guidance by reference to airborne instruments during instrument approaches such as ILS/MLS; or
- 2. Visual ground aids, such as VASI, which provide vertical guidance for a VFR approach or for the visual portion of an instrument approach and landing.
- **3.** PAR, used by ATC to inform an aircraft making a PAR approach of its vertical position (elevation) relative to the descent profile.

GLIDE SLOPE/ GLIDE PATH INTERCEPT ALTITUDE — The minimum altitude to intercept the glide slope/path on a precision approach. The intersection of the published intercept altitude with the glide slope/path, designated on Jeppesen Terminal charts by the start of the glide slope/path symbol, is the precision FAF; however, when ATC directs a lower altitude, the resultant lower intercept position is then the FAF.

GLOBAL NAVIGATION SATELLITE SYS-TEMS (GNSS) — An "umbrella" term adopted by the International Civil Aviation Organization (ICAO) to encompass any independent satellite navigation system used by a pilot to perform onboard position determinations from the satellite data.

GLOBAL POSITIONING SYSTEM (GPS) — A

space-based radio positioning, navigation, and time-transfer system. The system provides highly accurate position and velocity information, and precise lime, on a continuous global basis, to an unlimited number of properly equipped users. The system is unaffected by weather, and provides a world-wide common grid reference system. The GPS concept is predicated upon accurate and continuous knowledge of the spatial position of each satellite in the system with respect to time and distance from a transmitting satellite to the user. The GPS receiver automatically selects appropriate signals from the satellites in view and translates these into a three dimensional position, velocity, and time. System accuracy for civil users is normally 100 meters horizontally. **GRID MINIMUM OFF-ROUTE ALTITUDE** (Grid MORA) — An altitude derived by Jeppesen or pro-vided by State Authorities. The Grid MORA altitude provides terrain and manrnade structure clearance within the section outlined by latitude and longitude lines. MORA does not provide for NAVAID signal coverage or communication coverage.

1. Grid MORA values derived by Jeppesen clear all terrain and manmade structures by 1000 feet in areas where the highest

elevations are 5000 feet MSL or lower. MORA values clear all terrain and manmade structures by 2000 feet in areas where the highest elevations are 5001 feet MSL or higher. When a Grid MORA is shown as "Unsurveyed" it is due to incomplete or insufficient information. Grid MORA values followed by a \pm denote doubtful accuracy, but are believed to provide sufficient reference point clearance.

2. Grid MORA (State) altitude supplied by the State Authority provides 2000 feel clearance in mountainous areas and 1000 feet in nonmountainous areas.

GROUND COMMUNICATIONS OUTLET (GCO) (USA) — An unstaffed, remotely controlled ground/ ground communications facility. Pilots at uncontrolled airports may contact ATC and FSS via VHF to a telephone connection to obtain an instrument clearance or close a VFR or IFR flight plan. They may also get an updated weather briefing prior to take-off. Pilots will use four "key clicks" on the VHF radio to contact the appropriate ATC facility, or six "key clicks" to contact FSS. The GCO system is intended to be used only on the ground.

HEIGHT ABOVE AIRPORT (HAA) — The height of the Minimum Descent Altitude (MDA) above the published airport elevation. This is published in conjunction with circling minimums.

HEIGHT ABOVE TOUCHDOWN (HAT) — The height of the Decision Height or Minimum Descent Altitude above the highest runway elevation in the touchdown zone of the runway. HAT is published on instrument approach charts in conjunction with all straight-in minimums.

HIGH FREQUENCY COMMUNICATIONS — High radio frequencies (HF) between 3 and 30 MHz used for air-to-ground voice communication in overseas operations.

HIGH SPEED TAXIWAY / TURNOFF (HST) — A

long radius taxiway designed and provided with lighting or marking to define the path of an aircraft, traveling at high speed (up to 60 knots), from the runway center to a point on the center of a taxiway. Also referred to as long radius exit or turnoff taxiway. The high speed taxiway is designed to expedite aircraft turning off the runway after landing, thus reducing runway occupancy time. **LANDING DISTANCE AVAILABLE** (LDA) (ICAO) — The length of runway which is declared available and suitable for the ground run of an airplane landing.

LOCAL AIRPORT ADVISORY (LAA) — A service provided by flight service stations or the military at airports not serviced by an operating control tower. This service consists of providing information to arriving and departing aircraft concerning wind direction and speed, favored runway, altimeter setting, pertinent known traffic, pertinent known field conditions, airport taxi routes and traffic patterns and authorized instrument approach procedures This information is advisory in nature and does not constitute an ATC clearance.

LOW ALTITUDE AIRWAY STRUCTURE / FEDERAL AIRWAYS (USA) — The network of airways serving aircraft operations up to but not including 18,000 feet MSL.

LOW FREQUENCY (LF) — The frequency band between 30 and 300 kHz.

MAGNETIC VARIATION — The orientation of a horizontal magnetic compass with respect to true north Because there is a continuous small change of direction of lines of magnetic force over the surface of the earth, magnetic variation at most locations is not constant over long periods of time.

MANDATORY ALTITUDE — An altitude depicted on an instrument approach procedure chart requiring the aircraft to maintain altitude at the depicted value.

MANDATORY FREQUENCY (MF) — A frequency designated at selected airports that are uncontrolled during certain hours only. Aircraft operating within the designated MF Area, normally 5 NM radius of the airport, must be equipped with a functioning radio capable of maintaining two-way communications Jeppesen charts list the MF frequency and the area when other than the standard 5 NM.

MAXIMUM AUTHORIZED ALTITUDE (MAA) — A

published altitude representing the maximum usable altitude or flight level for an airspace structure or route segment.

MEDIUM FREQUENCY (MF) — The frequencies between 300kHz and 3 MHZ.

MINIMUM CROSSING ALTITUDE (MCA) — The lowest altitude at certain fixes at which an aircraft must cross when proceeding in the direction of a higher minimum enroute IFH altitude (MEA).

MINIMUM DESCENT ALTITUDE/HEIGHT (MDA/H) (ICAO) — A specified altitude or height in a non precision approach or circling approach below which descent may not be made without visual reference.

MINIMUM DESCENT ALTITUDE (MDA)

(USA) -

The lowest altitude, expressed in feet above mean sea level to which descent is authorized on final approach or during circle-to-land maneuvering in execution of a standard instrument approach procedure where no electronic glide slope is provided.

MINIMUM ENROUTE IFR ALTITUDE

(MEA) — The lowest published altitude between radio fixes that meets obstacle clearance requirements between those fixes and in many countries assures acceptable navigational signal coverage The MEA applies to the entire width of the airway, segment, or route between the radio fixes defining the airway, segment, or route.

MINIMUM IFR ALTITUDES — Minimum altitudes for IFR operations are published on aeronautical charts for airways, routes, and for standard instrument approach procedures. Within the USA, if no applicable minimum altitude is prescribed the following minimum IFR altitudes apply:

1. In designated mountainous areas, 2000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown, or

2. Other than mountainous areas, 1000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown or

3. As otherwise authorized by the Administrator or assigned by ATC.

MINIMUM OBSTRUCTION CLEARANCE ALTI-TUDE (MOCA) — The lowest published altitude in effect between radio fixes on VOR airways, off-airway routes, or route segments which meets obstacle clearance requirements for the entire route segment and in the USA assures acceptable navigational signal coverage only within 22 nautical miles of a VOR.

MINIMUM OFF-ROUTE ALTITUDE (MORA) —

This is an altitude derived by Jeppesen The MORA provides known obstruction clearance within 10NM of the route centerline.

MINIMUM RECEPTION ALTITUDE (MRA) — The

lowest altitude at which an intersection can be determined.

MINIMUM SAFE ALTITUDE (MSA) — Altitude depicted on an instrument approach chart and identified as the minimum safe altitude which provides a 1000 foot obstacle clearance within a 25 NM radius from the navigational facility upon which the MSA is predicated. If the radius limit is other than 25 NM it is stated. This altitude is for EMERGENCY USE ONLY and does not necessarily guarantee NAVAID reception. When the MSA is divided into sectors, with each sector a different altitude, the altitudes in these sectors are referred to as "minimum sector altitudes".

MINIMUM VECTORING ALTITUDE (MVA) — The lowest MSL altitude at which an IFR aircraft will be vectored by a radar controller except as otherwise authorized for radar approaches, departures and missed approaches. The altitude meets IFR obsta- cle clearance criteria. It may be lower than the published MEA along an airway of J - route segment. It may be utilized for radar vectoring only upon the controller's determination that an adequate radar return is being received from the aircraft being controlled. Charts depicting minimum vectoring altitudes are normally available only to the controllers, not to pilots.

MISSED APPROACH —

- 1 A maneuver conducted by a pilot when an instrument approach cannot be completed to a landing. The route of flight and altitude are shown on instrument approach procedure charts. A pilot executing a missed approach prior to the Missed Approach Point (MAP) must continue along the final approach to the MAP. The pilot may climb immediately to the altitude specified in the missed approach procedure.
- 2 A term used by the pilot to inform ATC that he/she is executing the missed approach.
- **3** At locations where ATC radar service is provided the pilot should conform to radar vectors when provided by ATC in lieu of the published missed approach procedure.

MISSED APPROACH POINT (MAP) (ICAO) — That point in an instrument approach procedure at or before which the prescribed missed approach procedure must be initiated in order to ensure that the minimum obstacle clearance is not infringed.

MISSED APPROACH POINT (MAP) (USA) — A point prescribed in each instrument approach procedure at which a missed approach procedure shall be executed if the required visual reference does not exist.

NONPRECISION APPROACH PROCED-URE — A standard instrument approach procedure in which no electronic glideslope is provided e. g. VOR, TACAN, NDB, LOC, ASR, LDA, or SDF approaches.

NO PROCEDURE TURN (NoPT) — No procedure turn is required nor authorized.

OBSTACLE CLEARANCE ALTITUDE (HEIGHT) OCA(H) (ICAO) — The lowest altitude (OCA) or alternatively the lowest height above the elevation of the relevant runway threshold or above the aerodrome elevation as applicable (OCH) used in establishing compliance with the appropriate obstacle clearance criteria. **OBSTRUCTION CLEARANCE LIMIT** (OCL) (ICAO) — The height above aerodrome elevation below which the minimum prescribed vertical clearance cannot be maintained either on approach or in the event of a missed approach.

PILOT CONTROLLED LIGHTING (PCL) (USA) — (For other states see Air Traffic Control Rules and Procedures).

Radio control of lighting is available at selected airports to provide airborne control of lights by keying the aircraft's microphone. The control system consists of a 3 step control responsive to 7, 5 and/or 3 microphone clicks. The 3-step and 2 step lighting facilities can be altered in intensity. All lighting is illuminated for a period of 15 minutes (except for 1-step and 2 - step REILs which may be turned off by keying the mike 5 or 3 times respectively).

Suggested use is to always initially key the mike 7 times, this assures that all controlled lights are turned on to the maximum available intensity. If desired adjustment can then be made, where the capability is provided to a lower intensity (or the REIL turned off) by keying the mike 5 and/or three times. Approved lighting systems may be activated by keying the mike as indicated below:

KEY MIKE FUNCTION

7 times within 5 seconds	Highest intensity available
5 times within	Medium or lower intensity
5 seconds	(Lower REIL or REIL Off)
3 times within	Lowest intensity available
5 seconds	(Lower REIL or REIL-Off)

Due to the close proximity of airports using the same frequency radio controlled lighting receivers may be set at a low sensitivity requiring the aircraft to be relatively close to activate the system. Consequently, even when lights are on always key mike as directed when overflying an airport of intended landing or just prior to entering the final segment of an approach. This will assure the aircraft is close enough to activate the system and a full 15 minutes lighting duration is available.

PRECISION APPROACH PROCEDURE — A standard instrument approach procedure in which an electronic glideslope / glidepath is provided, e. g. , ILS, MLS, PAR.

PREDEPARTURE CLEARANCE (PDC) — An automated Clearance Delivery system relaying ATC departure clearances from the FAA to the user network computer for subsequent delivery to the cockpit via ACARS (Airline/Aviation VHF data link) where aircraft are appropriately equipped, or to gate printers for pilot pickup.

PROCEDURE TURN (PT) (ICAO) — A maneuver in which a turn is made away from a designated track followed by a turn in the opposite direction to permit the aircraft to intercept and proceed along the reciprocal of the designated track.

NOTE 1: Procedure turns are designated 'left" or 'right according to the direction of the initial turn.

NOTE 2: Procedure turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual approach procedure.

PROCEDURE TURN (PT) (USA) — The maneuver prescribed when it is necessary to reverse direction to establish an aircraft on the intermediate approach segment or final approach course. The outbound course, direction of turn, distance within which the turn must be completed and minimum altitude are specified in the procedure. However, unless otherwise restricted the point at which the turn may be commenced and the type and rate of turn are at the discretion of the pilot.

PROCEDURE TURN INBOUND — That point of a procedure turn maneuver where course reversal has been completed and an aircraft is established inbound on the intermediate approach segment or final approach course. A report of "procedure turn inbound" is normally used by ATC as a position report for separation purposes.

QFE — Height above airport elevation (or runway threshold elevation) based on local station pressure.

QNE — Altimeter setting 29 92 inches of mercury, 1013.2 hectopascals or 1013.2 millibars.

QNH — Altitude above mean sea level based on local station pressure.

RACETRACK PROCEDURE (ICAO) — A procedure designed to enable the aircraft to reduce altitude during the initial approach segment and/or establish the aircraft inbound when the entry into a reversal procedure is not practical.

RADAR WEATHER ECHO INTENSITY

LEVELS — Existing radar systems cannot detect turbulence. However, there is a direct correlation between the degree of turbulence and other weather features associated with thunderstorms and the radar weather echo intensity. The National Weather Service has categorized radar weather echo intensity for precipitation into six levels. These levels are sometimes expressed during communications as "VIP LEVEL" 1 through 6 (derived from the component of the radar that produces the information Video integrator and Processor). The following list gives the "VIP LEVELS" in relation to the precipitation intensity within a thunderstorm: Level 1 WEAK Level 2 MODERATE Level 3 STRONG Level 4 VERYSTRON8 Level 5 INTENSE Level 6 EXTREME

RADIO ALTIMETER / **RADAR ALTIMETER** — Aircraft equipment which makes use of the reflection of radio waves from the ground to determine the height of the aircraft above the surface.

RAPID EXIT TAXIWAY (ICAO) — A taxiway connected to a runway at an acute angle and designed to allow landing airplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.

RNAV APPROACH — An instrument approach procedure which relies on aircraft area navigation equipment for navigation guidance.

ROUTE MINIMUM OFF-ROUTE ALTITUDE (**Route MORA**) — This is an altitude derived by Jeppesen. The Route MORA altitude provides reference point clearance within 10 NM of the route centerline (regardless of the route width) and end fixes. Route MORA values clear all reference points by 1000 feet in areas where the highest reference points are 5000 feet MSL or lower. Route MORA values clear all reference points by 2000 feet in areas where the highest reference points are 5001 feet MSL or higher When a Route MORA is shown along a route as 'unknown" it is due to incomplete or insufficient Information.

RUNWAY EDGE LIGHTS (ICAO) — Are provided for a runway intended for use at night or for a precision approach runway intended for use by day or night. Runway edge lights shall be fixed lights showing variable white, except that

1. in the case of a displaced threshold, the lights between the beginning of the runway and the displaced threshold shall show red in the approach direction, and

2. a section of the lights 600m or one-third of the runway length, whichever is the less, at the remote end of the runway from the end at which the take-off run is started, may show yellow.

RUNWAY EDGE LIGHTS (USA) — Lights used to outline the edges of runways during periods of darkness or restricted visibility conditions. The light systems are classified according to the intensity or brightness they are capable of producing they are the High Intensity Runway Lights (HIRL), Medium Intensity Runway Lights (WIRL) and the Low Intensity Runway Lights (RL). The HIRL and MIRL systems have variable intensity controls where the RLs normally have one intensity setting. 1. The runway edge lights are while, except on instrument runways amber replaces white on the last 2,000 feet or half of the runway length, whichever is less, to form a caution zone for landings.

2. The lights marking the ends of the runway emit red light toward the runway to indicate the end of runway to a departing aircraft and emit green outward from the runway end to indicate the threshold to landing aircraft.

RUNWAY MARKINGS -

1. Basic marking - Markings on runways used for operations under visual flight rules consisting of centerline markings and runway direction numbers and, if required, letters.

2. Instrument marking - Markings on runways served by nonvisual navigation aids and intended for landings under instrument weather conditions, consisting of basic marking plus threshold markings.

3. All-weather (precision instrument) marking -Marking on runways served by nonvisual precision approach aids and on runways having special operational requirements, consisting of instrument markings plus landing zone markings and side strips.

SEGMENTS OF AN INSTRUMENT AP-PROACH PROCEDURE — An instrument approach procedure may have as many as four separate segments depending on how the approach procedure is structured

ICAO —

1. Initial Approach — That segment of an instrument approach procedure between the initial approach fix and the intermediate approach fix or, where applicable, the final approach fix or point.

2. Intermediate Approach - That segment of an instrument approach procedure between either the intermediate approach fix and the final approach fix or point, or between the end of a reversal, race track or dead reckoning track procedure and the final approach fix or point, as appropriate.

3. Final Approach - Thai segment of an instrument approach procedure in which alignment and descent for landing are accomplished.

4. Missed Approach Procedure - The proce - dure to be followed if the approach cannot be continued.

USA —

- 1. Initial Approach -The segment between the initial approach fix and the intermediate fix or the point where the aircraft is established on the intermediate course or final course.
- 2. Intermediate Approach The segment between the intermediate fix or point and the final approach fix.
- 3. Final Approach The segment between the final approach fix or point and the runway, airport or missed approach point.
- 4. Missed Approach The segment between the missed approach point, or point of arrival at decision height, and the missed approach fix at the prescribed altitude.

SELECTIVE CALL SYSTEM (SELCAL) — A system which permits the selective calling of individual aircraft over radiotelephone channels linking a ground station with the aircraft.

SIDESTEP MANEUVER — A visual maneuver accomplished by a pilot at the completion of an instrument approach to permit a straight-in landing on a parallel runway not more than 1200 feet to either side of the runway to which the instrument approach was conducted.

SPECIAL USE AIRSPACE — Airspace of defined dimensions identified by an area on the surface of the earth wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities. Types of special use airspace are:

- Alert Area (USA) Airspace which may contain a high volume of pilot training activities or an unusual type of aerial activity. neither of which is hazardous to aircraft. Alert Areas are depicted on aeronautical charts for the information of nonparticipating pilots. All activities within an Alert Area are conducted in accordance with Federal Aviation Regulations, and pilots of participating aircraft as well as pilots transiting the area are equally responsible for collision avoidance.
- 2.Controlled Firing Area (USA) Airspace wherein activities are conducted under conditions so controlled as to eliminate hazards to nonparticipating aircraft and to ensure the safety of persons and property on the ground.
- 3.Military Operations Area (MOA) (USA) A MOA is airspace established outside of a Class A airspace area to separate or segregate certain nonhazardous military activities from IFR traffic and to identify for VFR traffic where these activities are conducted.

- 4. Prohibited Area Airspace designated under FAR Part 73 within which no person may operate an aircraft without the permission of the using agency.
- 5. Restricted Area (USA) Airspace designated under Part 73, within which the flight of aircraft, while not wholly prohibited, is subject to restriction. Most restricted areas are designated joint use and IFR/VFR operations in the area may be authorized by the controlling ATC facility when it is not being utilized by the using agency Restricted areas are depicted on enroute charts. Where joint use is authorized, the name of the ATC controlling facility is also shown.
- 6. Restricted Area (ICAO) An airspace of defined dimensions, above the land areas or territorial waters of a state, within which the flight of aircraft is restricted in accordance with certain specified coordinates.
- 7. Warning Area A warning area is airspace of defined dimensions from 3 NM outward from the coast of the United States, that contains activity that may be hazardous to nonparticipating aircraft. The purpose of such warning areas is to warn nonpartictpating pilots of the potential danger. A warning area may be located over domestic or international waters or both.

STANDARD INSTRUMENT DEPARTURE (SID) —

A preplanned instrument flight rule (IFR) air traffic control departure procedure printed for pilot use in graphic and/or textual from. SIDs provide transition from the terminal to the appropriate enroute structure.

STANDARD TERMINAL ARRIVAL ROUTE (STAR)

— A preplanned instrument flight rule (IFR) airtraffic control arrival procedure published for pilot use in graphic and/or textual form. STARs provide transition from the enroute structure to an outer fix or an instrument approach fix/arrival waypoint in the terminal area.

STATION DECLINATION — The orientation with respect to true north of VHF transmitted signals The orientation is originally made to agree with the magnetic variation (an uncontrollable global phenomenon) at the site. Hence station declination (fixed by man) may differ from changed magnetic variation until the station is reoriented.

SUBSTITUTE ROUTE — A route assigned to pilots when any part of an airway or route is unusable because of NAVAID status.

SUNSET AND SUNRISE — The mean solar times of sunset and sunrise as published in the Nautical Almanac, converted to local standard time for the locality concerned. Within Alaska, the end of evening civil twilight and the beginning of morning civil twilight, as defined for each locality.

SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM (SMGCS) (USA) — Provisions for guidance and control or regulation for facilities, information, and advice necessary for pilots of aircraft and drivers of ground vehicles to find their way on the airport during low visibility operations and to keep the aircraft or vehicles on the surfaces or within the areas intended for their use. Low visibility operations for this system means reported conditions of RVR 1200' or less.

SURVEILLANCE APPROACH (ASR) — An instrument approach wherein the air traffic controller issues instructions, for pilot compliance, based on aircraft position in relation to the final approach course (azimuth), and the distance (range) from the end of the runway as displayed on the controller's radar scope. The controller will provide recommended attitudes on final approach if requested by the pilot.

TAKE-OFF DISTANCE AVAILABLE (TODA) (**ICAO**) — The length of the take-off run available plus the length of the clearway, if provided.

TAKE-OFF RUN AVAILABLE (TORA) (ICAO)

The length of runway declared available and suitable for the ground run of an airplane taking off.

TERMINAL CONTROL AREA (ICAO) — A control area normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes.

TERMINAL VFR RADAR SERVICE (USA) — A national program instituted to extend the terminal radar services provided instrument flight rules (IFR) aircraft to visual flight rules (VFR) aircraft. The program is divided into four types of service referred to as basic radar service, terminal radar service area (TRSA) service, Class B service and Class C service.

1. Basic Radar Service - These services are provided for VFR aircraft by all commissioned terminal radar facilities. Basic radar service includes safety alerts, traffic advisories, limited radar vectoring when requested by the pilot and sequencing at locations where procedures have been established for this purpose and/or when covered by a letter of agreement. The purpose of this service is to adjust the flow of arriving IFR and VFR aircraft into the traffic pattern in a safe and orderly manner and to provide traffic advisories to departing VFR aircraft. TRSA Service - This service provides, in addition to basic radar service, sequencing of all IFR and participating VFR aircraft to the primary airport and separation between all participating VFR aircraft. The purpose of this service is to provide separation between all participating VFR aircraft and all IFR aircraft operating within the area defined as a TRSA.

Class B Service - This service provides, in addition to basic radar service, approved separation of aircraft based on IFR, VFR, and/or weight, and sequencing of VFR arrivals to the primary airport(s),

Class C Service - This service provides, in addition to basic radar service, approved separation between IFR and VFR aircraft, and sequencing of VFR aircraft, and sequencing of VFR arrivals to the primary airport.

TERMINAL RADAR SERVICE AREA (TRSA) (USA) — Airspace surrounding designated airports wherein ATC provides radar vectoring, sequencing and separation on a full-time basis for all IFR and participating VFR aircraft. Service provided in a TRSA is called Stage III Service. Pilots' participation is urged but is not mandatory.

THRESHOLD—The beginning of that portion of the runway usable for landing.

THRESHOLD CROSSING HEIGHT — The theoretical height above the runway threshold at which the aircraft's glideslope antenna would be if the aircraft maintains the trajectory established by the mean ILS glideslope or MLS glidepath.

TOUCHDOWN ZONE ELEVATION (TDZE) — The highest elevation in the first 3,000 feet of the landing surface.

TRANSITION ALTITUDE (QNH) — The altitude in the vicinity of an airport at or below which the vertical position of an aircraft is controlled by reference to altitudes (MSL).

TRANSITION HEIGHT (QFE) — The height in the vicinity of an airport at or below which the vertical position of an aircraft is expressed in height above the airport reference datum.

TRANSITION LAYER — The airspace between the transition altitude and the transition level. Aircraft descending through the transition layer will use altimeters set to local station pressure, while departing aircraft climbing through the layer will be using standard altimeter setting (QNE) of 29.92 inches of Mercury, 1013.2 millibars, or 1013.2 hectopascals. **TRANSITION LEVEL (QNE)** — The lowest flight level available for use above the transition altitude.

TURN ANTICIPATION — Turning maneuver initiated prior to reaching the actual airspace fix or turn point that is intended to keep the aircraft within established airway or route boundaries.

VERTICAL NAVIGATION (VNAV) — That function of RNAV equipment which provides guidance in the vertical plane.

VERTICAL PATH ANGLE (VPA) (USA) — The descent angle shown on some non-precision approaches describing the geometric descent path from the Final approach fix (FAF), or on occasion from an intervening stepdown fix, to the Threshold Crossing Height (TCH). This angle may or may not coincide with the angle projected by a Visual Glide Slope Indicator (VASI, PAPI, PLASI, etc.)

VISIBILITY (ICAO) — The ability, as determined by atmospheric conditions and expressed in units of distance, to see and identify prominent unlighted objects by day and prominent lighted objects by night.

- 1. Flight Visibility The visibility forward from the cockpit of an aircraft in flight.
- 2. Ground Visibility The visibility at an aerodrome as reported by an accredited observer.
- 3. Runway Visual Range (RVR) The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.

VISIBILITY (USA) — The ability, as determined by atmospheric conditions and expressed in units of distance, to see and identify prominent unlighted objects by day and prominent lighted objects by night. Visibility is reported as statute or nautical miles, hundreds of feet or meters

- 1.Flight Visibility The average forward horizontal distance, from the cockpit of an aircraft in flight, at which prominent unlighted objects may be seen and identified by day and prominent lighted objects may be seen and identified by night.
- 2.Ground Visibility Prevailing horizontal visi bility near the earth's surface as reported by the United States National Weather Service or an accredited observer.
- 3.Prevailing Visibility The greatest horizontal visibility equaled or exceeded throughout at least half the horizon circle which need not necessarily be continuous.

Runway Visibility Value (RVV) – The visibility determined for a particular runway by a transmissometer. A meter provides a continuous indication of the visibility (repor ted in miles or fractions of miles) for the runway. RVV is used in lieu of prevailing visibility in determining minimums for a particular runway.

- Runway Visual Range (RVR) An instrumentally derived value, based on standard calibrations, that represents the horizontal istance a pilot will see down the runway from the approach end; it is based on the sighting of either high intensity runway lights or on the visual contrast of other targets whichever yields the greater visual range. RVR, in contrast to prevailing or runway visibility, is based on what a pilot in a moving aircraft should see looking down the runway. RVR is horizontal visual range, not slant visual range. It is based on the measure- ment of a transmissometer made near the touchdown point of the instrument runway and is reported in hundreds of feet. RVR is used in lieu of RVV and/or prevailing visibility in determining minimums for a particular runway.
 - a. Touchdown RVR The RVR visibility readout values obtained from RVR equipment serving the runway touchdown zone.
 - b. Mid-RVR The RVR readout values obtained from RVR equipment located midfield of the runway.
 - c. Rollout RVR The RVR readout values obtained from RVR equipment located nearest the rollout end of the runway.

VISUAL APPROACH (ICAO) — An approach by an IFR flight when either part or all of an instrument approach procedure is not completed and the approach is executed in visual reference to terrain.

VISUAL APPROACH (USA) — An approach conducted on an instrument flight rules (IFR) flight plan which authorizes the pilot to proceed visually and clear of clouds to the airport. The pilot must, at all times, have either the airport or the preceding aircraft in sight. This approach must be authorized and under 1he control of the appropriate air traffic control facility. Reported weather at the airport must be ceiling at or above 1,000 feet and visibility of 3 miles or greater.

VISUAL DESCENT POINT (VDP) — A defined point on the final approach course of a non-precision straightin approach procedure from which normal descent from the MDA to the runway touchdown point may be commenced, provided the approach threshold of that runway, or approach lights, or other markings identifiable with the approach end of that runway are clearly visible to the pilot

VOLMET BROADCAST — Routine broadcast of meteorological information for aircraft in flight.

WAYPOINT — A specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation

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UNIT 3

AIR TRAFFIC CONTROL

PART 1

Exercise 1

Read the RULES AND PROCEDURES for TUNISIA and translate the document into your language. Use the WORD LIST after the text.

RULES AND PROCEDURES

GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in confirmity with ICAO Standards, Recommended Practices and Procedures.

FLIGHT PROCEDURES

HOLDING

No information available.

PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are in accordance with an earlier version of PANS-OPS, Document 8168, and are not yet converted to the new PANS-OPS standard.

AIRPORT OPERATING MINIMUMS

Tunisia publishes Obstacle Clearance Limit (OCL), DA(H)/MDA(H), visibility and ceiling for landing.

Jeppesen charted minimums are not below State minimums.

SPECIAL REQUIREMENTS AND REGULATIONS

VFR FLIGHTS WITHIN CONTROLLED AIRSPACE

Aircraft operating VFR within controlled airspace have to be equipped with functioning two-way radio and serviceable VOR receiver and must maintain a continuous listening watch on the radio frequency assigned by the relevant ATS unit.

With the exception of control zones, no aircraft under VFR is allowed to enter controlled airspace without having received prior approval by the ATS unit. Every change from IFR flight to VFR is subject to prior approval.

DIFFERENCES FROM ICAO STANDARTS AND PROCEDURES ICAO REFERENCE

ANNEX 2

- 3.3.1.1.2.1 Fligth plans are required for all flights.
- 5.2.1 IFR flights shall be executed at a height of at least 1500 feet (450m) above the highest obstacle located within a radius of 4.3 NM (8km) of the estimated position of the aircraft in flight.
- 5.3.3 Aircraft flying IFR outside controlled airspace are required to report position at half hourly intervals.

WORD LIST

assign	[E7sain]	назначать, определять, предписывать
conformity	[kEn7fO:miti]	соответствие, согласованность
convert	[kEn7vE:t]	превращать, переделывать
relevant	[7relivEnt]	уместный, относящийся к делу
subject	[7sVbd3ikt]	подлежащий, подверженный

Before doing the following exercises study the text and the word list thoroughly again.

Exercise 2

Give the English equivalents for:

В силе; обслуживание воздушного транспорта; в соответствии с; рекомендуемая практика; имеется в наличии; заход по приборам; вариант; переведенный в; минимальная безопасная высота; высота принятия решения; нижняя граница облачности; минимум; опубликованный в картах; требование; работающий; предписанный; соответствующий; за исключением; одобрение; подлежать; выполнять полет; расположенный; получасовой интервал.

Exercise 3

What do the following abbreviations stand for?

ICAO, OCL, DA, DH, MDA, MDH, VFR, ATS, VOR, IFR, NM, PANS-OPS.

Exercise 4

True or false?

- 1. The air traffic rules in Tunisia are in conformity with ICAO standards.
- 2. No information is available about holding procedures.
- 3. Instrument approach procedures are in accordance with the latest version of PANS-OPS, Document 8/68.
- 4. Tunisia publishes only obstacle clearance limit, visibility and ceiling for landing.
- 5. Aircraft operating VFR within controlled airspace have to be equipped with a twoway radio.
- 6. Only heavy traffic needs a serviceable VOR receiver on board when being within controlled airspace.
- 7. Every change from IFR flight to VFR has to be approved by ATC.
- 8. Flight plans are not required of transit flights over the Tunis a territory.
- 9. IFR flights have to be executed at a height not below 450 m above the hightest obstacle located within a radius of 10 km of the estimated position of the aircraft in flight.
- 10. Aircraft flying IFR outside controlled airspace must transmit position reports each hour.

Exercise 5

Answer the questions:

- 1. What air traffic rules are in force in Tunisia?
- 2. Is any information about holding procedures available?
- 3. What kind of operating minimums does Tunisia publish?
- 4. Are Jeppesen charted minimums below or above the state minimums of Tunisia?
- 5. What equipment must aircraft flying VFR in the controlled airspace carry on board?
- 6. Does the operator have to listen continuously to the relevant ATS unit?
- 7. What kind of permission must VFR traffic obtain before entering controlled air-space?
- 8. Does every operator need a flight plan?
- 9. What is the minimum height above the highest obstacle which the aircraft have to maintain when flying IFR?
- 10. When do the aircraft flying IFR outside controlled airspace have to make their routine position reports?

Exercise 6

Give the synonyms for:

Rule, to hold, in accordance with, version, ceiling, to convert, to be equipped with, to maintain a continuous listening watch, with the exception of, be allowed, approval, to be subject to, to require, to execute a flight, at half hourly intervals.

Exercise 7

Which elements do the following words consist of? What parts of speech are they? Find the related words in the dictionary.

Organization, service, recommended, available, equipped, functioning, continuous, approval, highest, hourly, estimated.

Exercise 8

Fill in the gaps in the following sentences:

a) The air traffic rules are in _____ with ICAO standards.

- b) Instrument _____ procedures are in accordance with PANS-OPS, Document 8168.
- c) Tunisia _____ Obstacle Clearance Limit, DA and MDA.
- d) Aircraft _____ VFR have to be equipped with a radio.

e) Operators must maintain a continuous listening _____

- f) No aircraft is _____ to enter controlled airspace without prior permission.
- g) Every change from IFR flight to VFR is _____ to prior approval.

h) IFR flights shall be _____ at a height of a least 1500 feet above the highest obstacle.

Exercise 9

Make up sentences using the following words:

- a) Minimums; not; sharter, are, minimums; state; below; Jeppesen.
- b) Is; prior; every; IFR; VFR; subject; to; from; flight; approval; change; to.
- c) Intervals; aircraft; half; position; are; hourly; to ; report; at; required.
- d) PANS-OPS; procedures; accordance; instrument; with; approach; in; are.
- e) Must, continuous; watch; a; aircraft; listening; maitain.
- f) Aircraft; way; be; with; have; two; to; radio; equipped; functioning.

Exercise 10

Fill in the gaps choosing the necessary word:

- a) The organization of air _____ services (force, traffic, equipment, space)
- b) No information about holding procedures is _____. (approved, allowed, available, transmitted)
- c) Aircraft _____ IFR within controlled airspace (maintaining, listening, within, operating)
- d) Tinisia _____ visibility and ceiling for landing. (publishes, published, publishing, publish)
- e) Jeppesen _____ minimums are not below state minimums. (published, approved, allowed, charted)
- f) Flight plans are _____ of all flights. (asked, submitted, subject, required)

Exercise 11

Make up your own sentences using the following words:

Subject; relevant; conformity; assign; convert; frequency; VOR receiver; prior, position.

PART 2

Exercise 1

Read the RULES AND PROCEDURES for DJIBOUTI and translate the document into your language. Use the WORD LIST after the text..

RULES AND PROCEDURES

GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in connection with all air traffic services in Djuibouti:

Distance used in navigation, position repoprting, etc.	NM and TENTHS
Relatively short distances such as those relating to aerodromes (e.g.,runway lenghs)	METRES
Altitude, elevations, and heights	METRES, FEET*
Horizontal speed in cluding wind speed	KNOTS
Vertical speed	METRES per SEC
Wind direction for landing and taking off	DEG/MAG
Wind direction except for landing and taking off	DEG/TRUE
Visibility including runway visual range	KM or METRES
Altimeter setting, atmospheric pressure	MB
Temperature	DEG/CELSIUS (CENTIGRADE)
Weight	mt or KGS
Time	HR & MIN, the DAY of 24 HR BEGINS AT MID- NIGHT UTC

* Unit used on Instrument Approach Charts FLIGHT PROCEDURES

HOLDING

Holding is limited to maximum 220 KIAS/1 min at all altitudes.

PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are in accordance with an earlier version of PANS-OPS, Document 8168, and are not yet converted to the new PANS-OPS standard.

AIRPORT OPERATING MINIMUMS

Djibouti publishes OCL together with DA(H)/MDA(H), ceiling and visibility for landing and visibility for take-off.

Jeppesen charted minimums are not below State minimums.

ATS AIRSPACE CLASSSIFICATION

Djibouti has adopted the ICAO ATS airspace classification as listed on ATC page 351.

Within Djibouti airspace, however, only the airspace classes D and G are used. Within class D airspace a speed limitation is applied to IFR flights for control purposes only.

No speed limitation is applied toVFR flight.

SPECIAL REQUIREMENTS AND REGULATIONS

RESTRICTED USE OF AERODROMES

Civil aircraft coming from a country are not permitted to land at another aerodrome than Djibouti (Ambouti), except in an emegrency situation or with a special permision.

DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES ICAO REFERENCE

ANNEX 2

3.3.1.2.1 Flight plans are required for all flights except local fligts.

4.4 (a) VFR flights are not permitted at FL 195 or above.

5.1.2 Except when necessary for take-off or landing, aircraft shall fly at a height of at least 1500 ft (450m) over the highest obstacle located within a radius of at least 8 km (5 milies) of the estimated position of the aircraft.

WORD LIST

adopt	[E7dOpt]	принимать
apply	[E7plai]	применять, прилагать, ка-

		саться, относиться
civil	[7sivl]	гражданский
connection		связь, соединение
DA (H) Decision Altitude (Height)		абсолютная (относитель- ная) высота принятия ре- шения
limit	[7limit]	ограничивать
list		сносить в список, состав- лять список
MDA (H) - Minimun Descent Altitude (Height)		минимальная абсолютная (относительная) высота снижения
mt - metric ton		тонна
purpose	[7pE:pEs]	цель
relate	[ri7leit]	относиться, иметь отно- шение
relatively	[7lelEtivli]	относительно, сравни- тельно
restricted	[ris7triktid]	узкий, ограниченный
units of measurement	[7me3EmEnt]	единицы измерения

Before doing the following exercises study the text and the word list thoroughly again.

Exercise 2

Give the English equivalents for:

Рекомендуемая практика; единица измерения; в связи с; расстояние; вес; температура; атмосферное давление; направление; вертикальный; горизонтальный; превышение; установка шкалы высотометра; видимость на ВПП; высота относительная; высота абсолютная; магнитный градус; истинный градус; градусы по Цельсию; полночь; стоградусная шкала; длина ВПП; относительно; ограниченный; ограничение; замена; принимать; занести в список; применять; требование; ограниченный; специальное разрешение; аварийная ситуация; полеты на местных авиалиниях; расположенный.

Exercise 3

What do the following abbreviations stand for?

ATS, FL, ft, m, km, hr, min, UTC, DEG/MAG, MB, mt, KGS, NM, etc, e.g, KIAS, PANS-OPS, DA, DH, MDA, MDH, OCL, VFR, IFR, ATC.

Exercise 4

True or false?

- 1. Distance used in navigation and position reporting is measured by kilometres.
- 2. Runway lengths are measured by feet.
- 3. Aerodrome elevations are measured by feet on Instrument Approach Charts.
- 4. Temperatures are measured by degrees Fahrenheit.
- 5. Weight is measured by metrical tons.
- 6. Altimeter setting is given in inches.
- 7. Wind direction for take-off and landing is given in true degrees.
- 8. Runway visual range is measures by metres.
- 9. Holding is limited to maximum 1 minute pattern at all altitudes.
- 10. Instrument approach procedures are not yet converted to the new PANS-OPS standard.
- 11. Djibouti has adopted the ICAO ATS airspace classification.
- 12. Certain speed limitations are applied to VFR flights.
- 13. Only airspace classes D and C are used within Djibouti airspace.
- 14. Foreignt civil aircraft are permitted to land only at Ambouti airport in Djibouti.
- 15. Flight plans are required for all flights without any exception.
- 16. VFR flights are not permitted above flight level 200.
- 17. Minimum cruising height is 1500 feet above the highest obstacle.

Exercise 5

Answer the questions:

- 1. What standards are the Djibouti air traffic rules in conformity with?
- 2. Are distances used in navigation measured by nautical miles or statute miles?
- 3. Relatively short distances are measured by metres, aren't they?
- 4. Altitude and height aren't measured by kilometres, are they?
- 5. Is wind direction for take-off and landing measured by true or magnetic degrees?
- 6. Weight is not measured by pounds, isn't it?
- 7. What is temperature measured by?
- 8. Does the time measurement begins at midnight UTC or local time?
- 9. What is the maximum indicated airspeed which the aircraft may maintain in the holding pattern?
- 10. Is the maximum outbound time in the holding pattern 1 or 2 minutes?
- 11. Have the instrument approach procedures been converted to the new PANS-OPS standard?

- 12. What kind of operating minimums does Djibouti publish?
- 13. Are Jeppesen charted minimums above or below state minimuns?
- 14. Which class airspace is there in Djibouti?
- 15. Is any speed limitation applied to VFR flights?
- 16. Where are foreign civil aircraft permitted to land?
- 17. Do local flights need flight plans?
- 18. What is the minimum height above the obstacles which the aircraft must maintain?

Exercise 6

Give the synonyms for:

Recommend; distance; vertical speed which the aircraft keeps when climbing or descending; maximum speed; below minimums; adapted; not permitted; located; estimated.

Exercise 7

What elements do the following words consist of? What parts of speech are they? Find the related words in the dictionary.

Relatively; reference; difference; registered; classification; limited; visibility; including.

Exercise 8

Fill in the gaps in the following sentences:

- a) Visibility _____ runway visual range.
- b) Distance used in navigation and position _____.
- c) Only airspace _____ D and C are used.
- d) Foreign aircraft are not _____ to land at another aerodrome than Djibouti (Ambouli).
- e) Flight plans are required for all flights _____ local flights.
- f) Instrument _____ procedures are in accordance with an earlier version of PANS-OPS.

Exercise 9

Make up sentences using the following words:

- a) Prosedures; standard; yet; instrument; the; converted; not; PANS-OPS; to; approach are; new.
- b) 220 KIAS/1 min; limited; altitudes; holding; all; maximum; at; to; is.
- c) Of; least; shall; aircraft; 450m; at; a; fly; height.
- d) Required; flights; flight; except; are; all; plans; for; local.
- e) Ambouti; foreign; a; civil; are; at; from; only; land; coming; permitted; country; aircraft; to.
- f) Traffic; connection; units; with; in; of; air; used; measurement; services.

Exercise 10

Fill in the gaps choosing the necessary word:

- a) The air _____ rules and procedures are in conformity with ICAO standards. (Traffic, space, navigational, flying)
- b) Except when _____ for take-off and landing, aircraft shall fly at a height of at least 450 m.

(Requested, transmitted, necessary, asked)

- c) Within class D airspace a speed _____ is applied to IFR flights. (Rules, procedures, standards, limitations)
- d) Relatively short distances such as those _____ to aerodromes. (Related, concerning, connected, established)
- e) Djibouti has _____ the ICAO ATS airspace classification. (Achieved, published, classified, adopted)
- f) Aircraft shall fly a 450 m above the _____ obstacle. (Highest, tallest, longest, largest)

Exercise 11

Make up your own sentences using the following words:

To adopt; to apply; civil; connection; list; purpose; to relate; relatively; restricted; measurement.

PART 3

Exercise 1

Read RULES AND PROCEDURES for ALGERIA and translate the document into your language. Use the WORD LIST after the text.

RULES AND PROCEDURES

GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units os measurement used in connection with all air traffic services in Algeria:

Distance used in navigation, posi-	NM and TENTHS
tion	
reporting, etc.	
Relatively short distances such as	
those relating to aerodromes	METRES
(e.g., runway lengths)	
Altitude, elevations, and heights	METRES
Horizontal speed including	KNOTS
wind speed	
Vertical speed	METRES per SEC
Wind direction for landing and	DEG/MAG
taking off	
Wind direction except for landing	DEG/TRUE
and taking off	
Visibility including runway	KM or METRES
visual range	
Altimeter setting, atmospheric	MB
pressure	
Temperature	DEG/CELSIUS
	(CENTIGRADE)
Weight	mt or KGS
Time	HR & MIN, the
	DAY of 24 HR
	BEGINS AT
	MIDNIGHT UTC

FLIGHT PROCEDURES

HOLDING

Holding procedures comply with Table I, published on AIR TRAFFIC CON-TROL Pages series 200.

PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are in accordance with new PAHS-OPS, Document 8168, Volume II.

AIRPORT OPERATING MINIMUMS

Algeria does not publish State airport operating minimums. Algeria publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

ATS AIRSPACE CLASSIFICATION

Algeria has adopted the ICAO ATC airspace classification as listed on ATC

page 351.

Airspace classes B, C and E presently are not used within Algiers FIR.

Within class F and G airspace two-way communication is also required for VFR flights.

SPECIAL REQUIREMENTS AND REGULATIONS

SELECTION OF FLIGHT LEVEL

Whenever a pilot in flight is unable to obtain a sufficient number of QNH values to ascertain adequate terrain clearance, he should base his calculation of the minimum flight altitude according to the following values:

Northern part of FIR 985 mb, southern part of FIR 990 mb. The boundary between northern and southern part of the FIR is the southern edge of the high terrain area.

DIFERENCES FROM ICAO STANDARDS AND PROCEDURES

ICAO REFERENCE

ANNEX 2

3.3.1.2.1. Flight plans are additionally required for flights over desert regions and over the sea.

5.1.2. IFR flights shall be conducted at a height of at least 1500 ft (450m) above the highest obstacle located within 4.3. NM (8 km) of the estimated position of the aircraft in flight.

WORD LIST

adequate

[7Xdikwit]

соответствующий, аде-кватный

ascertain	[6XsE7tein]	устанавливать, удостове- ряться, выяснять, убе- ждаться
calculation	[6kXlkju7leiSEn]	вычисление, расчет
desert	[7dezEt]	пустыня
presently	[7prezntli]	теперь, сейчас
selection	[si7lekSn]	выбор
sufficient	[sE7fiSEnt]	достаточный
terrain clearance	[7terein]	высота над местностью, геометрическая высота
value	[7vXlju:]	значение

Before doing the following exercises study the text and the word list thoroughly again.

Exercise 2

Give the English equivalents for:

В общем; действующий; рекомендуемая практика; стоградусная шкала; установка шкалы высотометра; специальные требования и правила; в настоящее время; двусторонняя связь; достаточный; адекватный; убеждаться; расчет; пустыня; выбор; высота над местностью; значение; граница контрольной зоны; северный; южный; основываться на чем-либо; минимальная полетная высота; край.

Exercise 3

What do the following abbreviations stand for?

FIR; ATC; ATS; mb; ft; m; OCA; OCH; PANS-OPS; hr; UTC; sec; deg; nm; e.g.; etc.

Exercise 4

True or false?

- 1. The air traffic rules and procedures are in conformity with ICAO Standards, Recommended Practices and Procedures.
- 2. The organization of the air traffic services differs from ICAO standards.
- 3. Distance is measured in kilometres.
- 4. Altitude, elevations, and heights are measured in feet.
- 5. Vertical speed is measured in metres per second.
- 6. Weight is measured in pounds.
- 7. Instrument approach procedures are in accordance with the previous PANS-OPS.

- 8. Algeria does not publish State airport operating minimums.
- 9. Algeria has adopted the ICAO ATS Airspace classification.
- 10. Airspace classes B, C, E, F and G are used presently within Algiers FIR.
- 11. Two-way communication is required for VFR flights within class F and A air-space.
- 12. Whenever a pilot is unable to obtain a sufficient number of QNH values to ascertain adequate terrain clearance, he should base his calculation of the average flight altitude according to 985 mb in the northern part of FIR and 990 mb in the southern part of FIR.
- 13. The boundary between northern and southern part of the FIR is the southern edge of the high terrain area.
- 14. Flight plans are not required for flights over desert regions and over the sea.
- 15. IFR flights must be conducted at a height of at least 450m above the highest obstacle.

Exercise 5

Answer the questions:

- 1. Do the air traffic rules and procedures in Algeria differ greatly from the ICAO standards?
- 2. Which units are distances measured in?
- 3. Is wind direction measured by magnetic or true degrees?
- 4. Visibility is measured in miles, isn't it?
- 5. Atmospheric pressure is measured in milimetres, isn't it?
- 6. What do holding procedures comply with?
- 7. Which document are instrument approach procedures in accordance with?
- 8. Does Algeria publish state airport operating minimums?
- 9. Are obstacle clearance altitudes published in Algeria?
- 10. Which classes of airspace are now used in Algeria?
- 11. What should the pilot do if he cannot obtain a sufficient adequate terrain clearance?
- 12. Are the QNH values the same in the southern and the northern parts in Algerers FIR?
- 13. Where is the boundary between the northern and the southern parts of the Algiers FIR?
- 14. When are flight plans additionally required?
- 15. What is the minimum height above the highest obstacle for IFR flights?

Exercise 6

Give the synonyms for:

Altimeter setting; distance; comply with; in accordance with; classification; to adopt; be in use; required; to be unable; to ascertain; terrain; clearance; boundary; additionally; to conduct a flight; located; region.

Exercise 7

What elements do the following words consist of? What parts of speech are they? Find the related words in the dictionary.

Horizontal; setting; altimeter; operating; northern; unable; sufficient; values; ascertain; additionally; estimated.

Exercise 8

Fill in the gaps in the following sentences:

- a) The air traffic ______ and procedures are in conformity with ICAO Standards.
- b) Relatively short distances such as those _____ to aerodromes
- c) Instrument approach procedures are in _____ with new PANS-OPS.
- d) Algeria does not publish State Airport _____ minimums.
- e) The _____ northern and southern part of the FIR is the southern edge of the high terrain area.
- f) Flight plans are additionally required for flights over _____ regions and over the sea.

Exercise 9

Make up sentences using the following words:

- a) Classification; adopted; Algeria; ATS; the; has; airspace; ICAO.
- b) Clearance; publishes; altitudes; Algeria; obstacle.
- c) Measured; centigrade; is; in; temperature; degrees.
- d) His; altitude; 990 mb; the; of; should; flight; FIR; in; minimum; to; pilot; base; according; calculation; part; southern.
- e) Area; the; between; southern; northern; boundary; terrain; edge; part; is; of; the; high; FIR; and.
- f) Over; and; required; are; plans; additionally; flights; flight; the; sea; desert; regions.

Exercise 10

Fill in the gaps choosing the necessary word:

- a) _____ a pilot unable to obtain
 - (Whenever; however; whoever; whichever)
- b) The boundary _____ northern and southern part of FIR (Above; under; between; among)
- c) Units of measurement _____ in connection with all air traffic services. (Obtained; necessary; used; in force)
- d) Flight plans are _____ required for flights over desert regions. (Accurately; administratively; anxiously; additionally)
- e) IFR flights _____ be conducted at a height of at least 1500 ft.

(ought; have; shall; are)

f) The boundary is the southern edge of the high _____ area. (terrain; territory; region; districts)

Exercise 11

Make up your own sentences with the following words:

Value; terrain; sufficient; selection; calculation; desert; sea; adequate; to ascertain.

PART 4

Exercise 1

Read the RULES AND PROCEDURES for TURKEY and translate the document into your language. Use the WORD LIST after the text.

RULES AND PROCEDURES

GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in connection with all air traffic services in Turkey:

Distance used in navigation, position reporting, etc generally in excess of 2 to 3 nautical miles	NM and TENTHS	
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	METRES	
Altitude, elevations, and heights METRES		
Horizontal speed including wind speed	KNOTS	
Vertical speed	FEET per MIN	
Wind direction except for landing and taking off	DEG/MAG	
Wind direction except for landing and taking offDEG/TRUE		
Visibility including runway visual range	KM or METRES	
Altimeter setting, atmospheric	MB	
presuure		
Temperature	DEG/CELSIUS	

	(CENTIGRADE)	
Weight	mt or KGS	
Time	HR & MIN, the	
	DAY of 24 HR	
	BEGINS AT	
	MIDNIGHT UTC	

FLIGHT PROCEDURES

HOLDING

Holding procedures comply with Table I, published on AIR TRAFFIC CON-TROL Pages series 200.

PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are in accordance with new PANS-OPS, Document 8168, Volume II, 3rd Edition.

AIRPORT OPERATING MINIMUMS

Turkey does not publish State airport operating minimums. Turkey publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

SPECIAL REQUIREMENTS AND REGULATIONS

FLIGHT TO BE PERFORMED WITHIN CONTROLLED AIRSPACE

All foreign aircraft flying within or through the airspace of the Pepublic of Turkey must remain within controlled airspace at all times. The appropriate authoruty may waive this requirement by prior arrangement.

RADAR SERVICE

Radar assistance service may be provided by Turkish Air Force and is avialable on frequency 123.10 MHz, callsing 'TUGRIT SERVICE'. Service is provided on an 'as available' basis.

START-UP PROSEDURES

Departing turbo-jet and turbo-prop aircraft shall request a clearance to start engines between 15 and 30 minutes prior to the planned departure time. In case of a delay of 15 minutes or less a clearance to start engines will be granted. When the delay is more than 15 minutes the pilot will be advised of the expected delay.

AIR TRAFFIC FLOW MANAGEMENT (ATFM)

The Flow Management Unit (FNU) Istanbul (Telephone: (212) 6636400/1270-1271: AFTN: LTBBZDZX; Telefax: 90-212-6636290; SITA: ISTECYA) deals with ATFM measures affecting flights departing from airports in Turkey and destined to or overflying areas which are subject to air traffic flow restrictions.

- 1. Operators at Istanbul and Ankara airports will be informed by ATFN messages of the existing air traffic flow restrictions. At other airports information about the existing restrictions can be obtained from the ATS reporting office or from the appropriate ATC unit.
- 2. Non-repetitive flight plans concerning flights destined to or overflying areas which are subject to air traffic flow restrictions should be submitted at least 2 hours prior to ETD.
- 3. Any changes to ETD exceeding 30 minutes should be notified by telephone to the ATFM positions at Istanbul ACC (Telephone: (212) 6636400/1255, AFTN: LTBBZQZX, Telefax: 90-212-6636290) or Ankara ACC (telephone:312) 3980000/1153; ATFN: LTAAZQZX).
- 4. One hour before the expected start-up time, operators should contact by telephone the ATFM positions at Istanbul or Ankara ACC or the ATC unit at other airports asking for a slot allocation.
- 5. In case an allocated slot cannot be used, the operator should immediately inform the ATFM position or the appropriate ATC unit which in turn will try to provide a new slot.

DIFERENCES FROM ICAO STANDARDS AND PROCEDURES

ICAO REFERENCE

ANNEX 2

3.3.1.2.1 Flight plans are required for all flights.3.3.1.2.3. Flight plans shall be submitted at least 30 minutes before departure.

WORD LIST

Air Traffic Flow Manage- ment (ATFM)		управление потоком воз- душного движения
appropriate	[E7proupriit]	подходящий, соответ- ствующий
arrangement	[E7reind3mEnt]	соглашение, договорен- ность
authority	[O:7QOriti]	власть
deal (with)		вести дело, ведать, рассматривать вопрос
destine	[7destin]	направляться
exceed	[ik7si:d]	превышать, переходить границы
excess	[ik7ses]	сверх, больше чем

$in \sim of$		
grant	[gtX:nt]	предоставлять
non-repetitive flight plan		план неповторяющихся полетов
notify	[7noutifai]	извещать, уведомлять
remain	[ri7mein]	оставаться
slot allocation	[6Xlou7keiSn]	очередность вылетов
submit	[sEb7mit]	представлять на рассмот- рение
waive	[7weiv]	отказываться (от права, требования); временно откладывать

Before doing the following exercises study the text and the word list thoroughly again.

Exercise 2

Give the English equivalents for:

Свыше; длина ВПП; включая; через; оставаться; все время; руководство; соответствующий; отказываться; договоренность; локатор; ВВС; позывной; основа; турбо-реактивный; турбо-винтовой; в случае; выданный; влияющий; ограничения; сообщение; существующий; не повторяющийся; сообщать; согласованное время (вылета); назначенный; в свою очередь.

Exercise 3

What do the following abbreviationsstand for?

DEG; Min; NM; OCA; OCH; Mhz; ATFM; FMU; ATS; ATC; ETD; ACC.

Exercise 4

True or false?

- 1. Holding procedures comply with Table 2, published on Air Traffic Control pages 200.
- 2. Horizontal speed is measured by knots.
- 3. All foreign aircraft flying within the airspace of the Republic of Turkey must remain with in controlled airspace at all times.
- 4. Radar assistance service is available on frequency 124.10 Mhz.
- 5. Departing turbo-jet and turbo-prop aircraft must request start up 40 minutes prior to departure.
- 6. When the delay is more than 15 min the pilot is advised of the expected delay.

- 7. Turkey does not publish Obstacle Clearance Altitudes or Heights.
- 8. Operators at Istanbul and Ankara are usually informed by ATFM messages of the existing air traffic flow restrictions.
- 9. Any changes to ETD exceeding 1 hour should be notified by telephone to the ATFM positions at Istanbul ACC.
- 10. Two hours before the expected start-up operators should ask for a slot allocation.
- 11. Flight plans are required for all flight.
- 12. Flight plans must be submitted at least half an hour before departure.

Exercise 5

Answer the questions:

- 1. What are altitude, elevations, and heights measured by?
- 2. Is visibility measured by kilometers or miles?
- 3. Weight is measured by metrical tons, isn't it?
- 4. What do holding prosedures comply with?
- 5. Are instrument approach procedures in accordance with the new or the old PANS-OPS (3 rd Edition)?
- 6. Does Turkey publish State airport operating minimums?
- 7. Turkey publishes Obstacle Clearance Altitude, doesn't it?
- 8. Who must remain within controlled airspace all the time?
- 9. How can this requirement be cancelled and who by?
- 10. What may Turkish Air Force provide?
- 11. What frequency is this assistance provided on?
- 12. What is the callsign of the appropriate unit?
- 13. When should the departing aircraft request a start-up clearance?
- 14. Will the clearance be granted in case of a delay of 20 minutes?
- 15. Who will be advised in case of a long delay?
- 16. What does the Flow Management Unit deal with?
- 17. What will the operators at Istanbul and Ankara Airport be informed of?
- 18. Which way will they be informed of it?
- 19. Where can the information about the existing restrictions be obtained at other airports?
- 20. How long before ETD should the non-repetitive flight plans be submitted?
- 21. What kind of changes should be notified to the ATFM positions at Istanbul ACC?
- 22. Should the operators ask for a slot allocation by telephone or by radio?
- 23. Are flight plans required or all flights?

24. When must they be submitted?

Exercise 6

Give the synonyms for:

Relatively; generally; including; published; to remain; to waive; requirement; assistance; frequent; clearance; in case of; to grant; to be advised; to deal with; to obtain; prior; exceeding; to provide.

Exercise 7

What elements do the following words consist of? What parts of speech are they? Find the related words in the dictionary.

Measurement; instrument; operating; repetitive; existing; concerning; advised; requirement; departing; clearance; publishes; expected.

Exercise 8

Fill in the gaps in the following sentences:

- a) Departing turbo ______ and turbo ______ aircraft shall request a clearance.
- b) When the delay is more than 15 minutes the pilot will be advised of the _____ delay.
- c) The FMU deals with ATFM measures _____ flights departing from Airports in Turkey.
- d) Information about the _____ restrictions can be obtained from the ATS reporting office.
- e) Flight plans _____ flights destined to areas which are subject to air traffic flow restrictions should be submitted at least 2 hours prior to FTD.
- f) In case an ______ slot cannot be used, the operator should immediately inform the appropriate ATC unit.

Exercise 9

Make up sentences using the following words:

- a) expected; the; be; pilot; when; will; than; is; delay; advised; 30 minutes; more; the; of; delay.
- b) The; 30 minutes; Istanbul ACC; exceeding; to; ATFM positions; ETD; changes; to; at; notified; be; any; should.
- c) Assistance; force; may; service; air; be; radar; by; Turkish; provided.
- d) ATC; office; restrictions; from; about; be; information; obtained; can; existing; the; reporting.
- e) Contact; positions; before; should; the; time; hour; one; operators; expected; ATFM; start-up.
- f) To; slot; a; appropriate; cannot; in; an; new; will; unit; ATC; provide; try; used; be; case; allocated; the.

Exercise 10

Fill in the gaps choosing the necessary word:

- a) One hour before the expected _____ time
- (landing; estimated; necessary; start-up)
- b)The operators should immediatelly _____ the ATFM position.

(inform; tell; speak; request)

- c) Operators will be imformed by ATFM _____. (letters; calls; messages; people)
- d) Non-_____flight plans are subject to air traffic flow restrictions. (requested; repetitive; charter; irregular)
- e) Radar assistance is _____ on frequency 123.10 Mhz. (available; obtainable; imagionable; passable)
- f) Aircraft must _____ within controlled air space. (be; remain; maintain; cruise)

Exercise 11

Make up your own sentences using the following words:

Slot allocation; waive; notify; grant; exceed; deal; arrangement; authority; appropriate; submit.

PART 5

Exercise 1

Read the RULES AND PROCEDURES for IRELAND and translate the document into your language. Use the WORD LIST after the text.

RULES AND PROCEDURES

GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in connection with all air traffic services in Ireland:

Distance used in navigation, position reporting, ect generally in excess of 2 to 3 nautical miles	NM and TENTHS
Relatively short distances such as those relating to aerodromes (e.g.,runway lenghs)	METRES
Altitude, elevations, and heights	FEET
Horizontal speed including wind speed	KNOTS
Vertical speed	FEET per MIN
Wind direction for landing and taking off	DEG/MAG
Wind direction except for landing and taking off	DEG/TRUE
Visibility including runway visual range	KM or METRES
Altimeter setting, atmospheric pressure	hPa

Temperature	DEG/CELSIUS (CENTIGRADE)
Weight	mt or KGS
Time	HR & MIN, the DAY of 24 HR BEGINS AT MID- NIGHT UTC

FLIGHT PROCEDURES

HOLDING

Holding procedures comply with Table II, published on AIR TRAFFIC CON-TROL Pages series 200.

PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures for civil airports comply with the new PANS-OPS, Document 8168, Volume II.

Instrument approach procedures for military aerodromes are based on the United States Standards for Terminal Procedures (TERPS).

AIRPORT OPERATING MINIMUMS

Ireland publishes OCA(H)s for civil airports and DA/MDA, ceiling and visibilities for military aerodromes.

Jeppesen charted minimums are not below State minimums.

ATS AIRSPASE CLASSIFICATION

Ireland has adopted the ICAO ATS airspace classification as listed on ATC page 351.

Within Shannon FIR/UIR, however, only the airspace classes A,C and G are used.

For differences from ICAO VMC specifications refer to ATC page IRELAND.

SPECIAL REQUIREMENTS AND REGULATIONS

USE OF FREQUENCY BAND BETWEEN 136 AND 137 MHZ

According to a regional frequency plan the introduction of the new VHF channels between 136 and 137 MHz (137 MHz **not** included) will commence on a phased basis from early 1994.

Aircraft operators are strongly advised to ensure that their aircraft are suitably equipped to operate on the new frequencies. Failure to do so could result in aircraft being unsuitable for certain airspace sectors due to inability to communicate with the appropriate ATS authority.

FLIGHT PLANS

SIDs or STARs within the Shannon FIR/UIR should not be inserted in the route description of a flight plan.

AIR TRAFFIC FLOW MANAGMENT (ATFM)

- a) Flow Management Positions (FMPs) which are linked to the London Flow Management Unit (FMU) are operating at Shannon and Dublin ACCs. FMP Shannjn deals with operational ATFN matters other than the acquisition of Approved Departure Times (ADTs) affecting flights from the Shannon FIR/UIR/SOTA with the exception of flights originating within the lateral boundaries of the Dublin CTA. FMP Dublin deals with operational matters other than the acquisition of ADTs affecting flights originating from aero-dromes located within the lateral boundaries of the Dublin CTA.
- b) The FMPs at Dublin and Shannon are manned H24 daily and queries on tactical ATFM matters should be addressed to the respective ATC Watch Manager at Dublin:

Tel. (01)8445497 or AFTN: EIDWZDZX,

at Shannon: Tel. (061) 472284 or AFTN: EISNZQZX.

- c) Aircraft intending to operate to destinations or along routes subject to flow regulations have to obtain an ADT from the appropriate Flow Regulator (See ATC Page UNITED-KINGDOM-5).
- d) When a repetitive flight plan does not exist, a flight plan must be filed at least 4 hours prior to ETD.
- e) Flight plans for all IFR flights entering London FIR/UIR including all flights subject to regulation, should be addressed to EGTTZQZF(IFR flight plan reception unit at London) and to EIDWZQZX (Dublin ATCC and FMP) or EISNZQZX (Shannon ATCC and FMP) as appropriate.
- f) In the event that an operator wishes, during the pre-flight phase, to change to an altenative route, he cancels the original flight plan and files a Q-plan.

SHANNON OCEANIC TRANSITION AREA (SOTA)

The Shannon Oceanic Transition Area is a portion of the Shanwick FIR/Oceanic control Area (OCA) to the Southwest of Ireland, within which air traffic services are provided by Shannon ATCC.

- a) Flights shall be conducted in accordance with IFR when operating within SOTA airspace.
- b) A flight plan shall be submitted for all flights prior to operating in the SOTA airspace other than those flights which may be operated within arranged termporary airspace reservations.

Flight plans on all flights transiting SOTA shall be addressed to EISNZQZX.

c) Westbound aircraft departing from Irish airports are to request Oceanic Clea-rance from Shannon ACC.

For departures from Shannon operators should contact Shannon ACC, Tel.471233 Ext. 281, 45 minutes before ETD, or pilots may contact Shannon ACC, frequency 121.7 MHz, 45 minutes before ETD. To obtain Oceanic Clearance pilots should contact Shannon ATCC at least 15 monutes befor start-up.

For departures from other airports operators should contact the local ATS unit 45 minutes before ETD and request Oceanic Clearance.

- d) Estimates for the boundary crossing points between SOTA airspace and adjoining UK and Brest FIRs and Shanwick OCA shall be inccluded in the flight plan.
- e) The change from true airspeed to MACH number westbound, and from MACH number to true airspeed eastbound, should occur at lontitude 08°W.
- f) All aircraft enterning the SOTA and the Shannon UTA will be cleared in accordance with normal ATC procedures via standard routes associated with their cleared Oceanic Track.
- g) Aircraft will establish communication with Shannon Control not later than the estimated time of entry to the Shannon UTA/SOTA and report callsign, SSR code, flight level and ETA over the next compulsory reporting point entroute.
- h) Position reports will be required at the Shannon UTA/SOTA/Shanwick OCA boundary and at compulsory points established for the routing, or as otherwise instructed by Shannon ATCC.
- i) Aircraft entering Shannon UTA/SOTA from Shawick OCA should maintain their assigned MACH number until landfall or until such time as an authorization for a change has been obtained from Shannon Control.
- k) Flights which intend operating in the Shannon UIR and SOTA at FL 250 and above should flight plan via the published standard route structure.

DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

ICAO REFERENCE

ANNEX 2

3.3.1.2.1 In addition to ICAO specification a flight plan be submitted for any flight of which at least 30 NM is over water.

3.3.1.2.3 Flight plans shall be submitted at least 30 minutes before the estimated off block time.

4.1 Within class G airspace at and below 3000 ft AMSL or 1000 ft above terrain, whichever is the higher, a flight visibility of 3 km is permitted for flights operated at an IAS of 140 KT or less. Helicopters may operate in a flight visibility not less than 100 m.

4.5 Aircraft shall not be flown over condesed areas of cities, towns or settlements or over open air assembly of persons at less than

- a height of 1500 ft above the ground or water, or
- a height of 1000 ft above the highest obctagle within a radius of 2000 ft (600m) from the aircraft, whichever is the greatest.

WORD LIST

acquisition	[, Xkwi7ziSEn]	приобретение
adjoin	[E7d30in]	примыкать, прилагать, граничить
affect	[E7fekt]	действовать, воздей- ствовать, влиять
assembly	[7XsEmbli]	сбор, собрание, сборка
AMSL - Above Mean Sea Lev	vel	над средним уровнем моря
Approved Departure TIME (ADT)		одобренное время от- правления
certani	[7sE:tn]	определенный
compulsory reporting	[kEm7pVlsEri]	пункт обязательного донесения
conjested area	[kEn7d3estid]	место стесненного раз- мещения
CTA - Control Area		диспетчерский район
daily	[7deili]	ежедневно
ensure	[in7SuE]	обеспечивать, гарантировать, ручаться
Flow Management Position (FMP)		сектор по управлению потоком
Flow Management Unit (FMU	J)	отдел по управлению потоком
flow regulation		регулирование потока
Flow Regulator		оператор потока
frequency band		полоса частот
IAS - Indicated Airspeed		приборная воздушная скорость
inability		неспособность, невоз-

	можность	
insert	вставлять, помещать	
introduction	введение, внесение	
landfall	подход (подлет) к бере- гу	
man	укомплектовывать лич- ным составом, занимать людьми, ставить людей (к рабочим местам)	
off - block time	время начала руления	
originate	давать начало поро- ждать, происходить	
Q - plan	измененный план полета	
query	вопрос	
refer	обращаться, наводить справку, справляться	
repetitive flight plan	план повторяющихся полетов	
settlement	поселение	
SOTA - Shannon Oceanic	океанический район	
Transition Area	перелета а/п Шеннон	
suitably	соответственно	
TERPS - United States Stand- ard for Terminal Instrument Procedure	стандарты США для полетов по приборам в зоне аэроузла	
unsuitable	неподходящий	
UTA (upper control area)	верхний диспетчерский район	
Watch Manager	дежурный управляю- щий/руководитель сме- ны	

Before doing the following exercises study the text and the word list thoroughly again.

Exercise 2

Give the English equivalents for:

В общем; региональный; канал УКВ связи; диапазон частот; начинать; удостовериться; настоятельно рекомендуется; подходящим образом оборудованный; неудача; невозможность; включать; связанный; влиять на что-либо; боковой; граница зоны; приобретение; начинающийся; обеспечены персоналом; запрос; поток; внесенный в карту минимум; в случае; измененный план полета; временный; расчет; в восточном направлении; происходить; связанный с; обязательный пункт доклада; первая видимость земли; густонаселенная зона; поселок; группа людей; расчетное время снятия с колодок.

Exercise 3

What do the following abbreviations stand for?

NM; KM; DEG; Hr; min; UTC; TERPS; OCA; OCH; DA; MDA; ATS; ATC; FIR; UIR; VMC; Mhz; VHF; SID; STAR; FL; ATFM; FMP; FMU; ACC; ADT; SOTA; CTA; ATCC; UK; SSR; ETD; UTA; AMSL; ETA.

Exercise 4

True or false?

- 1. The air traffic rules and procedures in Ireland are based on ICAO standards, Recommended Practices and Procedures.
- 2. Altitude, elevations and heights are measured in metres.
- 3. The organization of air traffic services differs slightly from ICAO standards.
- 4. Horizontal speed including wind speed is measured in knots.
- 5. Instrument approach procedures for civil airports comply with the new PANS-OPS.
- 6. Instrument approach procedures for military airports are based on the United kingdom Standards for Terminal Procedures.
- 7. Jeppesen charted minimums are not below state minutes.
- 8. Ireland has adopted the ICAO ATS air space classification as listed on ATC page 531.
- 9. Within Shannon FIR and UIR only classes A, C and D are used.
- 10. There are certain differences from ICAO VMC spesifications.
- 11. According to a regional frequency plan the introduction of the new VHF channels will commence from 1994.
- 12. It is going to be done on a phased basis.
- 13. SIDs or STARs within the Shannon FIR and UIR should be given in the route description of a flight plan.
- 14. Flow Management Positions are linked to the Dublin Flow Management Unit.
- 15. FMP Shannon does not deal with the acquisition of approved departure times affecting flights from the Shannon FIR, UIR and SOTA.
- 16. FMP Dublin deals with operational matters affecting flights originating from aerodromes located within the lateral Boundaries of the Dublin CTA.
- 17. People work at the FMPs at Dublin and Shannon round the clock.
- 18. A flight plan must be usually filed at least 4 hours prior to ETD.
- 19. A Q-plan is a changed flight plan.

- 20. The Sannon Oceanic Transition Area is a portion of the Shanwick FIR and Oceanic Control Area in the Northeast of Ireland.
- 21. Westbound aircraft departing from Irish airports are to request Oceanic Clearance from Shannon ATC.
- 22. For departures from Shannon operators should contact 121. 7 45 minutes before ETD.
- 23. To obtain Oceanic clearance pilots should contact Shannon ATCC 30 minutes before start-up.
- 24. For departures from other airports pilots should contact the local ATS unit 1 hour before: ETD Oceanic Clearance.
- 25. Estimates for the boundary crossing point between a SOTA air space and adjoining UK and BREST FIRg and Shanwic OCA must be included in the flight plan.
- 26. The change from true airspeed to Mach number wesbound and from Mach number to true airspeed eastbound should be made at longitude 09° W.
- 27. Aircraft must establish communication with Shannon Control not later than the estimated time of entry to the Shannon UTA and SOTA.
- 28. Piloits should report callsign, SSR code, flight level and ETA over the next compulsory reporting point.
- 29. Aircraft entering Shannon UTA and SOTA from Shanwick OCA should maintain their assigned Mach number until landfall
- 30. Flights which intend operating in the Shannon UIR and SOTA at FL 250 and below should proceed via published standard routes.
- 31. A flight plan should be submitted for any flight of which at least 20 nautical miles is over water.
- 32. Flight plans should be submitted at least 30 minutes before the estimated offblock time.

Excercise 4

Answer the questions:

- 1. What are the Irish air traffic rules and procedures in confomity with?
- 2. What Units of measuriment are used in connection with air traffic services in Ireland? Give 2 or 3 examples.
- 3. What do holding procedures for civil airports comply with?
- 4. Do instrument approach procedures comply with the new or old PANS-OPS, Doc. 8168, Volume II?
- 5. Whose standards are instrument approach procedures for military aerodromes based on?
- 6. What kind of operating minimums does Ireland publish?
- 7. Are Jeppesen charted minimums above or below state minimums?
- 8. What kind of airspace classification has Ireland adopted?
- 9. Which classes of airspace are used within Shannon FIR and UIR?
- 10. Who should you refer to for differences from ICAO VMC spesifications?
- 11. When was the introduction of the new VHF channels due to commence?
- 12. How was it going to be carried out?

- 13. What were aircraft operators advised to do and why?
- 14. What could failure to do so lead to?
- 15. Should SIDs or STARs within the Shannon FIR and UIR be inserted in the route description of a flight plan?
- 16. What could failure to do so lead to?
- 17. Which Flow Management Unit are Flow Management positions operating at Shannon and Dublin ACCs linked to?
- 18. What does Shannon FMP dleal with?
- 19. Does Dublin FMP deal with the acquisition, of approved Departure Times?
- 20. How long do FMPS at Dublin and Shannon work daily?
- 21. Who should queries on tactical ATFM matters be addressed to?
- 22. Where can aircraft pilots intending to operate to destinations or along routes subject to flow regulations obtain approved departure times?
- 23. How long prior to ETD must a flight plan be filed when it is not a repetitive one?
- 24. When does an operator file a Q-plan?
- 25. What is the Shannon Oceanic Transition Area?
- 26. Who must the westbound aircraft request Oceanic Clearance from?
- 27. When should they contact ATCC?
- 28. Must estimates for the boundary crossing points be included in the flight plan?
- 29. Where should the change from true airspeed to Mach number occur?
- 30. Who do the pilots have to report when they are entering the Shannon UTA or SOTA?
- 31. Where are position reports required?
- 32. How long should aircraft entering Shannon UTA/SOTA from Shanwick OCA maintain their assigned Mach number?
- 33. What kind of flights should fire a flight plan so as to proceed via the published standard route structures?
- 34. What should be submitted in addition to ICAO specifications for the flights part of which is over water?
- 35. What time must flight plans be submitted?
- 36. What flight visibility is permitted for flights operated at IAS of 140 kts or less within G class Airspace?
- 37. What is flight visibility limit for helicopters?
- 38. What are the restrictions as for the flights over condesed areas of cities, towns or settlements?

Exercise 5

Give the synonyms for:

to approach; to publish; to dopt; to be advised; suitably; to result in; to be inserted; to deal with; originating from; queries; to obtain; to cancel; clearance; permitted.

Exercise 6

What elements do the following words consist of? What parts of speech are they? Find the related words in the dictionary.

Published; charted; difference; regional; strongly; unsuitable; description; exception; affecting; regulations; settement.

Exercise 7

Fill in the gaps in the following sentences:

- a) According to a regional frequency plan the ______ of the new VHF channels will commence from early 1994.
- b) Flow Management ______ which are linked to the London Flow Management Unit are operating at Shannon and Dublin.
- c) Aircraft operators are strongky advised to ______ that their aircraft are suitably equipped.

d) Aircraft entering Shannon UTA/SOTA from Shanwick OCA should maintain their _____ Mach number.

e) The change from true airspeed to Mach number should ______ at longitude 08° W.

f) If an operator wishes to change to an ______ route, he cancels the original flight plan.

Exercise 8

Fill in the gaps in the following sentences.

- a) Plan; must; the; crossing; included; for; in; points; estitates; be; boundary; flight.
- b) Westbound; clearance; from; aircraft; Oceanic; are; Irish; Shannon ACC; request; departing; to; airports.
- c) Dublin CTA; flights; with; from; FMP Dublin; affecting; operational; originating; matters; deals.
- d) Description; should; SIDs; the; a; be; inserted; of; route; in; plan; flight; STARs; not; or.
- e) Basis; new; commence; introduction; VHF channels; a; on; will; the; of phared.

Exercise 9

Fill in the gaps choosing the necessary word:

a) Instrument approach procedures are based on the United States Standadrds for ______ procedures.

(aircraft, management, terminal, approach)

b) The aircraft may be ______ for certain airspace sector due to inability to communicate.

(unisuitable, unused, umproper, impossible)

c) Aircraft intending to operate along routes subject to flow _____ have to obtain an ADT.

(clearance, communication, procedures, regulations)

- d) A flight plan must be _____ for all flights. (requested, submitted, published, sent)
- e) Position reports will be required at _____ reporting point.

(compulsory, necessary, assigned, published)

Exercise 10

Make up your own sentences using the following words:

Daily, conjestested area, frequency band, inability, to insert, to affect, landfall, to man, off-block time, settlement, suitably, originate.

PART 6

Exercise 1

Read the RULES AND PROCEDURES for Slovenia and translate the document into your language. Use THE WORD LIST after the text.

RULES AND PROCEDURES

GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in connection with all air traffic services in Slovenia:

Distance used in navigation, posi- tion reporting, etc > generally in excess of 2 to 3 nautical miles	NM and TENTHS
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	METRES
Altitude, elevations, and heights	FEET
Horizontal speed including wind speed	KNOTS
Vertical speed	FEET per MIN

Wind direction for landing and	DEG/MAG	
taking off		
Wind direction except for landing	DEG/TRUE	
and taking off		
Visibility including runway	KM or METRES	
visual range		
Altimeter setting, atmospheric	hPa	
pressure		
Temperature	DEG/CELSIUS	
	(CENTIGRADE)	
Weight	mt or KGS	
Time	HR & MIN, the	
	DAY of 24 HR	
	BEGINS AT	
	MIDNIGHT UTC	

FLIGHT PROCEDURES

HOLDING

Holding procedures comply with Table I, published on AIR TRAFFIC CON-TROL Pages series 200.

PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures comply with new PANS-OPS, Document 8168, Volume II.

AIRPORT OPERATING MINIMA

OCA(H)s are published together with DA(H)/MDA(H), and visibilites for landing and for take-off.

Jeppesen charted minimums are not below State minimums.

ATS AIRSPACE CLASSIFICATION

Slovenia has adopted the ICAO ATS airspace classification as listed on ATC page 351.

Within Ljublijana FIR, however, only the airspsce classes C, D, E and G are used.

ATC clearance is required for IFR flights operating in class G airspace.

In addition to ICAO provision is provided

■ within Ljubljana, Maribor and Portoroz CTRs (class D airspace) between VFR and IFR flight, and

■ between IFR flights in class G airspace.

For differences from ICAO VMC specifications refer to ATC page SLOVENIA.

SPECIAL REQUIREMENTS AND REGULATIONS PROVISION OF AIR FRAFFIC SERVICES

The Directorate of Civil Aviation of the Republic os Clovenia exercised thriugh the Ministry of Transport and Communications is the responsible authority for the provision of air fraffic services in the Ljubljana FIR/UIR which encompasses all the airspace over the mainland and territorial waters of Slovenia from GND to UNL.

Air Traffic Services are provided for the entire territory of the State whereby Air Traffic Services within the delegated airspace covering ATS routes B9/UB9 and R49/UR49, ATS TRUNK routes UL604 and UM725 respectively, are provided by Vienna ACC.

AIR TRAFFIC FLOW MANAGEMENT

Until an Air Traffic Flow Managemnet Position (ATFMP) will be established at ACC Ljubljana the AFTMP Wienna provides the inteface between ATS Slovenia and the Air Traffic Flow Management Unit 9AFTNU) responsible for the provision of ATFM service in the area.

Connections available at ATFMP Vienna:

Postal address: Flugsicherungsstelle Flugverkehrskontrollzentrale, Fachdienst Betrieb, A-1030 Wien, Schnirchgasse 11b;

Telephone: 0600-1800; +43 (1) 79798-2114,

1800-0600: +43 (1) 7988990;

AFTN: LOVVZDZX; SITA: VIE SLYF.

Hours of Operation: H24.

Person to contact: Flow Manager.

If according to current information AFTM measures are required the application of the slot allocation procedure will be initiated by issuing ATFM messages via the ATFN. Information concerning ATFM measures can be obtained from the ATFMP Vienna.

The following slot allocation procedure (SLAP) applies to flights according to IFR and to flights according to VFR changing to IFR:

- a) Where repetitive flight plans do not exist, airspace users/piloits have to file flight plans for flights departing from Slovenian aerodromes into areas with ATFM restrictions at least 3 hours and 30 minutes prior to the EOBT.
- b) Variations in EOBT of more than 20 minutes and cancellations of flight plans subject to the slot allocation procedure shall immediately be reported by airspace users to the ATFMP Vienna or the ATS unit concerned.

- c) For all flights subject to the slot allocation procedure a departure slot shall be obtained not earlier than 2 hours and 30 minutes but not later than 2 hours prior to the EOBT, either directly from the ATFMP Vienna or the relevant ARO.
- d) By taking the relevant measures (timely start-up, calculation of taxiing time) the pilot should ensure that he is ready for take-off at the holding point of the runway-in use, if possible, at the beginning of the departure slot.
- e) As soon as a pilot realizes that a departure slot assigned cannot be adhered to, theATFMP Vienna or the ATS unit concerned must be informed immediately.

ADDRESSING OF ATS MESSAGES

For overflights above FL 125 flight movement messages shall be additionally addressed to LOVVZQZX.

All overflights through Portoroz TMA should beside LJLAZQZX/ZFZX (depending on flight rules status) include the addressee LJPZZTZX in flight plans and related ATS messages.

DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES ICAO REFERENCE

ANNEZ 2

3.3.1.2.1 Flight plans are required for all flights.

4.1. within class g airspace at or below 900 m (300 ft) MSL or 300 m (1000 ft) GND, whichever is higher, a flight visibility of 1,5 km is permitted. Helicopters may operate in a flight visibility of less than 1,5 km, if manoeuvred at a speed that will give adequate opportunity to observe other fraffic or any obstacles in time to avoid collision.

WORD LIST

adhere	[Ed7hiE]	придерживаться
CTR (Control zone)		диспетчерская зона
delegate	[7deligeit]	делегировать, уполнома- чивать, передавать полно- мочия, поручать
encompass	[in7kVmpEs]	окружать, заключать
exercise		использовать,осуще- ств-лять (права), пользо- вать-ся (правами)
GND(Ground)		земля

inferface		взаимодействие
mainland	[7meinlEnd]	материк
responsible	[ris7pEnsEbl]	ответственный
UNL (Unlimited)		неограниченный

Before doing the following exercises study the text and the word list thoroughly again.

Exercise 2

Find the English equivalents in the text:

Принимать; обращаться к ; руководство; избегать столкновений; материковая часть; тот, кого это касается; повторный; вся территория; соответсвенно; соответсвующие меры; придерживаться чего-либо; маневрировать; связь между; ответственный; расчет времени; текущая информация.

Exercise 3

What do the following abbreviations mean?

FIR; UIR; GND; UNL; AIUMU; ATS; ACC; ATFMP; AIS; ARO; OCA(H); DA(H);MDA(H); HR; DEG; MAG; NM; VFR; IFR; SLAP; EOBT; MSL.

Exercise 4

Frue or false?

- 1. Slovenia has adopted the ICAO ATS airspace classification.
- 2. ATC clearance is required for IFR flights operating in class C airspace.
- 3. Separation is provided between VFR and IFR flights within Ljubljana CTR (class G airspace).
- 4. The Directorate of Civil Aviation is the responsible authority for the provision of air traffic services.
- 5. Air Traffic Services are provided for the entire territory of the state.
- 6. Air Traffic services within the delegated airspace covering routes B9/UB9 and R49/UR49 are provided by Munich ACC.
- 7. ATFMP Vienna provides the interface between ATS Slovenia and the Air Traffic Flow Management Unit responsible for the provision of ATFM service in the area.
- 8. ATFMP Vienna 24 hours a day.
- 9. The application of the slot allocation procedure is initiated by issuing ATFM messages via ATC.
- 10. Information concerning the current ATFM measures can be only obtained fron the AIS Reporting Office Ljubljana.

- 11. Variations in EOBT of more than 20 minutes shall immediately be reported to the ATFMP Vienna.
- 12. By taking the relevant measures (timely start-up, calculation of taxiing time) the pilot shouled ensure that he is ready for take-off at the begining of the departure slot.

Exercise 5

Answer the questions:

- 1. What are the air traffic rules and procedures in force in Slovenia in conformity with?
- 2. Is the distance used in position reporting measures in nautical or statute miles?
- 3. Are elevations measured in feet or metres?
- 4. What units of measurement are used for horizontal speed?
- 5. What kind of airspace classification has Slovenia adopted?
- 6. What should one refer to for differences from ICAO VMC specifications?
- 7. Who is the responsible authority for the provision of air traffic services in the Ljubljana FI land IFR?
- 8. Are air traffic services provided for the entire territory of the state?
- 9. What routes does the delegated airspace cover?
- 10. Who provides air traffic services within the delegated airspace?
- 11. Who provides the interface between ATS Slovenia and ATFMU service in the area?
- 12. What is the gostal address of ATFMP Vienna?
- 13. What are the operation hours of ATFM Vienna?
- 14. Who is the person to contact?
- 15. Where can one obtain the information concerning the current ATFM measures?
- 16. How long prior to the EOBT do the pilots have to file the flight plans?
- 17. What must the pilots do in case of variation of more than 20 min. and cancellation of the flight plan?
- 18. Where and when should the pilot report that he is ready for departure?
- 19. Who must be informed as soon as a pilot realizes that a departure slot cannot be adhered to?

Exercise 6

Give the synonyms for:

Comply with; clearance; to refer to; the responsible authority; main land; interface; curent information; shall; be obtained; prior; runway-in-use; to realize; im mediately; to manoeure; to observe.

Exercise 7

What elements do the following words consist of? What garts of speech are they? Find the related words in the dictionary.

Clearance; specification; directorate; required; obtained; initiated; respectively; covering; prior; user; calculation; assigned.

Exercise 8

Fill in the garps in the following sentences.

- a) ATC clearance is ______ for IFR flights.
- b) The directorate of civil aviation is the responsible ______.for the provision of air traffic services.
- c) Air traffic services are ______ for the entire terrutory of the state.
- d) ATFM Vienna provides the _____ between ATS Slovenia and the ATFMU.
- e) Information concerning the _____ ATFM, measures can be obtained from ARO Ljioblyana.

Exercise 9

Make up sentences using the following words:

- a) Provided; air traffic services; ACC; Vienna; by; are.
- b) Between; ATFMU; ATFMP Vienna; interface; ATS Slovenia; and; provides; the.
- c) 2 hours and 30 minutes; shall; a departure; be; slot; than; prior; obtained; carlier; to; not the EOBT.
- d) the beginning; taking; measures; relevant; ready; of the slot; at; should; by; the; the pilot; that he; for; is; take-off;failure.
- e) less than 1,5 km; operate; visibility; in; helicopters; a; flight; may; of.
- f) Must; cannot; the ATFMP Vienna; to; be adhered to; as soon as; realires; a pilot; that; a; slot; departure; immediately; informed.

Exercise 10

Fill in the gaps choosing the necessary word:

- a) In _____ to ICAO provisions (conformity; addition; operation; difference).
- b) The Directorate of Civil Aviation is the _____ authority (re-sponsible; relative; available; current).
- c) If according to ______ information (impotant; territorial; current; holding).
- d) The delegated airspace is ______ routes B9 and R49. (providing; according; issuing; covering).
- e) Where repetitive flight plans do not _____ (exist; concern; ensure; adhere).
- f) Speed that will give _____ opportunity to observe other traffic (visible; assigned; adequate; related).

Exercise 11

Make up your sentences with the following words:
opportunity; cancellation; to realize; additionally; interface; to exercise; to encompass; to delegate; to adhere; responsible; mainland; to issue.

PART 7

Exercise 1

Read the RULES AND PROCEDURES for POLAND and translate the document into your language. Use the WORD LIST after the text.

RULES AND PROCEDURES

GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in connection with all air traffic services in Poland:

Distance used in navigation, position repoprting, etc	KILOMETRES NM and TENTHS
Relatively short distances such as those relating to aerodromes (e.g.,runway lengths)	METRES
Altitude, elevations, and heights	METRES

Horizontal speed including wind speed	KMH,KNOTS
Vertical speed	METRES per SEC
Wind direction for landing and taking off	DEG/MAG
Wind direction except for landing and taking off	DEG/TRUE
Visibility including runway visual range	KM or METRES
Altimeter setting, atmospheric pressure	hPa
Temperature	DEG/CELSIUS (CENTIGRADE)
Weight	mt or KGS
Time	HR & MIN, the DAY of 24 HR BEGINS AT MID- NIGHT UTC

FLIGHT PROCEDURES

HOLDING

Holding procedures comply with Table I, publioshed on AIR TRAFFIC CON-TROL pages series 200.

PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are in accordance with the new PANS-OPS, Document 8168, Volume II, 3rd Edition.

AIRPORT OPERATING MINIMUMS

Poland does not publish State airport operating minimums.

Poland publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

ATS AIRSPACE CLASSIFICATION

Poland has adopted the ICAO ATS airspace classification as listed on ATC page 351

Within Warsaw FIR, however, only the airspace classes A, C and G are used.

For differences from ICAO VMC specifications refer to ATC page POLAND.

SPECIAL REQUIRENENTS AND REGULATIONS

ALTIMETRY

- 1. Vertical position of aircraft shall be expressed in terms of:
 - a) Flight levels in feet or meters (e.g., 'flight level 130' or '3950 meters standard'):
 - at or above the lowest usable FL;

■ after take-off above the "transition height" (term used instead of "transition altitude").

- b) Altitude or height above ground in meters for flights below the lowest usable flight level outside controlled airspace and aerodrome traffic zones.
- c) Height in meters (e.g. "height 300 mrters"):
 - after take-off at or below transition height;
 - before landing when below the transition level;
 - below the lowest usable flight level within the aerodrome traffic zone.
- 2. QFE and QNH values will be given in hectopascals and on request millimeters. The QNH value is made available on request only.
- 3. VFR flights shall be conducted at flight levels as specified for IFR flights in accordance with Cruising Level Table, Annex 2, Appendix 3.

FLIGHTS OUTSIDE CONTROLLED AIRSPACE

For national flights of foreing aircraft planned within Warsaw FIR outside controlled airspace, a special permission is required which should be requested from the appropriate Polish ATS unit. (lefer to ENTRY REQUIREMENTS PO-LAND).

AIR TRAFFIC FLOW MANAGEMENT (ATFM)

- 1. Air Traffic Flow Management Service in Warsaw FIR is provided be the ATFM position located at Warsaw ACC: ATC supervisor. +48-22-460733, +48-2-6501855, +48-2-6501355, +48-2-6501754; AFTN: EPWWZDZX, EP-WAZPZX (ATC Reporting Office); Telex: 813553 ppl pl.
- 2. Information concerning areas where ATFM restrictions are being applied are obtainable at local ATS Reporting Offices or directly from ATFMP Warsaw.
- 3. Operators/pilots of flights departing from Waesaw FIR into areas where ATFM restrictions are being applied, must contact ATFMP at Warsaw ACC or the ATS Reporting Office not earlier ehan 2 hours 30 minutes and not later than 2 hours before EOBT in order to receive a slot time.
- 4. Pilots shall arrange their flight to arrive over the slot reference point within \pm 10 minutes of the allocated time, unless otherwisw stated in the slot allocation message.

5. Pilots who are unable to meet a allocated slot time shall immediately advise ATFMP Warsaw or the appripriate ATC unit and request a revised slot time.

DIFFERENCES FROM ICAO STANDARDS

ICAO REFERENCE

ANNEX 2

- **3.2.2.3.** When the pilot-in-command obliget to give way to another aircraft is unable to maintain safe horizontal distance the aircraft that has the other on its left shall descend and the aircraft that has the other on its right shall climb in order to attain an altitude difference for safe separation.
- **3.3.1.2.1** Flight plans are required for all flights.
- **4.1.** In class G airspace at and below 3000 ft (900m) AMSL or 1000 ft (300m) AGL, whichever is higher, lower flight visibilities are permitted as indicated by foot note in table on ATC page 355.

4.5. (a) Flights of airplanes and helicopters over cities of more than 25.000 inhabitans and over health-resort towns shall be performed at a height of not less than 2000 meters. Except when necessary for take-off or landing or except by special permission from the appropriate authority flights at lower heights over those places shall be performed according to the following rules:

- flights with a speed up to 300 km/h outside congested areas at a height not less than 300m; at a height less than 300m - in a distance of a least 1.5 km from congested areas of those places;
- flights with speeds 300-600 km/h in a distance of at least 4 km from congested areas of thore places and at a height not less than 300m;
- flights with a speed over 600 km/h in a dictance of at least 5 km from congested areas of thore places and at a height not less than 400m.
- **4.6.** Except when otherwise cleared by ATC or specified by the appropriate ATS authority VFR flights on ATS routes, and VFR flights outside controlled airspace above 900m AGL, shall be performed at flight levels correlated with true track. As specified for IFR flights in the table of cruising levels in Appendix 3 of Annex 2.

Appendix 1,4.1.1. The following additional pyrotechnic signals are used:

- 1. single green rocket means:
 - a) for aircraft in flight:
 - Cleared to land;
 - b) for aircraft on the ground:
 - Cleared to taxi and take-off;
- 2. two or more green rockets mean:
 - a) for all aircraft in flight:
 - Command to land;

b) for aircraft on the ground:

Clear the runway.

WORD LIST

aerodrome traffic zone		воздушная зона аэродрома
allocated time	[7Xloukeitid]	назначенное время
attain	[E7tein]	добиться, достичь
correlate	[7kOrileit]	находиться в связи, в оп-
		ределенном соотношении
health-resort	[7helQri7z0:t]	курорт
inhabitant	[[in7hXbitEnt]	житель, обитатель
oblige	[E7blaid3]	обязывать
obtainable	[Eb7teinEbl]	доступный, достижимый
pyrotechnic	[6pairou7teknik]	пиротехнический
slot reference point		исходная точка (пункт), на- вигационный ориентир
altimetry	[7XltimEtri]	измерение (техника изме- рений) высоты

Before doing the following exercises study the text and the word list thoroughly again.

Exersice 2

Give the English equivalents for:

Должно выражаться; утвердил (принял); единицы измерения; в соответствии с; минимальная безопасная высота; отдел по управлению обслуживанием потока воздушного транспорта; должен проводиться; высота перехода; самый нижний использующийся эшелон; ограничения; те, которые можно получить; неспособный выполнить взлет в назначенное время; житель; густонаселенные места; крейсерский эшелон; соотнесенный с...; техника измерения высоты.

Exercise 3

What do the following abbreviations mean?

OCA; OCH; QFE; QNH; VFR; IFR; ATFM(p); FIR; ACC; ATS; AMSL; AGL; ATC; EOBT.

Exercise 4 *True or false?*

- 1. Holding procedures comply with Table 5, published on AIR TFAFFIC CON-TROL pages series 200.
- 2. Instrument approach procedures are in accordance with the new PANS-OPS.
- 3. Vertical position of aircraft shall be expressed in terms of metres only.
- 4. The term "transition height" is used instead of "transition altitude".
- 5. For national flights of fireign aircraft within Warsaw FIR outside controlled airspace no special permission is needed.
- 6. Pilots shall arrange their flight to arrive over the slot reference point within± 30 minutes of the allocated time.
- 7. Pilots who are unable to meet an allocated slot time shall advise ATFMP Warsaw.
- 8. The aircraft that has the other on its left shall climb for safe separation.
- 9. Flight plans are requested for all flights.
- 10. Flights over cities of more than 250 thousand inhabizans and over health-resort towns shall be performed at a height not less than 3000 thousand metres.
- 11. The pyrotechnic nynals mean: singnals green rochet for aircraft in flight "Cleared to land" for aircraft on the ground "Clear the runway".
- 12. Flights with a speed over 600 km/h shall be performed at a distance of at least 5 km from congested areas and at a height not less than 600 metres.

Exercise 5

Answer the question:

- 1. What are the air traffic rules in force in conformity with?
- 2. What units of measurement are used for: a) altimeter setting; b) weight; c) runway visual range; d) wind speed; e) altitude, elevations and heights?
- 3. Where should you refer for differences from ICAO VMC specifications?
- 4. What is required for national flights of foreign aircraft planned within Warsaw FIR outside controlled airspace?
- 5. Where can you obtain the information concerning area where ATFM restrictions are begin applied?
- 6. Who should you request for a slot time?
- 7. When should you contact ATFMP in order to receive a slot time?
- 8. How must pilots arrange their flights as for the slot reference points?
- 9. What does the pilot-in-command do to give way to another aircraft?
- 10. Are flight plans required for all flights?
- 11. What noise abatement procedures are in force in Poland?
- 12. What are the main pyrotecnical signals used in Poland?

Exercise 6

Give the synonyms for:

in general; in conformity with; as listed; refer to; on request; the pilot-in-command; safe horizontal distance from another aircraft; 30 min earlier; inhabitants; congested areas; clear the runway.

Exercise 7

What elements do the following words consist of? What garts of speech are they? Find the related words in the dictionary.

Difference; requered; allocated; obtainable; restrictions; correlated; usable; low-est.

Exercise 8

Fill in the gaps in the following sentences:

- a) Vertical position of an aircraft shall be _____ in terms of feet and metres.
- b) Altitude or height above ______ shall be given in fut or metres.
- c) A ______ permission is required for national flights of foreigh aircraft.
- d) The permission should be requested from the _____ Polish ATS unit.
- e) When the pilot is ______ to give way to another aircraft he shall descend.
- f) Flights over the cities of more than 25 000 ______ shall be performed at a height of not less than 2 000 m.

Exercise 9

Make up sentences using the following words:

- a) hectopascals, QFE and QNH, given, values, be, will, in.
- b) that, EOBT, earlier, contact, must, ATS reporting office, not, before, 2 hours 30 minutes, operators
- c) Climb, he, descend, or must, distance, maintain, to, unable, is, when, safe, pilot, the, horizontal.
- d) rules, special be, shall, levels, lower, at flights, performed, the, to, according.
- e) VFR flights, correlated, on, track, true, with, at, levels, flight, shall, performed, be, ATS routes.
- f) Land, to, command, more, green, two, mean, or, rockets.

Exercise 10

Fill in the gaps choosing the necessary word.

- a) VFR flight shall be ______ at flight levels according to Annex 2 (conducted, operated, done, taken).
- b) Except when _____ cleared by ATC... (another, other, is, otherwise).
- c) Flights with a _____ up to 300km/h... (height, track, speed, rate).
- d) Flight ______ are required for all flights (sheduled, dates, numbers, plans)
- e) Flights over _____ towns shall be performed at a height not less than

2 000 m (new, ancient, capital, health-resort).

f) Pilots who are unable to ______ an allocated slot time ... (give, take, meet, ask)

Exercise 11

Make up your own sentences using the following words:

obtainable, correlate, altimetry, pyrotechnic, slot reference poinnt, attain, allocated time, usable, inhabitant, congested area.

UNIT 4

AIRPORT DIRECTORY

Exercise 1

Read the LEGEND AND EXPLANATION and translate it into the Russian language.

LEGEND AND EXPLANATION

NOTE: Only legend items published by State authorities are included in the airports listings.

LOCATION (AIRPORT), Apt of Entry (if applicable)

Airports are listed alphabetically by location name, with airport name in parentheses when different than location name. A cross index by airport name is provided.

ELEVATION, ICAO INDICATOR, IATA IDENTIFIER, COORDINATES.

→ TELEPHONE/TELEFAX NUMBERS

Telephone/Telefax numbers are provided for contact with the airport where available.

RUNWAY DATA and runway/approach lights

All usable runways are listed indicating the following items.

- 1. Runway designators.
- 2. Total runway length, excluding stopways, overruns or clearways.
- 3. TORA and LDA if not identical with total runway length. TODA and ASDA when longer than take-off run (TORA) and provided by controlling authority.
- 4. Type of runway surface: concrete, asphalt, grass, bitumen, soil, gravel, goudron, macadam/ tarmac, iron, gypsum, laterite.
- 5. Runway bearing strength.
 - Load classification number (LCN) supplemented (if known) by
 - r (rigid pavement) radius of relative strength in inches
 - f (flexible pavement) thickness in inches
 - Load Classification Group (LCG)
 - Wheel and/or aircraft loads in thousands of pounds

SIWL/ESWL - single isolated wheel load times number of main wheel legs = allowable aircraft weight.

ESWL - Equivalent Single Wheel Load, a calculated value for multiwheel legs. The resultant value is considered to be the same as SIWL for determining LCN.

- S or SW (allowable aircraft weight) for single wheel per leg configuration.
- T or DW (allowable aircraft weight) for tandem or dual wheel per leg configuration.
- TT or DDW (allowable aircraft weight) for twin tandem or double dual wheel per leg configuration.
 - TDT Runway weight bearing capacity for aircraft with twin delta tandem landing gear.
 - DDT Runway weight bearing capacity for aircraft with double dual tandem type landing gear.
- AUW all up weight (without regard to wheel configuration).
 Load allowed on each main landing gear leg for different wheel configurations in thousand of pounds.
 - S/L (load per leg) for single wheel per leg configuration.
 - T/L (load per leg) for twin or tandem wheel per leg configuration.
- Type of aircraft (represents a maximum load factor).
- ACN/PCN system.

Information predicated on maximum pounds per square inch tire pressure is shown as "000 psi".

Estimated information is prefaced with "E".

6. Runway edge and approach lights are indicated as the best available system from the following sequence.

- HIRL - high intensity runway lights	HIALS - high intensity approach lights
- MIRL - medium intensity runway lights	MIALS - medium intensity ap- proach lights
- RL - low intensity runway lights	ALS - low intensity approach lights
- PORT-RT - portable electric run- way lights	LDIN - sequenced flashing lead-in lights
- FLARES - flare pots or goosenecks	RAIL - runway alignment in- dicator lights (sequenced flashing)

HOURS & RESTRICTIONS

Airport hours of operation, restrictions for certain types of users or aircraft. All times are UTC unless otherwise indicated.

Abbreviations used for airport hours and restrictions have the following meaning:

- Sunrise SR - On request -O/R SS - Sunset
- H24 Continuous operations
- O/T Other times
- PNR Prior notice required
- PPO Prior permission only
- PPR Prior permission required

Note: Civil aircraft require prior permission for the use of military airports.

CUSTOMS

"Customs" without further explanation indicates that Customs are available during airport hours. Other Customs conditions are explained, as appropriate. Note: Availability at destination should be checked before departure.

FUEL

F	Gasoline	(piston engine fuel), grade not specified
F-1	Gasoline	73 octane
F-2	Gasoline	80/87 octane
F-3	Gasoline	100LL octane
F - 4	Gasoline	100/130 octane
F-5	Gasoline	115/145 octane
F-6	Gasoline	Mogas
F-7	Gasoline	91/96 octane (unleaded)

Jet	Jet fuel	grade not specified
Jet A	Jet fuel	turbine fuel with a-40°C max. freezing point
Jet A-1	Jet fuel	turbine fuel with a-50°C max. freezing point
Jet A-1+	Jet fuel	Jet A-1 with icing inhibitor -50°C freezing point
Jet B	Jet fuel	wide-cut turbine fuel equal to JP-4 with exception of certain additives
JP-4	Jet fuel	wide-cut turbine fuel intended for use in Military turbine-powered aircraft with a-58°C max. freezing point
JP-5	Jet fuel	turbine fuel used for aircraft operating from Naval aircraft carriers

Availability for JASU (jet aircraft starting units) and Oxygen is also provided. **NOTE:** Fuel and servicing hours may not be identical with airport hours. At military fuel and/or oxygen may not be available for civil operators. Availabality at destination should be before departure.

BEACON

The abbreviations "ABN" and "IBN" indicate the availability of an aerodrome light beacon or aerodrome identification beacon.

DECLARED RUNWAY DISTANCES as specified by ICAO

Take-off Run Available (TORA), that is, the length of runway which is declared available and suitable for the ground run of an aeroplane taking off.

Accelerate Stop Distance Available (ASDA), that is the length of the take-off run available plus the length of stopway available (if stopway is provided).

Take-off Distance Available (TODA), that is, the length of the take-off run available plus the length of clearway available (if clearway is provided).

Landing Distance Available (LDA), that is, the length of runway which is declared available and suitable for the ground run of an aeroplane landing. The landing distance available commences at the threshold and extends for the length of funway after the threshold. However, the threshold may be displaced from the extremity of the runway when it is considered necessary to make a corresponding displacement of the approach surface by reason of obstacles in the approach path to the runway.

RUNWAY	TORA	ASDA	TODA	LDA
	ft	ft	ft	ft
09	2000	2300	2580	1850
27	2000	2350	2350	2000

WORD LIST

additive airport listing asphalt bitumen clearway concrete configuration coordinates declared determine displacement elevation equal exception exclude freezing point gasoline goudron grade grass gravel gypsum icing inhibitor identical identifier inch include iron load location laterite macadam naval aircraft carrier octane overrun oxygen

parentheses piston engine [7Xditiv]
[7BEpO:t7listiN]
[7XsfXlt]
[7bitjuimEn]
[7kliEwei]

[7kONkri:t] [kEn67figEreiSn] [6kou70:dinEts] [di7klBEd] [di7tE:min] [dis7pleismEnt] [6eli7veiSn] [7i:kwEl] [ik7sepSn] [ik7sklu:d] [7fri:ziN7pOint] [7gXsEli:n] [7gu:drEn] [greid] [gra:s] [7grXvl] [7d3ipsEm] [7aisiNin7hibitE] [ai7dentikEl] [ai7dentifaiE]

[7intS] [in7klu:d] [7aiEn] [loud] [lou7keiSn]

[71XtErait]

[mE7kXdEm]

[7neivl] [7kXriE] [70ktein] [7ouvErVn]

[70ksid3En] [pE7renQEsi:z] [7pistEn] добавка (к топливу) перечень аэропортов асфальт битум зона свободная от препятствий бетон конфигурация координаты объявленный, заявленный определять смещение превышение (аэродрома) равный исключение исключать точка замерзания бензин гудрон сорт (топлива) трава гравий гипс ограничитель обледенения идентичный, одинаковый определитель, идентификатор дюйм (= 2,54 см) включать (в себя) железо, железный нагрузка местонахождение, местоположение грунт, пропитанный смолой щебень, щебеночное покрытие морской авианосец октан, октановый концевая полоса безопасности кислород круглые скобки поршневой двигатель

provide	[prE7vaid]	обеспечивать
relative strength	[7relEtiv7streNQ]	относительная прочность
resultant value	[ri7zVltEnt]	значение, получаемое в ре-
		зультате
runway bearing	[7bBEriN]	прочность несущей поверх-
strength		ности взлетно-посадочной
		полосы
runway designator	[7dezigreitE]	обозначение взлетно-поса-
		дочной полосы
soil	[7sOil]	почва, грунт
state authorities	[7steitE:7QOrEti]	полномочный орган госу-
		дарства
stopway	[7stOpwei]	концевая полоса торможе-
		ния
suitable	[7sjutEbl]	подходящий
supplement	[7sVplimEnt]	пополнять, добавлять
tarmac	[7ta:mXk]	смола со щебнем
thickness	[7Qiknis]	толщина
tire pressure	[7taiE7preSE]	давление в пневматике
turbine fuel	[7tE:bain7fju:El]	реактивное топливо
unleaded	[6Vn7ledid]	без содержания свинца
wide-cut fuel	[7waidkVt]	топливо широкого фракци-
		онного состава

ABBREVIATIONS

ABN	aerodrome beacon	аэродромный маяк
ACN	aircraft classification number	классификационный номер
		воздушного судна
ALS	approach lighting system	система огней подхода
ASDA	accelerate - stop distance avail-	располагаемая дистанция
	able	прерванного взлета
AUM	all-up weight	полная полетная масса
DDT	double dual tandem type land-	тип посадочного устрой-
	ing gear	ства с четырехколесной
		тележкой из двух спарен-
		ных колес
ESML	equivalent single wheel load	эквивалентная нагрузка
		одного колеса
f	flexible pavement	нежесткое покрытие
FLARES	flare pots or goosenecks	сигнальные ракеты
H 24	24 Hour Service	круглосуточная работа
HIALS	high intensity approach light	система огней подхода вы-

	system	сокой интенсивности
HIRL	high intensity runway edge	посадочные огни ВВП вы-
	lights	сокой интенсивности
IBN	identification beacon	опознавательный маяк
JASU	jet aircraft starting unit	установка для запуска сжа-
		тым воздухом
LCG	load classification group	классификационная группа
		нагрузки
LCN	load classification number	классификационный номер
		степени нагрузки
LDA	landing distance available	располагаемая посадочная
	C	дистанция
LDIN	lead-in light system	система ведущих огней
MIALS	medium intensity approach light	система огней подхода
	system	средней интенсивности
MIRL	medium intensity runway edge	посадочные огни ВПП
	lights	средней интенсивности
O/R	on request	по запросу
O/T	other times	в другое время
PCN	pavement classification number	классификационный номер
	-	прочности покрытия
PNR	prior notice required	требуется предварительное
		уведомление
PORT-RT	portable electric runway lights	переносные электрические
		посадочные огни ВПП
PPO	prior permission only	только после получения
		предварительного разре-
		шения
PPR	prior permission required	требуется предварительное
		разрешение
r	rigid pavement	жесткое покрытие
RAIL	runway alignment indicator	указатель входа в створ
		ВПП
RL	runway edge lights	посадочные огни ВПП
S or SW	single wheel landing gear	одноколесное шасси
SIWL	single isolated wheel load	нагрузка (на ВПП), созда-
		ваемая одним колесом
S/L	single wheel leg	опора шасси с одним коле-
		СОМ
SR	sunrise	начало светлого времени
SS	sunset	конец светлого времени
T or DW	dual wheel landing gear	спаренные колеса
TDT	twin delta tandem landing gear	тип посадочного устрой-
		ства с восьмиколесной

		тележкои из двух пар сдво-
		енных колес
T/L	twin or tandem wheel leg	спаренное колесо
TODA	take off distance available	располагаемая взлетная
		дистанция
TORA	take-off run available	располагаемая длина раз-
		бега для взлета
TT or DDW	twin tandem or double dual wheel	двойное спаренное колесо
TT/L	bogie or twin tandem wheel leg	тип посадочного устрой-
		ства с четырехколесной
		тележкой из двух спарен-
		ных колес

Exercise 2

Read the AIRPORT DIRECTORY for definite airports and interpret the information.

ITALY

ROME (FIUMICINO) Apt of Entry 14' LIRF FCO N41 48.7 E012 15.2 Apt operator 6595. Traffic Office 6011024. 07/25 108110' MACA/BITU. SIWL-99. LDA 07 9482'. TODA 07 11007'. TODA 25 11007' HIRL. HIALS SFL 25. HIALS 07. 16L/34R 1295' BITUMEN. LCN 100. TODA 16L 12992'. TODA 34R 12992' MACA/BITU. SIWL-99. LDA 344L 11742'. 16/R/34L 12795' MACA/BITU. SIWL-99. LDA 34L 11742'. TODA 16R 12992'. TODA 34L 1299'. HIRL. HIALS SFL. Right hand circuit rwy 34R & 34L H24 (charter flights only from 2330-0700LT, until 0800LT For longhaul flights). For noise restrictions see Rome 10-4. Customs Jet A-1. ABN. IBN. FIRE 9. EGYPT CAIRO (CAIRO INTL) Apt of Entry 382' HEGA CAI N30 07/3 E031 24/3 Apt Operator 665599, 666188, 665607, 2443149, 2449356/ Fax 2432522, 2437132. 05L/23R 10827' ASPHALT/ PCN 70/F/B/W/U. HIRL. HIALS. 16/34 10279' ASPHALT. PCN 58/F/B/W/ TORA 169885'. LDA 16 9491'. LDA 34 9885'. HIRL. HIALS 34. Rwy 16/34 operating during daytime and in VMC only as

An alternative for rwys 05R/23L & 05L/23R. H24. For noise restrictions see Cairo 10-4. Customs. F.F-3. F-5. Jet A-1. Oxygen. ABN. Fire 9.

BELARUS

 MINSK (MINSK-2) Apt of Entry

 669'
 UMMS
 MSQ
 N53 53.0 E028 02.0

 13/31 11942'
 CONCRETE. PNC 60/R/B/X/T.

 TORA 13 11614'.
 TORA 31 11614'.

 TODA 13 13124'.
 TODA 31 13124'. HIRL. HIALS.

 H24.
 Customs.

 F-3.
 Jet A-1.

 JASU.
 Oxygen.

 Fire 7.

CHECH REPUBLIC

KARLOVY VARY Apt of Entry1989'LKKVKLVN50 12.2 E012 54.9Apt Operator (17) 3331102, Fax 3331106. ATC 3331103.11/29 7054' ASPH/CONC. PCN 33/F/B/X/T. TORA 296594'. LDA 11 6594'. TODA 11 7710'. MIRL, MIALS 29.0800-1600LT. Summer: Mon-Thu 0800-1800LT, Fri-Sun0800-2000LT. O/T O/R 24hr. Customs.F. F-3. Jet A-1. Fire 3.

RUSSIA

MOSKOW (VNUKOVO) Apt of Entry

 686'
 UUWW
 VKO
 N55. 9 E037 16.5

 Apt Operator 66885.

14/32 8202' CONCRETE, PCN 38/R/B/X/T. NORA 14

7874'. TORA 32 7874'. TODA 14 9186'. TJDA 32 9186'.

HIRL. HIALS.

14/32/2133' GRASS.

H24. Customs. Apt to be used with caution in winter during ice conditions. Apt not avbi as alternate foracft type B-747.

Jet A-1. Oxygen. Fire 8.

LATVIA

RIGA (RIGA INTL) Apt of Entry

 33'
 EVRA
 RIX
 N56 55.4 E023 58.3

 Apt Operator (2) 207135. Fax 211767.

 18/36 8366' ASP/CONC. PCN 110/F/A/W/T. TORA 18

 8038'. TORA 36 8038'. TODA 18 9350'. TODA 36 9350'.

 HIRL. HIALS.

 0800-1700LT. Customs.

 F-3. Jet A-1. Oxygen. Fire 7.

FINLAND

TURKU Apt of Entry

 161'
 EFTU
 TKU
 N60 30.9 E022 15.9

 ATS (921) 2714801, AIS 2714803, AIS Fax 2714698.

 08/26 8202'
 ASPHALT. PCN 47/F/B/X/T. TODA 08 8793'.

 TODA 268858'.
 HIRL.

 HIALS 26.
 ALS 08.

 H24.
 Customs.

 F-3.
 Jet A-1.

 Fire 6.
 6.

GERMANY

HAMBURG Apt of Entry

53'EDDHHAMN53 37.8 E009 59.3Apt switchboard (040) 50750, Fax 50751234, Apt Ops50752599, 50752600, Fax 50751236.

50751337, Apron Control Fax 50751236,

05/23 10663' ASPH/BITU. PCN 65/F/A/W/T. LDA 05

9685'. LDA 23 10151'. TODA 05 10859'. TODA 23

10860'. HIRL. HIALS SFL.

Last 512' rwy 05 designated swy.

15/33 12028' ASPH/BITU. PCN 65/F/A/W/T. LDA 33 10565'. TODA 15 12224'. TODA 33 12224'. HIRL. HIALS SFL.

H24. For noise restrictions see Humburg 10-4. Refuelling 0600-2200LT. Customs.

F-3. Jet A-1. Oxygen. ABN. Fire 9.

NORWAY

OSLO (FORNEBU) Apt of Entry

MON N59 53.8 E 010 37.1 54' ENFB Apt Operator 67593340. Fax 67124131. AIS 67593266. Fax 67593616. Scheduling Coordinator 67593131, 67597769. Fax 67124026. TWR 67593370. Fax 67593171 01/19 6070' ASPHALT. PCN 40/F/B/Y/T. TORA 01 5791'. TORA 19 5625'. LDA 01 5627'. LDA 19 5463'. TODA 19 6118'. ASDA 01 5791'. ASDA 19 5625'. HIRL. ALS 19. HIALS 01. 06/24 7776' ASPHALT. PCN 70/F/B/X/T. TORA 24 7382'. LDA 06 7579'. LDA 24 7218'. TODA 06 8268'. TODA 24 7874'. ASDA 24 7382'. HIRL. HIALS. Adnl197' in front of each Thr may be used for T/O. CIV 0700-2400LT, charter tfc PPR. For noise restrictions see Oslo 10-4. MIL Mon-fri 0800-2000LT. Sat, Sun & Hol closed. Acft with wingspan exceeding 171' and outer main gear wheel span exceeding 30' not accepted, except in emergency. Slot allocation required for arr and dep.

Customs: H24. F-3. Jet. Jet A-1. Fire 7.

BELGIUM

CHARLEROI (BRUSSELS SOUTH) Apt of Entry

614' EBCI CRL N50 27.7 E004 27.3

Switchboard (071) 251211. Manager-Direction 251259,

Fax 251202. Manager-Ops 359333, Fax 251201. Apt

Authority 251215, Fax 251254. Airport Inspection 251212,

Fax 251291. ATC 251221, Fax 373280.

07/25 8366' ASPHALT. PCN 64/F/A/W/T.

LDA 07 8261' Night 6890'

Rwy 25 (Asphalt/Concrete) LDA IFR night 8366'.

Right hand circuit rwy 25.

07/25 1640' GRASS. AUW-2

Grass rwy 07/25 O/R for acft with MTOW 1t.

Mon Tue Thu Fri 0700-2200L, Wed 0630-32245L, Sat 0730-2100L, Sun

0900-2130LT, O/T O/R preceding day before 1300LT, except skd and non-skd flights.

Customs: Passengers, Mon-Fri 0630-2230LT, Sat0700-2200LT,

Sun & 4 Hol 0900-2100LT. Fire 8 O/R.

For noise restrictions see apt chart.

F-3. Jet. Fire 5.

Afetherlands

AMSTERDAM (SCHIPNOL) apt of Entry

-11' EHAM AMS N52 18.5 E004 45.9

Apt (020) 6019111. TWR 6022540. Apron 6012116. Fax 6041475 (Commercial).

01L/19R 10827' ASPHALT. PCN 82/R/C/1.7/T. LDA 01L 9350'.

TODA 011 11024'. TODA 19R 11024'. HIRL. HIALS.

01R/19L 11155' ASPHALT. PCN 82/R/C/1.7/T. TODA O1R 11352'.

HIRL. HIALS 01R. 04/22 6608' ASPHALT. PCN 48/F/D/X/U.

TODA 04 6804'. TODA 22 6804'. RL;. ALS.

06/24 10633' ASPHALT. PCN 82/R/C/1.7/T. TADA 24 10499'.

TODA 06 10991'. TODA 24 10696'. HIRL. HIALS 06.

09/27 11329' ASHALT. PCN 82 R/C/1.7/T. TORA 09 4429'.

TODA 09 4626' Night 4526'. HIRL. HIALS 27.

Rwy 09/27 limiyed to acft with a load per strut less than 18298lbs. Rwy 01L, 09 19L, 24 normally used for T/O;

Rwy 01R, 06, 19R and 27 normally used for landings. H24. For general aviation: 0630-2330LT, O/T PNR to KLM General aviation Schiphol-east. For noise restrictions see Amsterdam 10-4. Slot allocation required for IFR flights from ATFM, phone (020) 6022195 or AFTN EHAAZDZX; FOR VFR flights from FIO APT, phone (020) 602 2315 or 2316. Customs. F. F-3. Jet. Jet A-1. Oxygen. Fire 9.

KRASNODAR (PASHKOVSKY)

 118?
 URKX
 KRR
 N45 02.1 E039 10 3

 Apt. Operator:
 396453, 396362.

 05L/23R 7218?
 ASPH/CONC. PCN 27/R/C/X/T. TORA

 05L 6890?.
 TORA 23R 6890?. TODA 05L 8202?. TODA

 23R 8202?.
 PL ALS.

 05R/23L 9843?
 CONCRETE. PCN 30/R/A/X/T. TORA 05R

9514?. TORA 23L 9514?. TODA 05R 10826?. TODA 23L 10826?. HIRL. HIALS.

H24. Customs: By operational requirements. Apt to be used with caution in wither during ice conditions. Jet A-1. Oxygen. Fire 6.

MOSCOW (VNUKOVO) Apt of Entry

686' UUWW VKO N55 35.9 E037 16.5
Apt Operator 4368257.
02/20 10039' CONCRETE PCN 100/R/C/X/T. TORA 02
9711'. TORA 20 9711'. TODA 02 10039'. TODA 20
10367'. HIRL. HIALS.
06/24 9842' CONCRETE. PCN 50/R/A/W/T. TORA 06
9514'. TORA 24 9514'. TODA 06 10827'. TODA 24

10827'. HIRL. HIALS.

H24. Customs. Apt to be used with caution in winter during ice conditions. Apt not avbl as alternate for acft type B-747.

Jet A-1. Oxygen. Fire 8.

ST PETERSBURG (PULKOVO) Apt of Entry

79' ULLI LED N59 48.0 E030 15.9
Apt Operator 1043302, 1143318.
10L/28R 11158' CONCRETE. PCN 73/R/C/W/T. TORA
10L 10830'. TORA 28R 10830'. TODA 10L 12142'. TODA
28R 12142'. HIRL. HIALS.
10R/28L 12408' CONCRETE. PCN 70/R/C/W/T. TORA
10R 12080'. TORA 28L 12080'. TODA 10R 13392'.

H24. Customs. Airport to be used with caution in winter during ice conditions. Jet A-1. Oxygen. Fire 7.

DORTMUND (WICKEDE)

417' EDLW DTM N51 31.2 E007 36.8 Apt Operator (0231) 9213-01 during ops hr, O/T (0231) 9213-1770r-138.
06/24 3445' ASPHALT. PCN 49/F/C/W/T. TODA 06 4298'. TODA 24 4289'. ASDA 06 4101'. ASDA 24 4101'. HIRL. HIALS.
Right hand circuit rwy 24.
0700-2130lt PPR,2130-2200LT PPR.
Customs: Mon-Fri 0830-1600lt. O/R 2 hr, Sat Sun O/R until Fri 1500LT O/R 2hr, limited svc. Address for flight safety messages EDLWZTZX.
F-3. Jet A-1. ABN. Fire 4.

UNIT 5

NOTAMS

Exercise 1

Read and translate the document given below.

NOTAMs promulgating significant information changes are disseminated from locations all over the world. NOTAMs are intended to supplement Aeronautical Information Publications and provide a fast medium for disseminating information at a short notice. The following format and codes are used in disseminating NOTAMs.

TYPICAL NOTAM – in the SYSTEM NOTAM Format

GG EDZZNAEG 020610 EGGNYNYX	Priority, address and date-time group for use by NOT- AM office.
(A0623/91 NOTAM	— NOTAM series A number 0623 of 1991. New NOT- AM.

Q)EGXX/QRDCA/IV/NBO/W/000/400/5510	 Q)More than one FIR is affected: Danger Area activated;		
N00520W050	IFR/VFR; NOTAM is for the immediate attention of aircraft operations, for inclusion in pre-flight bulletins and operationally significant for IFR flights; navigational warring; group; 40,000 ft; centered at N 5510 W 00520 for a radius of 50 NM.		
 A) EGTT/EGPX B) 9104030730 C) 9104281500 D) APR 03 07 12 21 24 AND 28 0730 TO15000 E) DANGER APEA DXX IS ACTIVE F) GND G) 12200M (40000 FT.) MSL.) 	 A) ICAO four letter indicator for Scottish and London FIR/UIR. B) Beginning 1991, 4th month, 3rd day, 0730 UTC. C) Ending 1991, 4th month, 28th day, 1500 UTC. D) Danger area is only active 4th month, day03, 07, 12, 21, 24 and 28, between 0730 to 1500 hr. E) Danger Area DXX is activated. F) Lower limits beginning at ground level. G) Upper limits to 12,200 m (40,000 ft) MLS. 		

FORMAT EXPLANATION of SYSTEM NOTAM

NOTAMN – New NOTAM

NOTAMR - Replaces a previous NOTAM

NOTAMC – Cancels a NOTAM

NOTAMS – SNOTAM

NOTAM format item Q is divided into eight separate qualifier fields.

- a. FIR ICAO location indicator plus "XX" if applicable to more than one FIR.
- b. NOTAM Code. If the subject of NOTAM (second and third letter of NOTAM code) is not in the NOTAM Code, the following letters should be used to reference the subject category.

QAGXX = AGA QGDXX = COM QRCXX = RAC QXXXX = other c. TRAFFIC -1 = IFRV = VFR IV = IFR/VFR

- d. PURPOSE N = Selected for the immediate attention of aircraft operators.
 - B = Selected for pre-flight information bulletins.
 - O = Operationally significant for IFR flights.
 - M = Miscellaneous.
- e. SCOPE A = Aerodrome
 - E = En route
 - W = Navigational warning
- f. LOWER Used when applicable to indicate lower limits of affected area. Default value of 000 is used when limit is not defined.
- g. UPPER Used when applicable to indicate upper limit of the affected area. Default value of 999 is used when limit is not defined.
- h. COORDINATES & RADIUS Latitude and longitude present approximate center of a circle whose radius encompasses the whole area of influence.

NOTAM format items A thru G provide information on location, times, changes and limits.

- A) ICAO location indicator of aerodrome or FIR.
- B) Ten figure date-time group indicating when the NOTAM comes into force.
- c) Ten figure date-time group or PERM indicating the duration of the NOTAM. If the duration of the NOTAM is uncertain, the approximate duration must be indicated using the date-time group followed by EST.
- D) Specified periods for changes being reported otherwise omitted.
- E) Decoded NOTAM code in plain language. ICAO abbreviations may be used where appropriate.
- F) \downarrow These items are normally applicable to navigational warnings or airspace re-
- G) strictions clearly indicating reference datum and units of measurement. Item F provides the lower limit and item G provides the upper limit.

SOME STATES ARE STILL PROMULGATING CLASS I NOTAMS IN THE PREVIOUS FORMAT.

PREVIOUS NOTAM FORMAT and EXPLANATION

JJ KDZZYNAY 310836 AYPYYM — Priority, address and date/time group for use of NOT-AM office.

A67/88 NOTAMN AYPY | ____ Number A67 of 1988 new NOTAM from Port

Moresby.

A) AYPY B) 02251330 C) UFN APRX DVR 5 DAYS E) RWY 14L QIGAS A) ICAO four letter indicator for Port Moresby.

- B) Beginning the 2nd month, 25th day, 18 hrs, 30 minutes UTC.
- C) Down unit further notice but should be operational in 5 days.

E) Glide path on RWY 14 L is unserviceable.

A) ICAO location indicator of aerodrome or FIR.

l

B)Eight figure date-time group. WIE (with immediate effect), or WEF (with effect from) indicating when the NOTAM comes into force.

- c)Eight figure date-time group. PERM, or UFN (unit further notice) indicating the duration of the NOTAM. If the duration of the NOTAM is UFN, the approximate duration of the information should also be indicated.
- D) Specified periods for changes being reported, otherwise omitted.
- E) NOTAM code, abbreviated plain language or both.
- F) \downarrow These items are normally applicable to navigational warnings or airspace re-
- G) \int strictions clearly indicating reference datum and units of measurement.

WORD LIST

affect	[E7fekt]	воздействовать
applicable	[E7plikEbl]	применимый, подходя- щий
appropriate	[E7proupriit]	подходящий, соответству- ющий
approximate	[E7prOksimit]	приблизительный
danger area activated		действующая опасная зона
default	[di7f0:lt]	отсутствие, недостаток
disseminate	[di7semineit]	распространять
down until further notice		вплоть до дальнейшего извещения
duration	[djuE7reiSEn]	продолжительность
encompass	[in7kVmpEs]	окружать, очерчивать
EST (estimated time)		расчетное время
inclusion	[in7klu:zn]	включение

influence	[7influEns]	влияние
latitude	[7lXtitju:d]	широта
location	[lou7keiSEn]	местонахождение, распо- ложение
longitude	[7lONd3itju:d]	долгота
miscellanous	[misi7leinjEs]	смешанный, разнооб- разный
PERM (permanently)		постоянно
plain language		обычный (простой) язык
previous	[7pri:vjEs]	предыдущий, предше- ствующий
priority	[prai7Oriti]	порядок срочности
promulgate	[7prOmlgeit]	опубликовать, обнародо- вать
purpose	[7pE:pEs]	назначение
scope	[skoup]	сфера применения
selected	[si7lektid]	отобранный
significant	[sig7niSikEnt]	важный
units of measurement	[7me3Ement]	единицы измерения
warning	[wO:niN]	предупреждение
WIE (within immediate effect)		с незамедлительным дей- ствием

Exercise 2

Study the following information.

SECOND AND THIRD LETTERS

(Q__)

UNIFORM ABBREVIATED PHRASEOLOGY

AGA

CODE

Lighting facilities (L)

LA Approach light system (specify runway and type)

SIGNIFICATION

- LB Aerodrome beacon
- LC Runway centreline lights (specify runway)
- LD Landing direction indicator lights
- LE Runway edge lights (specify runway)
- LF Sequenced flashing lights (specify runway)
- LH High intensity runway lights (specify runway)
- LI Runway end identifier lights (specify runway)
- LJ Runway alignment indicator lights (specify runway)

apch lgt abn rwy centreline lgt ldi lgt rwy edge lgt sequenced flg lgt high intst rwy lgt rwy end id lgt rwy alignment indicator lgt

LK	Category II components of approach lighting sys- tem (specify runway)	cat II components
LL	Low intensity runway lights (specify runway)	low intst rwy løt
LM	Medium intensity runway lights (specify runway)	medium intst rwy løt
LP	Precision approach path indicator (PAPI) (specify	1110 al al al 1110 se l' () 180
21	runway)	nani
IR	All landing area lighting facilities	ldg area lot fac
	Stonway lights (specify runway)	sway lot
LS I T	Threshold lights (specify runway)	thr lat
	Visual approach slope indicator system (specify	un igi
LV	tune, and runnyay)	Vocia
T 337	Holiport lighting	vasis halipart lat
	Terrivery controling lights (aposify terrivery)	tury controling lat
	Taxiway centreline lights (specify taxiway)	twy centrenne igr
	Duraway edge lights (specify taxiway)	twy edge Igi
	Runway touchdown zone fights (specify funway)	Twy tuz igi
AGA		
Moven	nent and landing area (M)	
MA	Movement area	mov area
MB	Bearing strength (specify part of landing area	
	or movement area)	beaning strength
MC	Clearway (specify runway)	cwy
MD	Declared distances (specify runway)	declared dist
MG	Taxing guidance system	tax quidance system
MH	Runway arresting gear (specify runway)	rwy arst gear
MK	Parking area	prkg area
MM	Daylight markings (specify threshold, centreline,	day markings
	etc.)	
MN	Apron	apron
MP	Aircraft stands (specify	acft stand
MR	Runway (specify runway)	rwy
MS	Stopway (specify runway)	SWY
MT	Threshold (specify runway)	thr
MU	Runway turning bay (specify runway)	rwy turning bay
MW	Strip (specify runway)	strip
MX	Taxiways (s) (specify)	twy

КОДЫ НОТАМ: II и III буквы (Q _ _)

КОД ЗНАЧЕНИЕ ФРАЗЕОЛОГИЧЕСКАЯ АББРЕВИАТУРА

Аэродромы, авиационные трассы и а/н оборудование (AGA)

Световое оборудование (L)

LA	Система огней подхода (указать ВПП и тип)	apch lgt
LB	Аэродромный светомаяк	abn
LC	Огни осевой линии ВПП (указать ВПП)	rwy centreline lgt
LD	Огни, указывающие направление посадки	ldi lgt
LE	Посадочные огни ВПП (указать ВПП)	rwy edge lgt
LF	Последовательные навигационные огни (ука-	secuenced flg lgt
	зать ВПП)	
LH	Огни высокой интенсивности (указать ВПП)	high intst rwy lgt
LI	Опознавательные огни торца ВПП (указать	rwy end id let
	ВШП)	
ТТ	Огни указывающие выравнивание по ВПП	rwy alignment indic-
LJ		ator lot
τV		alor Igi
LK	компоненты системы огнеи подхода п катего-	cat II components in-
	рии (указать ВПП)	dicator lgt
LL	Огни BIIII низкой интенсивности (указать	low intst rwy lgt
	ВПП)	
LM	Огни ВПП средней интенсивности (укажите	medium intst rwy lgt
	ВПП)	
LP	Указатель траектории точного захода на по-	papi
	салку (указать ВПП)	
LR	Светооборулование всей зоны посалки	ldg area lgt fac
LS	Огни концевой полосы торможения (указать	swy lgt
20		511 9 200
тт		the lat
	Бходные огни (укажите БПП)	thi igi
LV	Система визуальной индикации глиссады	vasis
	(указать ВПП)	
LW	Огни вертодрома	heliport lgt
LX	Огни осевой линии РД (указать ВПП)	twy centreline lgt
LY	Боковые огни РД (укажите ВПП)	twy edge lgt
LZ	Огни зоны приземления на ВПП (указать	rwy tdz ldt
	ВПП)	
AGA 3	она посадки и движения (М)	
MA	Зона движения	mov area
MB	Несушая способность покрытия ВПП (укажите	bearing strength
1112		
MC	часть зоны посадки или движения)	
MC	Полоса свооодная от препятствии (укажите	cwy
	ВПП)	
MD	Располагаемая дистанция (укажите ВПП)	declared dist
MG	Система управления рулением	tax quidance system
MH	Тормозное устройство на ВПП (укажите ВПП)	rwy arst gear
MK	Место стоянки ВС	prkg area

MM	Дневные маркировочные огни (укажите торец,	day markings
	осевые линии и т. д.)	
MN	Перрон	apron
MP	Стоянки ВС (укажите)	acft stand
MR	ВПП (укажите ВВП)	rwy
MS	Концевая полоса торможения (укажите ВПП)	swy
MT	Торец (укажите ВПП)	thr
MV	Участок разворота на ВПП (укажите ВПП)	rwy turning bay
MW	Грунтовая ВПП (укажите ВПП)	strip
MX	РД(- ки) (укажите)	twy

SECOND AND THIRD LETTERS

CODESIGNIFICATIONUNIFORM ABBREVIATEDPHRASEOLOGY

AGA

Facilities and Services(F)

FA	Aerodrome	ad
FB	Braking action measurement equipment (specify	ba measurement egpt
	type)	
FC	Ceiling measurement equipment	ceiling measurement egpt
FD	Docking system (specify AGNIS, BOLDS, etc)	dckg system
FF	Fire fighting and rescue	fire and rescue
FG	Ground movement control	gnd mov ctl
FH	Helicopter alighting area platform	hel alighting area
FL	Landing direction indicator	ldi
FM	Meteorological service (specify type)	met
FO	Fog dispersal system	fog dispersal
FP	Heliport	heliport
FS	Snow removal equipment	snow removal eqpt
FT	Transmissometer (specify runway and where ap-	
	plicable, designators) of transmissometer(s))	transmissometr
FU	Fuel availability	fuel avbl
FW	Wind direction indicator	wdi
FZ	Customs	cust

COM

Communication and radar facilities (C)

CA	Air ground facility (specify service and frequency)	a/g fac
CE	En route surveillance radar	rsr
CG	Ground controlled approach system (GCA)	gca
CL	Selective calling system (SELGAL)	selcal
CM	Surface movement radar	smr
СР	Precision approach radar (PAR) (specify runway)	par
CR	Surveillance radar element of precision approach	sre

	radar system (specify wavelength)	
CS	Secondary surveillance radar (SSR)	ssr
СТ	Terminal area surveillance radar (TAR)	tar

СОМ

Instrument and microwave landing systems (I)

IC	Instrument landing system (ILS) (specify runway)	ilt
ID	DME associated with ILS	ils dme
IG	Glide path (ILS) (specify runway)	ils gp
II	Inner marker (ILS) (specify runway)	ils im
IL	Localizer (ILS) (specify runway)	ils llz
IM	Middle marker (ILS) (specify runway)	ils mm
IO	Outer marker (ILS) (specify runway	ils om
IS	ILS Category I (specify runway)	ils I
IT	ILS Category II (specify runway)	ils II
IU	ILS Category III (specify runway)	ils III
IW	Microwave landing system (MLS) (specify runway)	mis
IX	Locator, outer (ILS) (specify runway)	ils to
IY	Locator, middle (ILS) (specify runway)	ils lm

КОДЫ НОТАМ: ІІ и ІІІ буквы

код Значение

ЕДИНООБРАЗНАЯ ФРА-ЗЕОЛОГИЧЕСКАЯ АББРЕВИАТУРА

АGА Оборудование и службы (F)

FA	Аэродромная служба	ad
FB	Оборудование, измеряющее эффективность	ba measurement egpt
	торможения (указать тип)	
FC	Оборудование, измеряющее НГО	ceiling measurement egpt
FD	Система стыковки ВС с трапом (указать AG-	dckg system
	NIS, BOLDS и др.)	
FF	Борьба с пожаром и спасение	fire and rescue
FG	Управление наземным движением	gnd mov ctl
FH	Площадка для посадки вертолетов	hel alighting area
FL	Указатель направления посадки	ldi
FM	Метеокарта (указать тип)	met
FO	Система рассеивания тумана	fog dispersal
FP	Вертодромная площадка	heliport
FS	Снегоочистительное оборудование	snow removal egpt
FT	Измеритель дальности видимости (укажите	transmissometr

FV	ВПП и где применяется, тип измерителя) Наличие топлива	fuel avbl	
FW	Vказатель направления ветра	wdi	
FZ	Таможенная служба	cust	
СОМ	: Связь и радиолокационное оборудование (С)		
CA CE CG	Оборудование связи "воздух-земля" (указать слу Маршрутный обзорный радиолокатор Радиолокационная система захода на посадку по	ужбу и частоту) о командам с	a/g fac rsr gca
CL CM CP CR	земли Система избирательного вызова Радиолокатор управления наземным движением Радиолокатор точного захода на посадку (указат Обзорный радиолокатор системы точного заход	ть ВПП) а на посадку	selcal smr par sre
CS CT	(указать длину) Вторичный радиолокатор кругового обзора Радиолокатор обзора зоны аэродрома		ssr tar
СОМ	: Приборы и микроволновая система посадки	(I)	
IC ID IG II	Система посадки по приборам (ИЛС) (указать Дальномерная система, взаимодействующая с Глиссада (ИЛС) (указать ВПП) Внутренний маркер (ИЛС) (указать ВПП)	ВПП) ИЛС	ils ils dme ils gp ils im
IL IM IO	Курсовой радиомаяк (ИЛС) (укажите ВПП) Средний маркер (ИЛС) (указать ВПП) Внешний (дальний) радиомаркер (ИЛС) (указа	гь ВПП)	ils llz ils mm ils om
IS IT	Система посадки по приборам I категории (ука (ИЛС) ИЛС категории (указать ВПП)	зать ВШП)	ils I
IV	ИЛС категории (указать ВПП)		ils III
IW	Микроволновая система посадки (указать ВПП		mls
IX	Приводная дальняя радиолокационная станция зать ВПП)	(ИЛС) (ука-	ils lo
IY	Приводная средняя радиолокационная станция зать ВПП)	(ИЛС) (ука-	ils lm

SECOND AND THIRD LETTERS

CODE SIGNIFICATION

UNIFORM ABBREVIATED PHRASEOLOGY

COM

Terminal and en route navigation facilities (N)

NA All radio navigation facilities (except ...) all rdo nav fac

NB	Non-directional radio beacon	ndb
NC	DECCA	decca
ND	Distance measuring equipment (DME)	dme
NF	Fan marker	fan mkr
NL	Locator (specify identification)	1
NM	VOR/DME	vor/dme
NN	TACAN	tacan
NO	OMEGA	omega
NT	VORTAC	vortac
NV	VOR	vor
NX	Direction finding station <i>(specify type and fre-</i> <i>quency)</i>	df
RAC		
Airsp	ace organization (A)	
AA	Minimum altitude (specify enroute/ crossing/	mnm alt

	safe)	
AC	Control zone (CTR)	ctr
AD	Air defence identification zone (ADIZ)	adiz
AE	Control area (CTA)	cta
AF	Flight information region (FIR)	fir
AH	Upper control area (UTA)	uta
AL	Minimum useable flight level	mnm usable fl
AN	Area navigation route	rnav route
AO	Oceanic control area (OCA)	oca
AP	Reporting point (specify name or coded desig-	rep
	nator)	
AR	ATS route (specify)	ats route
AT	Terminal control area (TMA)	tma
AU	Upper flight information region (UIR)	uir
AV	Upper advisory area (UDA)	uda
AX	Intersection (INT)	int
AZ	Aerodrome traffic zone (ATZ)	atz

КОДЫ НОТАМ: II и III БУКВЫ

КОД	ЗНАЧЕНИЕ	ЕДИНООБРАЗНАЯ ФРА-	
		ЗЕОЛОГИЧЕСКАЯ АБ-	
		БРЕВИАТУРА	
COM:	Аэровокзальные и маршрутные навигационные средства (N)		
NA	Все виды радиолокационных средств	all rdo nav fac	

(исключая ...) NB Всенаправленный радиомаяк ndb

NC	Система ДЕККА	decca
ND	Дальномерное оборудование	dme
NF	Веерный маркер	fan mkr
NL	Радиолокационная станция (указать опо- знавательный знак)	1
NM	Система ВОР/ДИЕ	vor/dme
NN	Система ТАКАН	tacan
NO	Система ОМЕГА	omega
NT	Система ВОРТАК	vortac
NV	Маяк ВОР	vor
NX	Радиолокационная станция (указать тип и частоту)	df
RAC:	Организация воздушного движения (А)	
AA	Минимальная абсолютная высота (указать высоту полета по маршруту, высоту про- лета ВС над КП, безопасную высоту)	mnm alt
AC	Диспетчерская зона	ctr
AD	Зона ПВО	adiz
AE	Диспетчерский район	cta
AF	Район полетной информации (РПИ)	fir
AH	Верхняя диспетчерская зона	uta
AL	Минимальный используемый эшелон по- лета	mnm usable fl
AN	Маршруты зональной навигации	rnav route
AO	Океанический диспетчерский район	oca
AP	Пункт обязательных донесений (указать название и кодовое обозначение)	rep
AR	Маршруты ОВД (указать)	ats route
AT	Узловая диспетчерская зона	tma
AU	РПИ верхнего воздушного пространства	uir
AV	Верхняя консультативная зона	uda
AX	Пересечение	int
AZ	Зона воздушного движения в РА	atz
	SECOND AND THIRD LETT	ERS
	UNII	FORM ABBREVIATED
COD	E SIGNIFICATION	PHRASEOLOGY
RAC		
Air traf	tic and VOLMET services (S)	<i>.</i> .
SA	Automatic terminal information service (ATIS))	atis
2 B	A I S reporting office	aro

SB ATS reporting officeSC Area control centre (ACC)SE Flight information service (FIS)

acc

fis

SF	Aerodrome flight information service (AFIS)	afis
SL	Flow control centre	flow ctl centre
SO	Oceanic area control centre (OAC)	oac
SP	Approach control service (APP)	app
SS	Flight service station (FSS)	fss
ST	Aerodrome control tower (TWR)	twr
SU	Upper area control centre (UAC)	uac
SV	VOLMET Broadcast	volmet
SY	Upper advisory service (specify)	advisory
RAC		
Air tra	ffic procedures (P)	
PA	Standard instrument arrival (STAR)	
	(specify route designator)	star
PD	Standard instrument departure (SID)	
	(specify route designator)	sid
PF	Flow control procedure	flow ctl proc
PH	Holding procedure	hldg proc
PI	Instrument approach procedure	
	(specify type and runway)	inst apch proc
PL	Obstacle clearance limit (specify procedure)	ocl
PM	Aerodrome operating minima (specify procedure an amended minimum)	nd opr minima
PO	Obstacle clearance altitude	oca
PP	Obstacle clearance height	och
PR	Radio failure procedure	radio failure proc
PT	Transition altitude	transition alt
PU	Missed approach procedure (specify runway)	missed apch proc
PX	Minimum holding altitude (specify fix)	mnm hldg alt
ΡZ	ADIZ procedure	adiz proc
Naviga	tion Warnings	
Airspa	ce restrictions (R)	
RA	Airspace reservation (specify)	airspace reservation
RD	Danger area (specify national prefix and number)	d
RO	Overlying of (specify)	overflying
RP	Prohibited area (specify national prefix and num- ber)	p
RR	Restricted area (specify national prefix and number)) r
RT	Temporary restricted area	tempo restricted
	КОДЫ НОТАМ: ІІ и ІІІ буквы	1
	Елин	ЮОБРАЗНАЯ ФРА-
КОД	ЗНАЧЕНИЕ ЗЕ А	ОЛОГИЧЕСКАЯ ББРЕВИАТУРА

RAC: ОВД и метеорологическое обеспечение (S): SA Автоматическая служба аэродромной информации

atis

SB	Пункт сбора данных, касающихся ОВД		aro
SC	Районный диспетчерский центр		acc
SE	Полетно-информационное обслуживание		fis
SF	Аэродромная служба полетной информации		afis
SL	Центр управления потоком ВС		flow ctl centre
SO	Океанический районный диспетчерский центр		oac
SP	Диспетчерское обслуживание подхода		app
SS	Служба обеспечения полетов		fss
ST	Аэродромный диспетчерский пункт		twr
SU	Районный диспетчерский пункт в верхнем ВП		uac
SV	Радиовещательная передача метеоинформации для	BC	volmet
SY	Консультативное обслуживание верхнего ВП (указать)		advisory service
RAC:	Процедуры ОВД (Р)		
PA	Стандартная схема посадки по приборам (указать маршрутное обозначение)		star
PD	Стандартная схема вылета по приборам (указать		aid
DE			SIQ flow otherse
РГ DU	управление потоком		hldg proc
ГП DI	Схема полета в зале ожидания		ning proc
ГІ	ВПП)	Л	instanch proc
Ы	Минимальная высота полета препятствий (указать		ocl
	метод)		
PM	Эксплуатационный минимум аэродрома (указать способ и коррелировочный минимум)		opr minima
PO	Абсолютная высота пролета препятствий		oca
PP	Относительная высота полета препятствий		och
PR	Порядок действия при отказе радиосвязи		radio failure proc
PT	Абсолютная высота перехода		transition alt
PU	Схема ухода на II круг (указать ВПП)		missed apch proc
PX	Минимальная высота полета в зоне ожидания		
	(указать КП)		mnm hldg alt
ΡZ	Порядок действия при входе в зону действия ПВО		adız proc
Нави	гационные предостережения:		
Огран	ичение BII (R):		
RA	Резервирование ВП (указать)	airs	space reservation
RD	Опасная зона (указать национальную приставку и номер)	d	
RO	Пролет района (указать)	ove	erflying
RP	Запретная зона (указать национальную приставку		
	и номер)	f)
RR	Зона ограничения (указать национальную		
	приставку и номер)	r	
RT	Зона временного ограничения	tem	npo restricted

SECOND AND THIRD LETTERS

CODE

SIGNIFICATION

Navigation Warnings Warnings (W)

- WA Air display
- WB Aerobatics
- WC Captive balloon or kite
- WD Demolition of explosives
- WE Exercises (specify)
- WF Air refuelling
- WG Glider flying
- WJ Banner target towing
- WL Ascent of three balloon
- WM Missile, gun or rocket firing
- WP Parachute jumping exercise (PJE)
- WS Burning or blowing gas
- WT Mass movement of aircraft
- WV Formation flight
- WW Significant volcanic activity
- WZ Model flying

Other Information (O)

- OA Aeronautical information service
- OB Obstacle (specify details)
- OE Aircraft entry requirements
- OL Obstacle lights on ... (specify)
- OR Rescue co-ordination centre

UNIFORM ABBREVIATED PHRASEOLOGY

air display aerobatics captive balloon or kite demolition of explosives exer air refuelling glider flying banner/target towing ascent of free balloon frng pje burning or blowing gas mass mov of acft formation flg sig volcanic act model flying

> ais obst acft entry rqmnts obst lgt rcc

КОДЫ НОТАМ: ІІ и ІІІ буквы

код Значение

Навигационные предупреждения

ЕДИНООБРАЗНАЯ ФРА-ЗЕОЛОГИЧЕСКАЯ АББРЕВИАТУРА

WA	Воздушный показ	air display
WB	Выполнение фигур высшего пилотажа	aerobatics
WC	Привязной аэростат или воздушный змей	captive balloon or kite
WD	Разрушение взрывчатых веществ	demolition of explos-
		ives
WE	Тренировочные полеты (указать)	exer
WF	Дозаправка топливом в полете	air refuelling
WG	Полеты планеров	glider flying
WJ	Подъем знамени/эмблемы	banner/target towing
WL	Подъем неуправляемого аэростата	ascent of free balloon
WM	Стрельбы реактивными снарядами, оружием	frng
	или ракетами	
WP	Тренировочные парашютные прыжки	pje
WS	Горящий или дымящийся бензин	burning or blowing gas
WT	Групповые полеты ВС	mass mov of acft
WV	Групповой полет в строю	formation flg
WW	Существенная вулканическая активность	sig volcanic act
WZ	Демонстрационные полеты	model flying
Другая	я информация	
OA	Служба аэронавигационной информации	ais
OB	Препятствия (указать)	obst
OE	Требования к входу воздушного судна в зону	acft entry rgmnts
OL	Заградительные огни на (указать)	obst lgt
OR	Координационный центр по спасению	rcc

SECOND AND THIRD LETTERS CODE SIGNIFICATION UNIFORM ABBREVIATED PHRASEOLOGY

Availability (A)

AC	Withdrawn for maintenance	withdrawn maint
AD	Available for daylight operation	abvl day ops
AF	Flight checked and found reliable	fltck okay
AG	Operating but ground checked only, awaiting flight check	opr awaiting fltck
AH	Hours of service are now	hr ser
AK	Resumed normal operation	okay
AL	Operative (or reoperative) subject to previ- ously published limitations/conditions	opr subj previous cond
AM	Military operations only	mil ops only
AN	Available for night operation	avbl night ops
AO	Operational	opr
AP	Available prior permission required	avbl ppr
AR	Available on request	avbl o/r
AS	Unserviceable	u/s
AU	Not available (specify reason if appropriate)	not avbl
AW	Completely withdrawn	withdrawn
AX	Previously promulgated shutdown has been	promulgated shutdown cnl
Chan	iges (C)	
CA	Activated	act
CC	Completed	cmpl
CD	Deactivated	deactivated
CE	Erected	erected
CF	Operating frequency (ies) changed to	freq change
CG	Downgraded to	downgraded to
СН	Changed	changed
CI	Identification or radio call sign changed to	ident change
CL	Realigned	realigned
CM	Displaced	displaced
CN	Cancelled	cnl
CO	Operating	opr
СР	Operating on reduced power	opr reduced pwr
CR	Temporarily replaced by	tempo rplcd by
CS	Installed	installed
CT	On test, do not use	on test, do not use
Haza	rd Conditions (H)	
HA	Braking action is	ba is
	1) Poor	
	2) Medium/Poor	
	3) Medium	

- 4) Medium/Good
- 5) Good
- HB Braking coefficient is ... *(specify measurement* brkq coefficient is *device used)*
- HC *Covered by compacted snow to a depth of*
- HD *Covered by dry snow to a depth of*
- HE Covered by water to a depth of
- HF Totally free of snow and ice
- HG Grass cutting in progress
- HH Hazard due to *(specify)*
- HI Covered by ice

cov compacted snow depth

cov dry snow depth

cov water depth free of snow and ice grass cutting hazard due cov ice

КОДЫ НОТАМ: II и III БУКВЫ

код Значение

ЕДИНООБРАЗНАЯ ФРА-ЗЕОЛОГИЧЕСКАЯ АБ-БРЕВИАТУРА

Наличие (А)

AC	Изъято из эксплуатации	withdrawn maint
AD	Предоставляется только для полетов в светлое	abvl day ops
	время суток	
AF	Проверено в полете и признано надежным	fltck okay
AG	В рабочем состоянии, но выполнена только на-	opr awaiting fltck
	земная поверка	
AH	Сейчас время обслуживания	hr ser
AK	Возобновлена нормальная работа	okay
AL	Сейчас в хорошем состоянии, ограничения сняты	opr subj previous cond
AM	Разрешены только военные полеты	mil ops only
AN	Предоставляется только для полетов в темное	avbl noght ops
	время суток	
AO	В рабочем состоянии	opr
AP	Предоставляется при получении необходимого	avbl ppr
	разрешения	
AR	Предоставляется по запросу	avbl o/r
AS	Непригодный	u/s
AU	Не предоставляется (уточните причину, если	not avbl
	таковая имеется0	
AW	Изъято полностью	withdrawn
AX	Предварительно объявленное выключение отме-	promulgated shutdown
	нено	cnl
Изме	енения (С)	
CA	Включено	act
CC	Завершено	cmpl
CD	Включено	deactivated
CE	Смонтировано	erected

CF	Рабочая частота изменена	freq change
CG	Категория снижения до	downgraded to
СН	Изменено	changed
CI	Позывной радиосвязи изменен на	ident change
CL	Повторно настроено	realigned
СМ	Смещенный	displaced
CN	Аннулированный	cnl
CO	Действия	opr
СР	Работа на пониженной мощности	opr reduced pwr
CR	Временно заменено	tempo rplcd by
CS	Установлено	installed
СТ	В стадии проверки, не использовать	on test, do not use
Опа	сные метеоявления (Н)	
HA	Эффективность торможения	ba is
	1) Плохое	
	2) Среднее (Плохое)	
	3) Среднее	
	4) Среднее (Хорошее)	
	5) Хорошее	
HB	Коэффициент торможения составляет (ука-	brkg coefficient is
	зать используемое устройство для измере-	
	ния торможения)	
HC	Покрыто уплотненным снегом на толщину	cov compacted snow depth
HD	Покрыто водой на толщину	cov dry snow depth
HE	Покрыто водой на глубину	cov water depth
HF	Полностью свободно от снега и льда	free of snow and ice
HG	Выполняется покос травы	grass cutting
ΗH	Опасность из-за (указать)	hazard due
HI	Покрыто льдом	cov ice
	FOURTH AND FIFTH LETT	ERS
~~ ~	UNIFO	RM ABBREVIATED
	DE SIGNIFICATION	PHRASEOLOGY
Hazai	rd Conditions (H) (Cont'd)	.
HJ	Launch planned (specify balloon flight identif	ic- launch plan
ation or project code name, launch site, planned		
	period of launch(es) - date/time, expected climb d	l 1r-
	ection, estimated time to pass 18 000 m (60 000 f	t),
	or reaching cruising level if at or below 18 000 m	

- (60 000 ft), together with estimated location
- HK Bird migration in progress (specify direction)
- HL Snow clearance completed
- HM Marked by
- HN Covered by wet snow or slush to a depth of
- HO Obscured by snow

bird migration inpr snow clr cmpl marked by cov wet snow depth obscured by snow

- HP Snow clearance in progress
- HQ Operation cancelled . . .(specify balloon flight identification or project code name)
- HR Standing water
- HS Sanding in progress
- HT Approach according to signal area only
- HU Launch in progress . . . (specify balloon flight identification or project code name, launch site, date time of launch(es), estimated time passing 18 000 m (60 000 ft), or reaching cruising level if at or below 18 000 m (60 000 ft), together with estimated location, estimated date/time of termination of the flight and planned location of ground contact, when applicable)
- HV Work completed
- HW Work in progress
- HX Concentration of birds
- HY Snow banks exist (specify height)
- HZ Covered by frozen ruts and ridges

Limitations (L)

- LA Operating on auxiliary power supply
- LB Reserved for aircraft based therein
- LC Closed
- LD Unsafe
- LE Operating without auxiliary power supply
- LF Interference from
- LG Operating without identification
- LH Unserviceable for aircraft heavier than
- LI Closed to IFR operations
- LK Operating a a fixed light
- LL Useable for length of . . and width of. .
- LN Closed to all night operations
- LP Prohibited to
- LR Aircraft restricted to runways and taxiways
- LS Subject to interruption
- LT Limited to
- LV Closed to VFR operations
- LW Will take place
- LX Operating but caution advised due to

Other (XX)

XX Where 4th and 5th letter code does not cover the situation use XX and supplement by plain language

- snow clr inpr opr cnl
- standing water sanding apch according signal area only launch inpr

- work cmpl wip bird concentration snow banks hgt cov frozen ruts and ridges
- opr aux pwr reserved for acft based therein clsd unsafe opr without aux pwr interference from opr without dent u/s acft heavier than clsd ifr ops opr as f lgt useable length width clsed night ops prohibited to acft restricted to rwy and twy
- subj intrp limited to
- clsd vfr ops
- will take place
- opr but caution due

(plain language following the NOTAM Code)

КОДЫ НОТАМ: III и IV БУКВЫ

код Значение

ЕДИНООБРАЗНАЯ ФРА-ЗЕОЛОГИЧЕСКАЯ АББРЕВИАТУРА

Опасные для полетов метеоявления

- HJ Старт запланирован на (указать условное launch plan обозначение ЛА, место запуска, планируемый период запуска (запусков - дата/время, предполагаемое направление подъема, расчетное время прохождения 18 000 м (60 00 футов) или занятие крейсерского эшелона, если на или ниже 18 000 м (60 000 футов), вместе с рассчитанным местонахождением ΗK Перелет птиц (укажите направление) bird migration inpr snow clr cmpl HL Расчистка от снега закончена marked by HM Обозначено HN cov wet snow depth Покрыто мокрым снегом или слякотью на толщину в ... HO Загорожено снегом obscured by snow HP snow clr inpr Выполняется расчистка снега HQ Полет отменен (указать условное обозначеopr cnl ние или название ЛА) HR Стоячая вода standing water HS sanding Выполняется посыпка снегом HT Заход на apch according signal HU launch inpr Выполняется запуск (указать условное обозначение или название АА, место запуска, планируемый период запуска/ запусков дата/ время, предлагаемое направление подъема, расчетное время прохождения 18 000 м (60 000 футов) или занятие крейсерского эшелона, если на или ниже 18 000 м (60 000 футов), вместе с рассчитанным местонахождением, расчетное дата/время завершения полета и планируемое местонахождение посадки, когда подходит) ΗV Работа закончена work cmpl HW wip Работа выполняется bird concentration HX Скопление птиц HY snow banks hgt Имеют место снежные заносы ΗZ cov frozen ruts and ridges Покрыто замерзшими выбоинами и выступами
- Ограничения

LA	Работа от вспомогательного источника электро- энергии	opr aux pwr
LB	Резервировано для базирующихся здесь ВС	reserved for acft based therein
LC	Закрыто	clsd
LD	Небезопасно	unsate
LE	Работа без вспомогательного источника электро- снабжения	opr without aux pwr
LF	Помехи от	interference from
LG	Работа без опознавания	opr without ident
LH	Непригоден для эксплуатации ВС тяжелее, чем	u/s acft heavier than
LI	Закрыто для полетов по приборам	clsd ifr ops
LK	Работает в качестве огня постоянного излучения	opr as lgt
LL	Используется по длине и ширине	useable length width
LN	Закрыто для всех полетов в темное время	clsed night ops
LP	Запрещено	prohibited to
LR	Разрешено передвижение ВС только по ВПП ру- лежным дорожкам	acft restricted to rwy and twy
LS	Возможны перерывы в работе	subj intrp
LT	Ограничено до	limited to
LV	Закрыто для полетов по ВПП	clsd vfr ops
LW	Будет иметь место	will take place
LX	В рабочем состоянии, однако, требуется соблю- дать осторожность из-за	opr but caution due

Другое (XX)

XX 4-я и 5-я буква кода не охватывает ситуации, используйте XX и дополнения обычным языком (plain language following the NOTAM Code)

Exercise 3

Study the NOTAM CODE and make the WORD LIST of the UNIFORM ABBREVI-ATED PHRAZEOLOGY in the alphabetic order like this:

abn	aerodrome beacon	аэродромный радиомаяк
acc	area control centre	районный диспетчерский пункт
act	activated	включено
ad	aerodrome	аэродром
adiz	air defence identification zone	зона опознавания ПВО
	— e	etc —

Exercise 4

Read and interpret the following TERMINAL CHART NOTAMS

Almaty, Kazakhstan, Ufn ILS CAT II apch rwy 23 not avbi.

Ashkabad, Turkmenistan, Inf crane of 262' AGL erected at 2 32 NM (4300m) in front of thresh rwy 30, therefore take-off from rwy 12 to be started at beginning of rwy and not 328' (100m) inwards from thresh rwy 12 as pbid. Ufn ILS rwy 12 u/s. Bratislavia, Slovakia, (Ivanka) Until 31 DEC 94 IAP ILS CAT II rwy 31 (chart 11-1A) suspended. **Bratsk**, Russia, Unf twy 4 cisd. Bucharest, Romania, (Otopeni) Unf RCL lights rwy 08L/26R on test. Ufn TDZ lights rwy 08L/26R u/s. Ufn rwy 08R/26L cisd. Chita, Russia, (Kadala) Ufn ILS GS rwy 11 u/s. Caransebes, Romania. Twy B witdrawn perm. **Dnepropetrovsk**, Ukraine, Until 31 DEC 94 Tue and Thu btn 0900-1100Z and Wed btn 0700-1100Z rwy 09/27 cisd. **Dushanbe**, Tajikistan, Ufn apt PPR for foreign acft. Gdansk, Poland, (Rebiechovo) Ufn TWR fred 132 2MHz ops on test, use 118.1MHz instead. Ivano-Frankovsk, Ukraine, Ufn PAR rwy 10/28 u/s. Kaunas, Lithuania, (Intf) SIDs, NDBV KNA 325 ident/freg remains `KM`704 until8 DEC 94; NDB 'KUS'ident remains 'SE' until 8 DEC 94. Kazan, Russia, Ufn ILS rwy 11/29 not avbi. Ufn dly btn 0800-1000Z apt cisd. Khabarovsk, Russia, (Novy) Ufn rwy 05L/23R cisd, however avbi for taxing except btn twy 2 and twy 4. Ufn LMM `B` rwy 05L u/s. Until 31 DEC 94 dly btn 0300-0500Z apt cisd. Kishinau, Moldova, Ufn 4 and 7 cisd. **Kiev**, Ukraine, (Borispol) Until 31 DEC 94 rwy 18L/36R cisd. Ufn apt not avbi as altemate. **Kiev**, Ukraine, (Shulyany) Ufn PAR rwy 08 u/s. Krasnodar, Russia, (Pashkovsky) Ufn ILS rwy 05L/23R u/s. Kuressaare, Estonia, MSA for all IAP centered on apt. Magadan, Russia, (Sokol) Ufn ALS rwy 28 u/s. Minsk, Belarus, (Minsk-2) Ufn on Wed, Fri, and Sun btn 2200-0400Z apt cisd. Ufn ILS rwy 13 u/s. Moscow, Russia, (Sheremetyevo) Ufn main twy 1 btn twys 1 and 10, twys 2,4,8,9,12,14,17 cisd.

Ufn apt avbi only for skd tfc and bisiness class acft. Ufn dly btn 0500-0700LT and additionally on Mon and wed btn 1200-1400LT rwy 07R/25L cisd.

Moscow, Russia, (Vnukovo) SIDs 10-3, Rwy 20

DEPs, trans height changed to (2957`)(900m), TA changed to 3590`.

TA/level rwy 20 (chart 11-4) lowered to 3590/FL 49(1500m).

Ufn twy 12 cisd.

Until 31 DEC 94 apt not avbi as alth apt for B-747 type acft.

Until 31 DEC 94 RCL lights rwy 24 u/s.

Murmansk, Russia, Until 30 DEC 94 ILS rwy 14 u/s.

Novosibirsk, Russia, (Tolmachevo) Until 30 DEC

94 dly (except Sat Sun Hol) btn 1500-1700LT apt cisd. Ufn PAR rwy 07/25 u/s.

Odessa, Ukraine, Ufn twy 1 to be used by acft

with AUW 173 (78tons) or heavier, all other twy avbi only for lighter acft.

Osh, Kyrgyzstan, Ufn ILS rwy 12 u/s.

Palanga, Lithuania, (Intl) SIDs, Klaipeda NDB

`KLA` freg/ident remains NC 718 until 8 DEC 94.

Palanga NDB 'PNG' 407 ident/freg remains 'AN'

878 until 8 DEC 94; NDB 'PL' ident remains 'ZE' until 9DEC 94.

Skaudvile NDB `SKD` ident/freg remains `NM` 617 until 8 DEC 94.

PAR rwy 01/19 (chart 11-1/11-2) withdrawn perm.

Petrozavodsk, Russia, (Besovets) Ufn LOM `XO` rwy 01 u/s.

Piestany, Slovakia, STAR, SID, prohibited area LK(P)-29 redesignated LZ(P)-29.

EASTERN EUROPE

Sunkova NDB - CRP at N5728 5 E09004 9, 2997117°, 53NM, 98km, CRP - CRP Maksimkin Yar NDB, 2977112°, 127NM, 236km, MEA FL187/FL5700m, MAA FL397/FL12100m **EE H/L-6**/8D **R211G** established CRP Krasnoyarsk Apt at N5610 3 E09229 6 - CRP Bazat NDB, 1467326°, 15NM, 28km, Bazat NDB - CRP SORKA at N5538 0 E09346 0, 1137294°, 41NM, 76km, MEA FL207/FL6300m, MAA FL397/FL12100m

EE H/L-6/8D R211W established CRP Novy Vasyugan NDB - CRP at N5829 8 E07936 0, 0797262°, 98NM, 181km, CRP - CRP Kolpashevo NDB, 0827266°, 106NM, 196km, Kolpashevo NDB - CRP at 5716 4 E08708 4, 1027288°, 149NM, 276km, CRP - CRP at N5653 7 E08829 1, 1087290°, 50NM, 92km, CRP - CRP Achinsk NDB at N5616 0 E09034 0, 1107293°, 79NM, 146km Novy Vasyugan NDB to Kolpashevo NDB, MEA FL187/FL5700m, MAA FL397/FL12100m, Kolpashevo NDB to Achinsk NDB, MEA FL167/FL5100m, MAA FL397/FL12100m Novy Vasyugan NDB via Kolpashevo NDB to Achinsk NDB EE H/L-6/8CD **R347**, VELTA to IGROD changed to one-way S-bound, available for flights from Europe to Japan, MEA changed to FL299/FL9100m, ballflag 12 should read 28 EE H/L-6/10B, **EE H/L-7/1CD** W521 established CRP UKSAT at N5030 7 E02745 9 - CRP Chernyakhov NDB, 0917272°, 36NM, 67km, MOCA 3000T/900mT, Chernyakhov NDB - CRP Soloveyevka NDB, 1107291°, 37NM, 68km, MOCA 2300T/700mT, Soloveyevka NDB - CRP Pn NDB, 1027283°, 64NM, 118km, MOCA 4000T/1200mT, UKSAT to Pn NDB, MEA FL266/FL8100m, MAA FL397/FL12100m **EE H/L-3**/4B **UKBB. Z10** established CRP TIRIS - CRP DOBOR at N4828 8 E02233 8 - CRP RUMUK, 128°, 16/42NM, 29/77km, MEA FL256/FL7200m, MAA FL348/FL 10600m, one-way SE-bound **EE H/L-3/3AC** DALNERECHENSK AUXILIARY ACC withdrawn **EE H/L-6/10B, EE H/L-7/1ABCD** KHABAROVSK FIR, vertical limits changed to FL79/FL2400m **EE H/L-6/10ABCD, EE H/L-7/1BCD2AC** KHABAROVSK FIR, transit flights via AVGOK restricted to 6 aircraft per hour ufn **EE H/L-6**/10B, **EE H/L-7**/1C

PODKAMENNAYA TUNGUSKA AUXILIARY ACC applies a 10mm longitudinal separation due to technical reasons, aircraft may avoid airway R22 by using airway R30 after approval by Vologda, Kotlas and Ekimchan ACCs ufn **EE H/L-6**/8AB

UZBEKISTAN

NUKUS FIR lateral limits changed ...402800N 0621000E - 402800N 0611000E -411000N 0612000E - 412000N 0601500E -420000N 0600000E - 421800N 0593300E -423000N 0585000E - 420000N 0570000E -411700N 0560000E - 432000N 0543000E EE H/L-5/3C SAMARKAND NDB W coords changed to

N3942 4 E06655 0

TERMEZ VORDME 'NO' u/s ufn. **EE H/L-5**/4C

YUGOSLAVIA

ATS ROUTES in upper airspace changed For details refer to CHART NOTAMS page **301**. **EE H/L-4/5BD** ATS ROUTES changed: **B54,** LIPOV coords should read N4500 2 E01905 0 E LO-9/3C **R26**, KATTI to DUBROVNIK, closed for E-bound traffic ufn, Belgrade VORDME to BABIT, MEA FL200 established ufn EE H/L-3/2CD, EE H/L-4/5BC UL607 (RNAV), DUBRONNIK to GLIDA, not available ufn EE H/L-4/5CD CHART NOTAMS 301. UR26, KATTI to DUBROVNIK, closed for E-bound traffic ufn EE H/L-4/5C BANJA LUKA NDBs 'BLK', 'NA' and LCTR 'LU' u/s ufn **EE H/L-4**/5A BELGRADE FIR/CTA (as published by LYBA) extended ufn 450900N 0180200E - 450900N 0171600E -452600N 0161700E - 453000N 0153300E -450200N 0151800E - 442700N 0153100E -441400N 0153500E - 440700N 0151500E -440200N 0153700E - 435100N 0161000E -434700N 0164800E - 433100N 0171500E

EE H/L-3/1D2C, **EE H/L-4**/5AC

ENROUTE HOLDING established on Mojkovac NDB, inbound track 187°, RIGHT turns, MHA FL250 MAX LEVEL FL370, 1 5 min EE H/L-4/5D

SARAJEVO VORDME 'SAR' u/s ufn, NDB 'SAR' freq changed to 338 ufn u/s ufn, TVORs 'KIS' and 'KGL' u/s ufn, LCTRs IL and KG' u/s ufn EE H/L-4/5AB CHART NOTAMS 301.
SKOPJE NDB 'BU' freq changed to 442 ufn, NDB 'PT' freq changed to 295 ufn EE H/L-4/6C

Exercise 5

Read and interpret the following EN ROUTE CHART NOTAMS. **SLOVAKIA**

Flights on ATS Routes above FL 125 (except designated STARs/SIDs) require RNAV equipment.

ATS ROUTES changed:

G114, FIR [FIR03] to FIR, only available for traffic departing LHCC FIR equipped with SSR transponder. **EE H/L-3**/2C.

UA42, NCRP TERDI established at N4830.6

E01943.4, NCRP GOKVA established at

N4831.5 E01953.2, RINAK replaced by NCRP

MITKO at N4832.5 E02004.2; Sliac VORDME -

TERDI - GOKVA - MITKO - Kosice VORDME, 24/7/7/47NM. EE H/L-3/2AB.

UA485, FIR [FIR09] to FIR, CDR classification changed to CDR 3, H24, available by ATC,

altemate route UG37. EE H/L-3/2AB.

UB45, Sliac VORDME changed to NCRP.

EE H/L-3/2A.

UG114, FIR [FIR03] to FIR, only available for traffic departing LHCC FIR equipped with SSR transponder. **EE H/L-3**/2C.

UL39 changed/realigned: x-break [FIR63] coords changed to N4907. 9 E01806.8;

x-break - NCRP GOKVA at N4831. 5 E01953.2. 114°/295°. 79NM;

GOKVA - CRP PITIK at N4819.5 E02022.3

119°/299°, 23NM.

EE H/L-3/2AB.

UL40, Jelsava NDB to x-break, withdrawn.

EE H/L-3/2AB.

UL601 realigned: x-break [FIR91] to GELSI withdrawn; x-break [ZILA14] established at N4913.0 E01809.1 - NCRP GOKVA established at N4831.5 E01953.2 - CRP PITOK established at N4819.5 E02022.3, 118°, 8023NM, one-way one-way SE-bound. EE H/L-3/2AB. UL726 realigned; x-break [ZLA26] at N4900.2 E01754.9 - NCRP TERDI at N4830.6 E01943.4 - CRP PITOK at N4819.5 E02022.3, 109°/290°, 78/28NM. EE H/L -3/2AB. UL867 changed/realigned: x-break [FIR05] relocated to N4929.8 E01842.0 - NCRP MITKO at N4832.5 E02004.2 - CRP PITOK at N4819.5 E02022.3, 134°/315°, 79/18NM. EE H/L-3/2AB. **UT42**, Kosice VORDME to x-break withdrawn. EE H/L-3/2AB. **UT43**, Kosice VORDME to x-break withdrawn. EE H/L-3/2AB. UT620, x-break [FIR90] to GELSI withdrawn. **EE H/L-3**/2AB. **UW42**, GELSI via Jelsava NDB to Jablonca VOR withdrawn. EE H/L-3/2B. **UW43**, Sliac VORDME changed to NCRP. EE H/L-3/2A. UY300 established: CRP SOTER - NCRP Nitra VORDME, 292°, 35NM, one-way NW-bound. EE H/L-3/2C. REPORTING POINT ABKOL, remark changed to read 'Not required B45, UA485'. EE H/L-3/2A. Poprad, Slovakia, (Tatry) ICAO location indicator chgd to LZTT Rostov-Na-Donu, Russia, Ufn PNR for int'l fit ' Until 31 DEC 94 dly 0515-0645Z apt clsd Rovno, Ukraine, Ufn ILS rwy 12/30 u/s Sarmellek, Hungary, (Balaton) Until 31 MAR 95 thresh rwy 35 displ 2297'(700m), LDA/TORA rwy 17/35 - 5906'(1800m) **St Petersburg**, Russia, (Pulkovo) Ufn apt avbl as alth apt for foreign acft only when destination is Moscow (Sheremetyevo). Ufn twy 3 clsd Ufn dly btn 0045-0315Z rwy 10R/28L clsd. Ufn rwy 10L/28R clsd Ufn main twy btn twy 6 and twy 7, twy 6, 11, 12, 13 clsd Ufn RCL lights rwy 28L u/s

ILS ident changes Rwy 10L - LOC 'IPU', LOM 'PU' and LMM 'U' instead of 'IAD', 'AD' and 'A', Rwy 28R -- LOC 'IPL', LOM 'PL', LMM 'L' instead of 'IZL', 'ZL' and 'Z', Rwy 10R -- LOC 'IPK', LOM 'PK', LMM 'K' instead of 'IOI', 'OI' and 'O', Rwy 28L - LOC 'IPO', LOM 'PO', LMM 'O' instead of 'IND', 'ND' and 'N' accordingly Samara, Russia, (Kurumoch) Ufn PPR via telegraph for charter and non-skd fit Ufn ILS rwy 05/23 and ILS rwy 15/33 not avbl **Samarkand,** Turkmenistan, Ufn ILS rwy 09 u/s Simferopol, Ukraine Until 26 MAR 95 dly 1700-0500Z rwy 01R/19L clsd Until 28 FEB 1995 apt not avbl as alternate apt for intl fit. Siofok, Hungary, (Kiliti) Swy rwy 15/33 withdrawn perm Ufn apt clsd. Sliac, Slovakia, ICAO location indicator chgd to LZSL **Sochi,** Russia, Ufn twy partly clsd, follow TWR instructions **Sofia**, Bulgaria, Ufn twy 4 not avbl for acft types Airbus and Boeing Stavropol, Russia, (Shpakovskoye) GND svc, 121 7MHz decomsnd. Sukhumi, Georgia, (Babushara) Ufn ILS rwy 30, LOM 'AV and LMM 'A' rwy 30 u/s Ufn PAR rwy 30 u/s Tallinn, Estonia, (Ulemiste) MSA for all IAP centered on apt Ufn main twy, twy 2, twy 3 clsd Ufn twy 5 clsd Ufn HIALS rwy 27 u/s Ufn ILS rwy 09 u/s Ufn IAP ILS rwy 27 (chart 11-1) u/s Tashkent, Uzbekistan, (Yuzhny) Until 18 DEC 94 dly btn 0300-1300Z rwy 08L/26R clsd. Until 31 DEC 94 twy 6 btn twy 4 and twy 5 clsd. Ufn ILS rwy 26R u/s Ufn twy 15 clsd. **Tbilisi**, Georgia, (Novoalexeyevka) Ufn acft exceeding AUW-221 are to use rwy 31 for ldg and rwy 13 for T/O Ufn ILS rwy 31 u/s Termez, Uzbekistan, SID, Kakaydy Apt coords

changed to N3737 4 E06731.1. Ufn ILS rwy 25 u/s. **Timisoara,** Romania, (Giarmata) Ufn IAP ILS rwy 29 (chart 11-1) downgraded to LOC (GS out) apch, FAF posn chgd to D28 6NM/53 0NM and R-148 'ARD', MAP at LMM 'S' no longer

UNIT 6 SNOWTAM

Exercise 1

Study and translate SNOWTAM FORMAT. Use the word list given after the exercise.

ORIGINATION AND DISTRIBUTION

Notification of the presence or removal or significant changes in hazardous conditions due to snow, slush, ice or water on the movement area is to be made preferably by use of the SNOWTAM format, or the NOTAM Code and plain language.

SNOWTAM FORMAT

(COM heading)	(PRIORITY IN- DICATOR)	$(ADDRESSES) \qquad \Leftarrow$
	(Date and time of	(ORIGINATOR'S INDICATOR)
	filing)	Æ
(Ab-	(SWAA SERIAL	(LOCATION DATE/TIME OF (OPTIONAL
bre-vi-	NUMBER)	INDICATOR) OBSERVATION GROUP)
ated	S W • •	
heading)		

SNOWTAM	Serial number				
(Aerodrome Location]	A)	>			
(DATE / TIME OF OBS ment in UTC))	SERVATION (Time of comple	tion of measure-	B)		
(RUNWAY DESIGNAT	TORS)		C)	>	
(CLEARED RUNWAY LENGTH (m))	LENGTH, IF LESS THAN PU	JBLISHED	D)		
(CLEARED RUNWAY WIDTH (m; it offset lej	(CLEARED RUNWAY WIDTH, IF LESS THAN PUBLISHED WIDTH (m: it offset left or right of centre line add "L" or "R"))				
(DEPOSITS OVER TO (Observed on each thin the lower runway desig	TAL RUNWAY LENGTH ed of the runway, starting fro gnation number)	om threshold	F)		
NIL – CLEAR AND DRY 1 – DAMP 2 – WET OR WATER PATCHES 3 – RIME OR FROG COVERED (depth normally less than 1 mm) 4 – DRY SNOW 5 – WET SNOW 6 – SLUSH 7 – ICE 8 – COMPACTED OR ROLLED SNOW 9 – FROZEN RUTS OR RIDGES)					
(MEAN DEPTH (mm) F LENGTH)	OR EACH THIRD OF TOTA	L RUNWAY	G)		
(FRICTION MEASUR WAY AND FRICTIO	REMENT ON EACH THIRI ON MEASURING DEVICE	OF RUN-	H)		

measured or calculated COEFFICIENT	or ESTIMATED SURFACT	E		
0.39 to 0.36	GOOD	_ 5		
0.35 to 0.30	MEDIUM/GOOD	_4		
0.29 to 0. 26	MEDIUM	-3		
0.25 and bellow	MEDIUM/POOR	-2		
9 – unicitable	POOR	- 1		
	UNRELIABLE	-9		
(When question a measured of ures, followed by the abbrevi device used. When question a	coefficient use the observed two iation of the friction measuring an estimate use single digit))	fig-		
(CRITICAL SNOWBANKS	(if present, insert height (cm d	is-	J)	
tance from thew edge of runw "LR" if applicable))	way (m) followed by "L", "R" o	Dr		
(RUNWAY LIGHTS (obscur "R" or both "LR" if applicat	red, insert "yes" followed by " ble))	L",	K)	
(FURTHER CLEARANCE (if planned, insert length ((m) width (m) to be cleared or if to full dimensions, insert "TOTAL"))				>
(FURTHER CLEARANCE I BY <u>(UTC)</u>)	EXPECTED TO BE COMPLE	ГED	M)	
TAXIWAY (if no appropriat "NO"))	te taxiway is available, insert		N)	
(TAXIWAY SNOWBANKS followed by distance apart, n	S (if more than 60 cm, insert "ye n))	es "	P)	
(APRON (if unusable insert	"NO"))		R	>
(NEXT PLANNED OBSERV FOR) (month/day/hour in UT	VATION/MEASUREMENT IS TC)	5	S)	
(PLANE LANGUAGE REM erage and other operationall ing, deicing))	IARKS (including contaminant ly significant information, e.g. s	cov- and-	T)) ∉
 Notes: 1."Entar ICAO nationality letters as given in ICAO Doc 7910, Part 2 2. Information on other runways, repeat from C to P 3.Words in brackets () not to be transmitted 				

WORD LIST

apart	[E7pa:t]	0
clear	[kliE]	0
clearance	[7klierEns]	У
completion	[kEmpli:Sen]	38
concern	[kEn7sE:n]	И
contaminate	[kEn7tXmineit]	38
coverage	[7kVvErig3]	30
		р
depth	[depQ]	Г.
designate	[7dezigneit]	0
digit	[7did3it]	Ц
dimension	[di7menSn]	р
distribution	[6distri7bju:sEn]	p
		Π
divice	[di7vais]	Π
edge	[7ed3]	ĸ
estimate	[7estimit]	0
friction	[7friSEn]	Т
		Η
hazardous	[7hXzEdEs]	0
insert	[7insE:t]	В
length	[7leNQ]	Д
movement	[7mu:vmEnt]	Д
notification	[6noutifi7keiSn]	И
		Η
obscure	[[Eb/skjuE]	38
observation	[Eb7zE:veiSEn]	Η
observe	[Eb7zE:v]	Η
offset	[70f7set	C
optional	[70pSEnEl]	Н
pavement	[7peivmEnt]	П

plain language

отдельно, в стороне чищать (от снега) борка (от снега) авершение меть отношение агрязнять она видимости (обзоa) лубина пределять ифра азмеры аспространение, расределение рибор, устройство рай ценка, исчисление орможение, сцеплеие пасный, рискованный ставлять лина вижение звещение, оповещеие атемнять аблюдение аблюдать мещение еобязательный окрытие

обычный (простой) язык

preferably	[7prefErEbli]	предпочтительно
presence	[7presEns]	наличие, присутствие
priority	[prai7Eriti]	первоочередность
published	[7pVbliSt]	опубликованный
remark	[ri7ma:k]	заметка
removal	[ri7mu:vEl]	устранение
significant	[sig7nifikEnt]	важный
slush	[slVS]	СЛЯКОТЬ
surface	[7sE:fis]	поверхность
total	[7toutl]	полный, суммарный
unreliable	[Vnri7laiEbl]	ненадежный
width	[widQ]	ширина

Study and translate the GUIDANCE FOR THE COMPLETION OF THE SNOWTAM FORMAT. Use the world list given after the exercise.

GUIDANCE FOR THE COMPLETION OF THE SNOWTAM FORMAT

GENERAL

- a. When reporting on two or three runways, repeat items C to P inclusive.
- b. items together with their indicator must be dropped completely, where no information is to be included.
- c. Metric units must be used and the unit of measurement not reported.
- d. The maximum validity of SNOWTAM is 24 hours. New SNOWTAM must be issued whenever there is a significant change in conditions. The following changes relating to runway conditions are considered as significant:
 - (1) a change in the coefficient of friction of about 0.05;
 - (2) changes in depth deposit greater than the following:
 - 20mm for dry snow;
 - 10mm for wet snow;
 - 3mm for slush;
 - (3) a change in the available length or width of a runway of 10 per cent or more;
 - (4) any change in the type of deposit or extent of coverage which requires reclassification in items F or T of the SNOWTAM;
 - (5) when critical snow banks exist on one or both sides of the runway, any change in the height or distance from centerline;
 - (6) any change in the conspicuity of runway lighting caused by obscuring of the lights;
 - (7) any other conditions known to be significant according experence or local circumstances.

e. The abbreviated heading "TTAAIIII CCCC MNYYGGgg (BBB)" is included to facilitate the automatic processing of SNOWTAM messages in computer data banks. The explanation of these symbols is:

TT = data designator for SNOWTAM = SW:

- AA = geographical designator for States; e.g.,
 - LF = France, EG = United Kingdom;

IIII = SNOWTAM serial number in a four-figure group;

CCCC = four-letter location indicator of the aerodrome to which the SNOWTAM refers;

MMYYGGgg = date time of observation/measurement, whereby:

- MM = month: e.g., January = 01,

- December = 12
- YY = day of the month
- GGgg = time in hours (GG) and minutes (gg) UTC;
- (BBB) = optional group for: Correction to SNOWTAM message previously disseminated with the same serial number = COR.

NOTE: Brackets in (BBB) are used to indicate that group is optional.

Example: Abbreviated heading of SNOWTAM No. 149 from Zurich, measurement/observation of 7 November at 0620 UTC:

SWLSO149 LSZH 1107 0620

ITEM A

Aerodrome location indicator (four-letter location indicator).

ITEM B

Eight-figure date-time of observation as month, day, hour and minutes in UTC: this item must always be completed.

ITEM C

Lower runway designator number.

ITEM D

Cleared runway length in metres, if less that published length (see item T or reporting on part of runway not cleared).

ITEM E

Cleared runway width; if offset left or right of centre line add "L" or "R" as viewer from the threshold having the lower runway designation number.

ITEM F

Deposit over total runway length as explained in SNOWTAM Format. Suitable combinations of these numbers may be used to indicate varying conditions over runway segments. If more than one deposit is present on the same portion of the runway, they should be reported in sequence from the top to the bottom. Drins,

depths of deposit appreciably greater that the average values or other significant characteristics on the deposits may be reported under Item T in plain language.

ITEM G

Mean depth in millimetres deposit for each third of total runway length, or "XX" if not measurable or operationally not significant; the assessment to be made to an accuracy of 20mm for dry snow, 10mm for met snow and 3mm for slush.

ITEM H

Friction measurements on each third of the runway and friction measuring device. Measured or calculated coefficient (two digits) or, it not available, estimated surface friction (single digit) in the order from the threshold having the lower runway designations number. Insert a code 9when surface conditions or available friction measuring device do not permit a reliable surface friction measurement to be made. Use the following abbreviations to indicate the type of friction measuring device used:

BRD - Brakemeter-Dynometer

GRT - Grip Tester

MUM - Mu-meter

RFT - Runway friction tester

SFH - Surface friction tester (high pressure tire)

SFL - Surface friction tester (low pressure tire)

SKH - Skiddometer (high pressure tire)

SKL - Skiddometer (low pressure tire)

TAP - Tapley meter

If other equipment used specify in plain language.

ITEM J

Critical Snowbanks: If present height in centimetres and distance from edge of runway in metres, followed by left ("L") or right ("R") side or both sides ("LR"). as viewed from the threshold having the lower runway designation number.

ITEM K

If runway lights are obscured insert "TES" followed by "L", "R" or both "LR" as viewed from the threshold having the lower runway designation number.

ITEM L

When further clearance will be undertaken, enter length and width of runway or "TOTAL" if runway will be cleared to full dimensions.

ITEM M

Enter the anticipated time of completion in UTC

ITEM N

The code for item F may be used to describe taxiway conditions; enter "NO" if no taxiways serving the associated runway are available.

ITEM P

If applicable, enter "YES" followed by the lateral distance in metres.

ITEM R

The code for item F may be used to describe apron conditions; enter "NO" if apron unusable.

ITEM S

Enter the anticipated time of next observation/measurement in UTC.

ITEM T

Describe in plan language any operationally significant information but always report on length of uncleared runway (item D) and extent of runway contamination (item F) for each third of the runway (if appropriate) in accordance with the following scale:

10% - if less than 10% of runway contaminated 25% - if 11-25% of runway contaminated 50% - if 26-50% of runway contaminated 100% - if 51-100% of runway contaminated.

EXAMPLE OF COMPLETED SNOWTAM FORMAT

GG EXAMZQZX EDDFZQZX EKCNZQZX 070645 LSZHYNYX SWLS0149 LSZH 11070620 SNOWTAM 0149

- A) LSZH B) 11070620 C) 02 D)...P)
 - C) 09 D)...P)
 - C) 09 D) . . . P)

R) NO S) 11070620 T) DEICING

DEFINITIONS OF THE VARIOUS TYPES OF SNOW

SLUSH - Water-saturated snow which with a heel-and toe slap-down motion against the ground will be displaced with a splatter: specific gravity: 0.5 up to 0.8.

NOTE: Combinations of ice, snow and/or standing water may, especially when rain, rain and snow, or snow is falling, produce substances with specific gravities in excess of 0.8. These substances, due to their high water/ice content, will have a transparent rather than a cloudy appearance and, at the higher specific gravities, will be readily distinguishable from slush.

SNOW (on the ground)-

- a. **Dry Snow**: Snow which can be blown if loose or, if compacted by hand, will tall apart again upon release; specific gravity: up to but not including 0.35.
- b. Wet Snow: Snow which, if compacted by hand, will stick together and tend to or form a snowball; specific gravity: 0.35 up to but not including 0.5.
- c. **Compacted Snow:** Snow which has been compressed into a solid mass that resists further compression and will hold together or break up into lumps if picked up; specific gravity: 0.5 and over.

WORD LIST

according to	[E7kO:diN]	в соответствии с
accuracy	[7XkjurEsi]	точность
anticipate	[En7tisipeit]	предвидеть, предвосхи- щать
appearance	[E7piErEns]	появление
applicable	[E7plikEbl]	применимый
assessment	[E7sesmEnt]	обложение (налогом), оценка
associate	[E7souSiteit]	соединять, связывать
average	[7Xvri93]	среднее число
brake	[breik]	тормоз, тормозить
cause	[kO:z]	вызывать, быть причиной
circumstance	[7sE:kEmstEns]	обстоятельство
cloudy	[7klaudu]	облачный
completion	[kEm7pli:Sen]	завершение, заполнение
consider	[kEn7sidE]	считать, полагать, рассматривать
conspicuous	[kEn7spi:kjuEs]	вилный заметный
content	[kEn7tent]	ловольный
definition	[6defi7niSEn]	опреление
dimension	[di7menSEn]	измерение, размер
displace	[dis7pleis]	смешать
drift	[drift]	снос, смещение
drop	[drop]	прекращать, падать
excess	[ik7ses]	избыток: излишек
in ~of		более, чем
extent	[iks7tent]	размер
general	[7d3enErEl]	общий
grip	[grip]	схватить, стать, сжимание
guidance	[7gaidEns]	руководство
lateral	[71XterE1]	боковой
metric	[7metric]	метрический
motion	[7mouSn]	движение
operationally	[60pE7reiSEnli]	операционно
permit	[pE7mit]	позволять, разрешать
portion	[7p0:SEn]	часть, доля
previously	[7pri:vjEsli]	раньше, предварительно
		*

produce	[prE7djus]	производить
readily	[7redili]	охотно, легко
relate	[ri7leit]	относиться, иметь отно- шение
reliable	[ri7laiEbl]	надежный
saturate	[7sXtSEreit]	насыщать, пропитывать
scale	[skeil]	шкала
segment	[7sefmEnt]	часть, сегмент
serial number	[7siEriel 7nVmbE]	порядковый номер
serve	[sE:v]	служить
sequence	[7si:kwEns]	последовательность
skid	[skid]	скользить, буксировать
stick	[stik]	приклеивать
substance	[7sVmstEns]	вещество, состояние
suitable	[7sju:tEbl]	подходящий
tend	[tend]	направляться, стремиться
transparent	[trXns7pBErEnt]	прозрачный, ясный, по- нятный, очевидный
undertake	[6VudE7teik]	предпринимать
validity	[vE7loditi]	действительный, валид-
value	[7vXlju:]	величина, значение

UNIT 7 EMERGENCY PART 1

SEARCH AND RESCUE

Exercise 1

Read SEARCH AND RESCUE and translate the text into your language. Use the word list after the text.

SEARCH AND RESCUE

Search and rescue operations are based on the knowledge or assumption that an aircraft is in distress and can be helped. Prompted by the need to rapidly find survivors of aircraft accidents, a set of internationally agreed, Standards and Recommended Practices has been adopted in ICAO Annex 12, Search and Rescue.

Proposals for Annex 12 were originally made in 1946. By 1951, the proposals had been reviewed to meet international requirements, and were embodied as Standards and Recommended Practices in the first edition of Annex 12.

This Annex contains details about the organisation and co-operation requirements necessary in support of SAR operations, outlines the preparatory measures required and sets forth the operating procedures for the SAR services in emergencies.

One of the first items dealt with in the organisational chapter is the requirement that States provide SAR Service within their territories and over those portions of the high seas or areas of undetermined sovereignty as determined by regional air navigation agreements and approved by the ICAO Council. This same chapter also deals with the establishment of SAR services units, the means of communication for these units, and designation of those elements of public or private services suitably equipped for search and rescue.

The equipment requirements of rescue units are covered by provisions reflecting the need to give adequate assistance at the scene of an accident, with due regard to the number of passengers involved.

Co-operation between the SAR services of neighbouring States is essential to the efficient conduct of SAR operations. This important aspect requires ICAO Contracting States to publish and disseminate all information needed for the entry into their territory of rescue units of other States. It is also recommended that persons qualified in the conduct of aircraft accident investigation accompany rescue units in order to facilitate accident investigation. Annex 12 deals with preparatory measures, sets forth the requirements for information needed by SAR services. It specifies that a detailed plan of operation for the conduct of a SAR operation must be prepared and indicates what the plan should contain.

Preparatory measures which must be undertaken by rescue units, training requirements and removal of aircraft wreckage are also covered.

A search and rescue operation is a dynamic activity requiring uniform set of operating procedures. Beginning with the identification of nature of the emergency situation Chapter 5 of the Annex 12 contains several separate items setting forth in detail these procedures.

Three distinct phases exist in an emergency situation.

The first is the "UNCERTAINTY PHASE" which occurs when the radio contact with the aircraft has been lost and cannot be re-established or when aircraft fails to arrive at its destination. During this phase Rescue Co-ordination Centre (RCC) concerned is activated. It collects and evaluates reports and information pertaining to the case.

Depending on the situation, the uncertainty phase may develop into an "ALERT PHASE", in which the RCC immediately alerts the appropriate SAR-services units and initiates the necessary action.

The "DISTRESS PHASE" is declared when an aircraft is believed to be in distress, or when a distress situation is known to exist. In this phase, the RCC is responsible for taking the action necessary to assist the aircraft and to determine its location as rapidly as possible. By following a predetermined set of procedures, the aircraft operator, State of Registry, air traffic services units concerned, and adjacent RCCs and appropriate accident investigation authorities are informed and the plan for the conduct of the search and rescue operation is drawn up and its existing execution is coordinated.

Three sets of distress signals are provided, the first of which are signals for use by aircraft and surface craft during the conduct of a SAR operation. The second and third set consists of ground-to-air visual signals for use by survivor and ground service units.

WORD LIST

knowledge	[nOlid3]	знание
assumption	[E7sVmpSn]	предположение
distress	[di7stres]	бедствие
be prompted	[prOmptid]	иметь подсказку
survivor	[sE7vaivE]	выживший
accident	[7XksidEnt]	авария, несчастный слу- чай

agreed	[E7gri:d]	согласованный
adopt	[E7dOpt]	принимать
review	[ri7vju:]	делать обзор
revise	[ri7vaiz]	пересмотреть
embody	[im7bodi]	включать в себя объеди-
		НЯТЬ
contain	[kEn7tein]	содержать
in support of	[sE7pO:t]	в поддержку чего-либо
outline	[7autlain]	очерчивать
set forth	[f0:Q]	выдвигать, объяснять
item	[aitEm]	пункт
chapter	[7tSXptE]	глава
undetermined	[7Vndi7tE:mind]	неопределенный
sovereignty	{7sOvrenti]	суверенитет
determine	[di7tE:min]	определять
designation	[7dezig7neiSEn]	указание, предназначе- ние
cover	[7kVvE]	охватывать
provision	[prEvi3En]	условие
reflect	[ri7flekt]	отражать
scene	[si:n]	место
due	[dju:]	должный, необходимый
with regard to	[ri7ga:d]	в отношении чего-либо
involved	[in7vOlvd]	вовлеченный
neighbouring	[7neibEriN]	соседствующий
essential	[i7senSEl]	существенный
efficient	[i7fiSEnt]	эффективный
conduct	[7kOndVkt]	проведение
disseminate	[di7semineit]	распространять
investigation	[in7vestigeiSEn]	расследование
accompany	[E7kVmpEni]	сопровождать
in order to	[O:dE]	с тем, чтобы
facilitate	[fE7siliteit]	облегчать, упрощать
preparatory	[pri7perEtEri]	предварительный, под- готовительный
specify	[7spesifai]	точно определять, уста- навливать
be undertaken	[7VndE7teikn]	быть предпринимаемым

removal	[ri7mu:vl]	убирание, перемещение
wreckage	[rekid3]	обломки
uniform	[7ju:nifO:m]	унифицированный
distinct	[dis7tinkt]	четкий
uncertainty	[Vn7sE:tEnti]	неуверенность
occur	[E7kE :]	случаться, происходить
concerned	[kEn7sE:nd]	имеющий отношение
activate	[7Xktiveit]	приводить в действие
evaluate	[i7veljueit]	оценивать
pertaining	[pE7teiniN]	имеющий отношение к
depend on	[di7pend]	зависеть от
develop	[di7velEp]	развивать (ся)
RCC (Rescue Co-ordina-		центр координации спа-
uon Cenue)	[[сательных расот
annronriete	[E7nrOnriit]	поднимать по тревоге
SAD (Search and Decoue)	[E/proprint]	соответствующий
SAR (Search and Rescue)		поиск и спасение
initiate	[1/hiSieit]	положить начало, иници- ировать
declare	[di7klBE]	объявлять
location	[lE7keiSn]	местонахождение
predetermined	[7priditE:mind]	заранее определенный
adjacent	[E7d3eisEnt]	примыкающий, смежный
authority	[07Q0:riti]	руководство
draw up	[dr0:]	вычертить
execution	[7eksi7kju:SEn]	выполнение
surface craft	[7sEfis 7kra:ft]	наземные транспортные
		средства

Give the English equivalents:

Предположение; имея подсказку; подробности; неопределенный; иметь дело с...; место аварии; имеющий квалификацию; распространять; подготовительные меры; выдвинуть (план); сопровождать; требования к оборудованию; эффективное проведение; обломки воздушного судна; расследование происшествий; оснащенный должным образом; выживший; поиск и спасание; приводить в действие; оценивать; примыкающий; соседствующий; выполнение; положить начало чему-либо; приводить в действие.

What do the following abbreviations stand for?

SAR; ICAO; SARP; RCC.

Exercise 4

True or false?

- a) Search and rescue operations are only based on the knowledge that an aircraft is in distress.
- b) Search and rescue units have to rapidly find survivors of aircraft accidents.
- c) ICAO Annex 12 contains a set of internationally agreed standards and recommended practices.
- d) It contains all the necessary details except the preparatory measures for SAR operations.
- e) The organizational chapter deals with the requirements that the states only provide SAR service within their territories.
- f) It also contains the details as for the establishment of SAR service units and means of communication for these units.
- g) There is no need for co-operation between the SAR services of different states.
- h) The ICAO contracting states have to publish and disseminate all information needed for the entry into their territory of rescue units of other states.
- i) Preparatory measures which must be undertaken by rescue units are covered in a special document published as a supplement to Annex 12.
- j) A search and rescue operation is a dynamic activity requiring uniform set of operating procedures.
- k) There are two distinct phases in an emergency situation.
- 1) The "uncertainty phase" may develop into an "Alert phase".
- m) There are different distress signals used by hervivor and ground service units.
- n) The aircraft operator and the state of Registry are informed about the accident.
- o) Air traffic control units collect and evaluate reports and information pertaining to the accident.

Exercise 5

Answer the question.

- a) What are search and rescue operations based on?
- b) Why has a set of internationally agreed SARPs been adopted by the ICAO?
- c) When were the proposals for Annex 12 originally made?
- d) When were they reviewed and revised?
- e) What does Annex 12 contain?
- f) Do the states have to provide SAR service only within their territories?
- g) Who approves regional air navigation agreements?

- h) Where can you find the details concerning the means of communication for SAR units?
- i) What kind of services should be suitably quipped for search and rescue?
- j) Why is coordination between the SAR services of neigbouring states so essential?
- k) Who has to accompany rescue units in order to facilitate accident investigation?
- 1) Which preparatory measures does Annex 12 specify?
- m) Who must such measures be undertaken by?
- n) A search and rescue operation is a dynamic activity, unit it?
- o) Which distinct phases exist in an emergency situation?
- p) When does the "Uncertainty Phase" occur?
- q) What happens during this phase?
- r) Does this phase always develop into an "Alert phase"?
- s) What does the RCC do during the "Alert phase"?
- t) When is the "Distress Phase" declared?
- u) What is the RCC responsible for in such a case?
- v) Who should be informed in case of an accident?
- w) What kind of a plan is it necessary to draw up under such circumstances?
- x) How many sets of special signals are provided foe use in case of emergency?

Dive the synonyms for the following words:

To review; to embody; to support; to outline; chapter; to cover; to reflect; due; to accompany; efficient; essential; neighbouring; concerned; to execute; to facilitate; pertaining.

Exercise 7

Which elements do the underlined words a the following fragments consist of; what parts...; find the related....

- a) The first items <u>dealt</u> with...
- b) It contains details about the cooperation <u>requirements</u>.
- c) This chapter deals with the <u>establishment</u> of SAR service units.
- d) The equipment requirements are covered...
- e) Cooperation between the SAR services of <u>neighbouring</u> states...
- f) This aspect requires to publish...
- g) Annex 12 deals with <u>preparatory</u> measures...
- h) It <u>specifies</u> that...
- i) The "Distress Phase" is <u>declared</u>.
- j) Appropriate accident investigation authorities.

k) It evaluates reports.

Exercise 8

Make up sentences:

- a) Search and rescue operations are based on the knowledge or assumption that An aircraft is in distress.
- b) This important aspect requires ICAO Contracting states to publish all the necessary information.
- c) Cooperation is essential to the efficient conduct of SAR operations.
- d) Preparatory measures which must be undertaken by rescue units are also covered.
- e) Air traffic service units concerned are informed.
- f) RCC collects and and evaluates reports information pertaining to the the case.
- g) The the RCC is responsible for taking an action necessary to assist aircraft.
- h) RCC immediately alerts the appropriate SAR-services units.

Exercise 9

Fill in the gaps with the suitable word.

- a) Three_____ of distress signals are provided. (sets; numbers; authorities; services)
- b) The "Uncertainty phase" _____ when the radio contact with the aircraft has been lost. (develops; occurs; needs; uses)
- c) This set ______ of ground-to-air visual signals. (provides; assists; consists; alerts)
- d) During this phase RCC concerned is _____. (initiated; activated; collected; evaluated)
- e) This Annex contains ______ about the organisation and cooperation requirements. (details; provisions; measures; operations)
- f) The equipment requirements are covered by provisions ______ the need to give adequate assistance. (asking; using; reflecting; recommending)
- g) The states provide SAR services ______ their territories. (out of; during; for; within)
- h) This Annex ______ the preparatory measures required. (outlines; deals; qualifies; reviews)

Exercise 10

Fill in the gaps.

- a) It is also recommended that persons ______ in the conduct of aircraft accident investigations ______ rescue units.
- b) This same chapter also ______ with the establishment of SAR services.
- c) A search and rescue operation is a _____ activity.
- d) The proposals were ______ as SARPs in the first edition of Annex 12.

- e) Prompted by the need to rapidly find ______ of aircraft accidents....
- f) The equipment requirements are _____ by the provisions reflecting the need to give adequate assistance at the _____ of an accident.
- g) The requirements provide SAR service over those portions of the high sees or areas of undetermined ______
- h) By following the predetermined set of ______ the appropriate accident investigation ______ are informed.
- i) RCC immediately alerts the _____ SAR services.
- j) The "Uncertainty Phase" occurs when aircraft ______ to arrive at its destination _____.

Make up your own sentences.

Distinct; concerned; to depend on; to facilitate; to involve; to occur; to accompany; to draw up; to initiate; to contain; item; designation; wreckage; to specify; location.

PART 2

EMERGENCY

Exercise 1

Read EMERGENCY and translate the text into your language. Use the word list after the text.

EMERGENCY

DEFINITIONS: Emergency phase: A generic term meaning, as the case may be. Uncertainty phase, Alert phase, Distress phase.

Uncertainly phase: A situation wherein uncertainly exists as to the safety of an aircraft and its occupants.

Incerfa: A code word used to designate a uncertainly phase.

Alert phase: A situation wherein apprehension exists as to the safety of an aircraft and its occupants.

Alerfa: A code word used to designate an alert phase.

Distress phase: A situation wherein there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger or require immediate assistance.

Detresfa: A code word used to designate a distress phase.

The various circumstances surrounding each emergency situation preclude the establishment of exact procedures to be followed. Air traffic service units shall maintain full and complete coordination and personnel shall use their best judgment in handling emergency situations.

Service to aircraft in the event of emergency:

An aircraft known or believed to be in a state of emergency, including being subject to unlawful interference, shall be given the maximum consideration, assistance and priority over other aircraft as may be necessitated by the circumstances.

- **Note**: To indicator that is in a state of emergency an aircraft equipment with a SSR transponder might operate the equipment as follows:
- a) on Mode "A" Code 7700 to indicate a distress situation; or
- b) on Mode "A" Code 7500 to indicate that it is being subject to unlawful interference.

Handling of the distress traffic:

In case an aircraft is in a condition of being threatened by serious and / or imminent danger and requires immediate assistance, the pilot or any other competent person

will declare "emergency". This message has priority over all other messages and the distress traffic will be handled with priority. Distress-messages will normally being with the attention-getter "MAYDAY".

The word "MAYDAY" spoken at the beginning identifies a distress message.

A distress call should normally be made on the frequency in use at the time. Distress communications should be continued on this frequency unless it is considered that better assistance can be provided by changing to the international emergency frequency 121,50 MHz or any other suitable frequency.

A distress message transmitted by an aircraft should commence with the word "MAYDAY" preferably spoken three times. The message should contain as many as possible of the following elements, if possible in the order shown below.

- a) Name of the station addressed,
 - b) Radio call sign of the aircraft
 - c) Nature of the distress condition
 - d) Intention of the person in command,
 - e) Position, level and heading of the aircraft,
 - f) Any other useful information (e.g. which assistance is requested)

EXAMPLE:



An aircraft in distress or a station in control of distress traffic may impose silence, either to all aircraft on the frequency or on a particular aircraft which interferes with

the distress traffic. Aircraft so requested will maintain radio silence until advised that the distress traffic has ended.

FASTAIR 456 FRANKFURT INFORMATION STOP TRANSMITTING, MAYDAY

As soon as the distress situation has ended a message cancelling the distress and the silence condition should be sent.

or

ALL STATIONS STUTTGART APPROACH DISTRESS TRAFFIC ENDED

Emergency descent

Upon receipt of advice that an aircraft is making an emergency descent through other traffic, all possible action shall be taken immediately to safeguard all aircraft concerned. When deemed necessary, air traffic control units shall immediately broadcast by means of the appropriate radio aids, or if not possible, request the appropriate communications stations immediately to broadcast an emergency message.

EXAMPLE



Immediately after such an emergency broadcast has been made, the area control centre, approach control office, or the aerodrome control tower concerned shall forward further clearances to all aircraft involved as to additional procedures to be followed during and subsequent to the emergency descent

D-C-A-D-E FRANKFURT RADAR TURN RIGHT IMMEDIATELY HEADING 180° DUE TO EMERGENCY DESCENT

Plotting of aircraft flight path in emergency.

Whenever deemed necessary or advisable, plot the flight path of an aircraft in emergency on a chart in order to determine its probable future positions. In addition, keep a current record of all other information connected with existing emergency.





DISTRESS SIGNALS:

The following signals, used either together or separately, mean that grave and imminent danger threatens and immediate assistance is required:

- a) SSR code 7700,
- b) a signal made by radiotelephony or by any other signalling method consisting of the group "S O S" (...—...) in the Morse Code,
- c) a signal sent by radiotelephony consisting of the word "MAYDAY" preferably spoken three times
- d) rockets or shells throwing red lights, fired one at a time at short intervals
- e) ,a parachute-flare showing a red light.

WORD LIST

additional	[E7diSEnl]	дополнительный, доба- вочный
alert	[E71E:t]	тревога, сигнал тревоги
apprenension	[0xpr1/mensen]	представление, понима- ние
appropriate	[E7prEupriit]	соответствующий, подхо-
broadcast	[7br0:dka:st]	передавать по радио, транслировать
cancel	[7kXns(E)1]	отменять, аннулировать
competent	[7kOmpitEnt]	правомочный
current	[7kVr(E)nt]	текущий
deem	[di:m]	полагать, думать, считать
distress	[dis7tres]	бедствие
exist	[ig7zist]	существовать
flare	[flBE]	вспыхивание, световой

		сигнал
generic	[d3Enerik]	общий
grave	[greiv]	смерть
imminent	[7imunEnt]	близкий, надвигающийся,
		угрожающий
impose	[im7pouz]	навязывать
judgment	[d3Vd3mEnt]	решение, правильное мне-
		ние
particular	[pE7tikjulE]	особенный, специфиче-
		ский
personnel	[6pE:sE7nel]	личный состав
plotting	[7plOtiN]	план, чертеж
preclude	[pri7klu:d]	предотвращать, устранять
preferably	[7prefErEbli]	предпочтительно, лучше
probable	[7prObEbl]	вероятный, возможный
rough	[rVt]	грубый, неровный
shell	[Sel]	артиллерийский снаряд
subsequent	[7sVbsikwEnt]	последующий
threaten	[7Qretn]	угрожать, грозить

Give English equivalents for:

Общий термин; существовать; безопасность ВС; пассажиры ВС; кодовое слово; определенность; угрожать; различные обстоятельства; аварийная ситуация4 установление точных процедур; органы УВД; полная и завершенная координация действий; личный состав; обслуживание ВС; незаконное вмешательство; ВС, оборудованное ответчиком; угрожать; надвигающаяся опасность; немедленная помощь; сообщение; приоритет над всеми другими сообщениями; ВС, терпящее бедствие; на рабочей частоте; до тех пор, пока не ..., международная аварийная частота; намерение командира ВС; место, ЭП и курс ВС; любая другая полезная информация; векторение на ближайший аэродром; до дальнейших указаний; если возможно; объявлять радиомолчание; обмен бедствия с бортом, терпящим бедствие закончен; немедленно; транслировать по радио; аварийное снижение4 вышка; дальнейшие разрешения; дополнительные процедуры; из-за аварийного снижения; определять4 в добавление; вся другая информация; или вместе, или отдельно.

Exercise 3

What do the following abbreviations means:

Incerfa; Alerfa; Detresta; MAYDAY; MHz; RW; QNH; FL; VOR; DME; SSR; SOS.

Exercise 4 *True or False?* 1. The various circumstances surrounding each emergency situation preclude the establishment of exact procedures to be followed.

- 2. Air traffic service units shall not maintain full and complete coordination.
- 3. Personnel shall use their best judgment in handling emergency situations.
- 4. Code 7700 is used to indicate a distress situation.

5. Code 7500 is used to indicate that an aircraft is being subject to unlawful interference.

6. In case of imminent danger, the pilot won't declare "emergency".

7. "Emergency" has priority over all other messages.

8. The word "MAYDAY" spoken at the beginning does not identify a distress message.

9. A distress call should normally be made on the frequency in use at the time.

10.An aircraft in distress or a station in control of distress traffic may impose silence.

11.As soon as the distress situation has ended a message canceling the distress and the silence condition should not be sent.

12.All possible actions shall be taken immediately to safeguard all aircraft concerned.

13.It is necessary to keep a current record of all other information connected by radiotelephony consisting of the word "MAYDAY" preferably spoken five times.

14.Rockets or shells throwing yellow lights, fired one at a time at short intervals.

Exercise 5

Answer the questions:

- 1. What does "Uncertainty phase" mean?
- 2. What is Incerfa?
- 3. What is Alert phase?
- 4. Alerfa. What is it?
- 5. How do you understand Distress phase?
- 6. What is Detresfa?
- 7. Why do air traffic service unit have to maintain full and complete coordination?
- 8. What code indicates a distress situation?
- 9. What does code 7500 indicate?
- 10. when does a pilot declare "emergency"?
- 11. What message has the priority over all other messages?
- 12. What word id spoken at the beginning of a distress message?
- 13. On what frequency should a distress call be made?
- 14. What is the international emergency frequency?
- 15. What elements should the distress message contain?
- 16. Who is responsible for imposing silence?
- 17. What are the reasons for emergency descend?
- 18. Who broadcasts the emergency messages?
- 19. Why is it necessary to keep a current record of all other information connected with existing emergency?
- 20. What distress signals do you know?
- 21. How do you understand an "Emergency situation"?
- 22. Have you ever experienced an emergency descent?

Give the synonyms for:

Generic term; alert; occupant; to threaten; imminent; danger; assistance; coordination; personnel; priority; in call of; to declare; to begin; to identify; communication; to transmit; to cancel; upon receipt; aircraft; appropriate; to broadcast; interval.

Exercise 7

Find the related words in the dictionary:

Certain; occupant; designate; various; judge; law; indicate; prior; danger; assist; identify; transmit; use; descent; continue; cancel; immediate; clear; advise; probable; add; separate; signal; prefer.

Exercise 8

Make up sentences using the following words:

- 1. code; a; word; to; an; phase; Alerfa; designate; used; alert.
- 2. units; maintain; shall; traffic; air; full; coordination; complete; and service.
- 3. indicates; situation; a; code; 7700; distress.
- 4. being; subject; indicates; 7500; code; unlawful; to interference; aircraft; an; that; is.

5. message; all; messages; the; emergency; priority; has; over; other.

6. "MAYDAY"; at a; distress; the; beginning; word; the spoken; identifies; message.

7. vector; airfield; request; radar; to; nearest.

8. record; a; other; connected; existing; with; all; current; keep; to; it; is; ne-cessary; information; emergency; of.

Exercise 9

Fill in the gaps choosing the necessary words:

1. Uncertainty phase is a ______ wherein uncertainty exists as to the safety of an aircraft and its occupants.

a) operation b) dialogue c) condition d) situation

2. Code 7500 is used to indicate that an aircraft is being subject to ______ interference.

a) necessary b) important c) unlawful d) lawful

3. The various circumstances surrounding each emergency situation preclude the es-				
tablishment of exact procedures to be				
a) known b) followed c) spoken d) seen				
4. Continue heading 360 until on the frequency in use at the time.				
a) more b) less c) further d) better				
a) done b) known c)spoken d) made				
6. An aircraft in distress or a station in control of distress traffic may				
silence.				
a) tell b) impose c) put d) add				
7. As soon as the distress situation has ended, a message the distress and				
the silence condition should be sent.				
a) regarding b) cancelling c) adopting d) taking				
8. Uncertainty phase is a situation wherein uncertainty as to the safety of				
an aircraft and its occupants.				
a) maintain b) works c) is d) exists				
Exercise 10				
Fill in the gaps in the following sentences and sentence fragments:				
1. Emergency phase is a term meaning, as the case may be, Uncertainty				
phase, Alert phase, Distress phase.				
2. The various circumstances surrounding each emergency situation the				
establishment of exact procedures to be followed.				
3. ATC units shall maintain full and complete and personnel shall				
use their best judgment in handling emergency situations.				
4. A distress call should normally be made on the in use at the time.				
5. Distress messages will normally with the attention-getter "MAY-				
DAY".				
6. An aircraft in distress or a station in control of distress traffic may impose				
······································				
7. As soon as the distress situation has a message canceling				
the distress and the silence condition should be sent				
8 All possible action shall be taken immediately to all aircraft				
concerned.				
9. Alerfa is a code used to designate an alert phase.				
10. An aircraft in distress shall be given the consideration, assistance				
and priority over other aircraft.				
Exercise 11.				

Make up your own sentences with the following words:

Emergency; emergency situation; the various circumstances; ATC units; unlawful interference; transponder; assistance; a distress call; frequency; distress communications: "MAYDAY"; useful information; to broadcast; additional procedures; emergency descent; appropriate radio aids; to impose silence; distress signals; ground speed; signaling method.

PART 3

URGENCY PROCEDURES

Exercise 1

Read URGENCY PROCEDURES and translate the text into your language. Use the WORD LIST after the text.

URGENCY PROCEDURES

Urgency: a condition concerning the safety of an aircraft or other vehicle, or of some person on board or within sight.

The word "**PAN PAN**" spoken at the beginning identifies an urgency message. Urgency messages have priority over other transmissions except distress messages. The call should be made on the frequency in use at the time. Stations not involved in the urgency traffic should take care not to interfere with the transmissions of urgency traffic.

PAN PAN PAN GEORGETOWN TOWER D-E-M-M-A CESSNA 172, 5 MILES EAST AT 3000 FEET, PASSENGER WITH SUSPECTED YEART ATTACK REQUEST PRIORITY LANDING

D-E-M-M-A GEORGETOWN TOWER NUMBER ONE IN TRAFFIC STRIGHT-IN RUNWAY 27 WIND 250 DEGREES, 5 KNOTS; QNH 1008 AMBULANCE IS STANDING BY

URGENCY SIGNALS:

The following signals, used either together or separately, mean that an aircraft wishes to give notice of difficulties which compel it to land without requiring immediate assistance:

- a) the repeated switching on and off of the landing lights or
- b) the repeated switching on and off of the position lights in such a manner that they cannot be mistaken for flashing position lights.

The following signals, used either together or separately, mean that an aircraft has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or of some person on board or within sight.

- a) a signal made by radiotelephony or by any other signaling method consisting of the group XXX (-..- -..-) in the Morse Code.
- b) A signal sent by radiotelephony consisting of the word "PAN" preferably spoken three times.

urgency	[7E:dEnsi]	состояние срочности
vehicle	[7vi:kl	средство передвижения
within	[wi79iN	в пределах; в течение
identify	[ai7dentifai]	опознавать, распознавать
priority	[prai7Oriti]	приоритет
except	[ik7sept]	за исключением, исключая
involve	In7volv]	вовлекать
interfere	[6intEfiE]	мешать, вмешиваться
suspect	[sEs7pekt]	подозревать
compel	[kEm7pel]	заставлять; принуждать
preferably	[7pref(E)rEbli]	предпочтительно

WORD LIST

Exercise 2

Give English equivalents for:

Безопасность воздушного судна; любое другое транспортное средство передвижения; в пределах видимости; слово, произнесенное вначале; иметь приоритет над всеми другими передачами; на рабочей частоте; не вмешиваться; не требуя немедленной помощи; сигналы срочности; любой сигнальный метод; состоящий из; передать сообщение; ВС имеет срочное сообщение, которое нужно передать; таким образом; на борту ВС; азбука Морзе.

Exercise 3

What do the following abbreviations means?

PAN; RW; QNH; ATC.

Exercise 4

True or false?

- 1. Urgency is a condition concerning the safety of an aircraft or other vehicle, or of some person on board or within sight.
- 2. The word "PAN PAN" is spoken at the beginning does not identify an urgency message.

- 3. Urgency messages have priority over other transmissions except distress messages.
- 4. The call should not be made on the frequency in use at the time.
- 5. Stations not involved in the urgency traffic should take care to interfere with the transmissions of urgency traffic.
- 6. A signal sent by radiotelephony consisting of the word "PAN" preferably spoken five times.
- 7. Urgency signals don't mean that the aircraft wishes to give notice of difficulties which compel it to land without requiring immediate assistance.

Exercise 5.

Answer the questions:

- 1. What is "URGENCY"?
- 2. Where should the word "PAN PAN" be spoken: at the beginning of the message or at the end?
- 3. What does the word "PAN" identify?
- 4. Do urgency messages have the priority over other transmissions?
- 5. On what frequency should the call be made?
- 6. Why don't other stations have to interfere with the transmissions of urgency traffic?
- 7. Give an example of an urgency message.
- 8. What reasons can cause an urgency?
- 9. What are urgency signals?
- 10. What does a signalling method consisting of the group XXX (-..- -..-) in the Morse Code mean?

Exercise 6.

Give the synonyms for:

Urgency procedure; aircraft; vehicle; within sight; to identify; distress message; to call; frequency in use; to interfere; priority landing; ambulance; to stand by; difficulties; to wish; immediate; require; assistance; to switch on; to switch off; mistaken; to transmit; person; preferably; radiotelephony.

Exercise 7.

Find the related words in the dictionary:

Urgency; safe; identify; interfere; transmit; suspect; difficult; notice; prefer.

Exercise 8.

Make up sentences using the following words:

- 1. the safety; aircraft; of an; concerning; a condition; urgency; other; or; vehicle; of; or; some; person; on board; person; sight; or; within.
- 2. have; priority; other; distress; messages; except; over; messages; urgency; transmissions.
- 3. should; the; on; the; time; at; use; in; frequency; made; be; call; the/
- 4. heart; passenger; attack; with; suspected; a.

5. a; radiotelephony; of; word; the; signal; by; spoken; sent; times; three; "PAN"; preferably; consisting.

Exercise 9.

Fill in the choosing the necessary words:

1. The word "PAN PAN" spoken at the identifies an urgency message. a) middle b) end c) beginning d) centre 2. Urgency messages have over other transmissions except distress messages. b) value c) profit d)priority a) sense 3. Urgency is a concerning the safety of an aircraft or other vehicle, or of some person on board or within sight. c) position d) situation a) state b)condition 4. The call should be ______ on the frequency in use at the time. a) done b) made c) heard d) listened Stations not involved in the urgency traffic should ______ not to inter-5. fere with the transmissions of urgency traffic. a) take part b) take place c) take care d) take notice

Exercise 10.

Fill in the gaps in the following sentences and sentence fragments:

- 1. The word "PAN PAN" spoken at the beginning ______ an urgency message.
- 2. Urgency messages have ______ over other transmissions except distress messages.
- 3. The call should be made on the _____ in use at the time.
- 4. A passenger with _____- heart attack.
- 5. An aircraft has a very urgent _____ to transmit concerning the _____ of a ship.
- 6. Wind 250 _____, 5 knots, QNH 1008.
- 7. Request ______ landing at your aerodrome.

Exercise 11

Make up your own sentences with the following words:

Safety; within sight; an urgency message; priority; frequency in use; to interfere; ambulance; heart attack; a signal; radiotelephony; the Morse Code; in such a manner; landing lights; immediate assistance; to give notice; difficulties.

PART 4

UNLAWFUL INTERFERENCE

Exercise 1

Read UNLAWFUL INTERFERENCE and translate the text into your language. Use the word list after the text.

UNLAWFUL INTERFERENCE

GENERAL

The following procedures are intended as guidance for use by aircraft when unlawful interference occurs and the aircraft is unable to notify an ATS unit of this act.

When an occurrence of unlawful interference with an aircraft takes place or is suspected, ATS units shall attend promptly to requests by the aircraft. Information pertinent to the safe conduct of the flight shall continue to be transmitted and necessary action shall be taken to expedite the conduct of all phases of the flight, especially the safe landing of the aircraft.

PROCEDURES

1.) Unless considerations aboard the aircraft dictate otherwise, the pilot in command should attempt to continue flying on the assigned track and the assigned cruising level at least

until able to notify an ATS unit, or until reaching an area with radar coverage.

2.) When aircraft subjected to an act of unlawful interference must depart from its assigned track or its assigned level without being able to make radiotelephony contact with ATS, the pilot in command should whenever possible:

- a) Attempt to broadcast warnings on the VHF emergency frequency and other appropriate frequencies, unless considerations aboard the aircraft dictate otherwise. Other equipment such as on-board transponders, data links, etc., should also be used when it is advantageous to do and circumstances permit, and
- b) Proceed in accordance with the applicable special procedures for in-flight contingencies, where such procedures have been established and promulgated in Doc.7030 - Regional Supplementary Procedures; or

c) If no applicable regional procedures have been established, proceed at the level which differs from the cruising levels normally used for IFR flight in the area by 300m (1000ft) if above FL 290 orgy 150m (500ft) if below FL 290.

HI-JACKING OF AIRCRAFT

If it is noticed that an aircraft has switched Code 7500, assume that the aircraft is being hijacked. In such case, take the following measures:

1. Comply with the requests of the pilot of a hijacked aircraft as far as possible. It there are doubts as to the code setting, ask the pilot for confirmations as follows:

CONFIRM YOU ARE SQUAWKING ASSIGNED CODE

Note: The absence of a reply to such request shall not be taken as an indication that Code 7500 was set inadvertently.

- 2. Beyond this do not initiate any further radiotelephony communication (neither to the hijacked aircraft nor to other aircraft) referring to the hijacking, unless the pilot himself has confirmed the hi-jacking by radiotelephony.
- 3. Supply the pilot with all information required for the safe conduct of the flight, but do not expect acknowledgement from him.
- 4. Monitor all flight manoeuvres of the hijacked aircraft on the radar scope. Further, take all necessary actions and all measures becoming necessary for the coordination with adjacent ATS units.

The special code for hijacked aircraft is normally presented on the radar scope in double size to attract controller's attention.

Besides this kind of "attention-getter" an aural signal may also be connected to the system.



NORMAL RADAR INFORMATION

WORD LIST

advantage
appropriate
assigned
circumstances
contingency
coverage
data link
quidance
interference
notify
occur
pertinent
promulgate

[Ed7va:ntid3] [E7prouprieit] [E7saind] [7sE:kEmstEnsiz] [kEn7tind3Ensi] [7kVvErid3] [7deitE] [7gaidEn3] [intE7fiErens] [7noutifai] [E7kE:] [7pE:tinEnt] преимущество уместный, подходящий подписанный обстоятельства возможность покрытие каналы передачи связи руководство вмешательство уведомлять происходить уместный публиковать

Exercise 2

Give the English equivalents for:

Руководство к действию; незаконное вмешательство; иметь место; происходить; не иметь возможности сделать что-то; орган УВД; уведомлять, извещать; подозревать; выгодный; безопасное выполнение полета; необходимые меры; ускорять; все этапы полета; процедуры; на борту самолета; командир ВС; попытка; по крайней мере; крейсерский эшелон; транслировать; предупреждение; на аварийной частоте; оборудование; другие имеющиеся в распоряжении частоты; бортовые ответчики; обстоятельства; в соответствии с; региональные процедуры; отличаться от чего-либо (кого-либо); полеты по приборам; обстоятельства позволяют сделать это; радиотелефонный контакт (связь); такой, как; дополнительные процедуры; до тех пор, пока не ...; район, зона; иначе говоря.

Exercise 3

What do the following abbreviations mean:

ATC; ATS; VHF; Doc.7030; m; ft; FL; IFR.

Exercise 4

True or False:

- 1. When unlawful interference occurs, the aircraft has to notify an ATS unit of this act.
- 2. Unless considerations aboard the aircraft dictate other wise, the pilot in command should stop continue flying on the assigned track and the assigned cruising level.

- 3. When an occurrence of unlawful interference with an aircraft takes place or is suspected, ATS units shall attend promptly to requests by the aircraft.
- 4. Information pertinent to the safe conduct of the flight shall continue to be transmitted and necessary action shall be taken to expedite the conduct of all phases of the flight, especially the safe landing of the aircraft.
- 5. The pilot in command should not broadcast warnings on the VHF emergency frequencies and other appropriate frequencies.
- 6. Other equipment such as on-board transponders, data, links and etc. Should also be used when it is advantageous to go so in case of unlawful interference.
- 7. When an occurance of unlawful interference with an aircraft takes place or is suspected, the pilot in command should not proceed in accordance with the applicable special procedures for in-flight contingencies.

Answer the questions:

- 1. What does the term "unlawful interference mean?"
- 2. Is it necessary for an aircraft to notify an ATS unit of this act?
- 3. What necessary actions should be taken to expedite the conduct of all phases of the flight?
- 4. What are the pilot's actions in case of unlawful interference?
- 5. Should the pilot broadcast warnings on VHF emergency frequencies and other appropriate frequencies?
- 6. What is the of on-board transponders and data links?
- 7. What is Doc.7030 about?
- 8. If there are no applicable regional procedures, how shall an aircraft with unlawful interference proceed?
- 9. What is the VHF emergency frequency?
- 10. Why do "unlawful interference" acts happen?

Exercise 6

Give the synonyms for:

unlawful; guidance; aircraft; to occur; to be unable to do smith; action; to take place; to conduct the flight; to transmit; to expedite; a pilot-in-command; to deport; interference; to broadcast; warning; emergency; appropriate; transponder; supplementary; above; below.

Exercise 7

Find the related words in the dictionary:

law; interfere; guide; occur; prompt; act; inform; cover; subject; warn; equip; advantage; apply; differ; consider; establish; use; cruise.

Exercise 8

Make up sentences using the following words;

1. uniawiui, a	ct; this; whe	en; interference; a	in; occurs; aircraft	; notify; should; ATS;	
2. pertinent; co ted; shall; sa	of; unit; an. 2. pertinent; conduct; information; the; to; the; of; flight; to; be; continue; transmit- ted; shall; safe.				
3. actions; sho	uld; place; ta	ake; necessary; int	terference; unlawfu	ıl; case; of; in.	
4. command; t able; should	he; pilot; in; l; with.	; in; accordance; 1	the; special; proce	ed; procedures; applic-	
5. unlawful; ca the; on; free	ase; of; in; i juency; VHF	nterference; shou	ld; warnings; be;	broadcast; emergency;	
6. equipment;	used; differe	ent; when; is; adva	ntageous; be; shou	ıld; it; so; do; to.	
Exercise 9					
Fill in the gap.	s choosing th	he necessary word	ls:		
1) When use unit of this a	nlawful inter act.	ference occurs the	e aircraft should	an ATS	
a) speak	b)) tell	c) notify	d) say	
2) The pilo	ot in comman	nd should wheney	ver possible broad	cast	
2) The pilo on the VHF	ot in comman emergency f	nd should whenev frequency and oth	ver possible broadd er appropriate freq	cast	
2) The pilo on the VHF a)congrat	ot in comman emergency f ulations b)	nd should whenev frequency and oth)letters	ver possible broadd er appropriate freq c)signs	cast uencies. d)warnings	
 The pilo on the VHF a)congrat The airc ures. 	ot in comman emergency f sulations b) craft should	nd should whenever frequency and oth)letters proceed	ver possible broadd er appropriate freq c)signs the app	cast uencies. d)warnings licable special proced-	
 The pilo on the VHF a)congrat The airc ures. a) accord 	ot in comman emergency f ulations b) craft should j ing b)	nd should whenever frequency and oth)letters proceed) in accordance with	ver possible broad er appropriate freq c)signs the app ith c) due to	cast juencies. d)warnings licable special proced- d) because of	
 The pilo on the VHF a)congrat The airc ures. a) accord Other also be used 	ot in comman emergency f ulations b) craft should j ing b)	nd should whenev frequency and oth)letters proceed) in accordance wi such as on-b	ver possible broade er appropriate freq c)signs the app ith c) due to oard transponders	cast juencies. d)warnings licable special proced- d) because of , data link, etc. should	
 The pilo on the VHF a)congrat The airc ures. a) accord Other also be used a) machin 	ot in comman emergency f sulations b) craft should j ing b) l. hes b)	nd should whenev frequency and oth)letters proceed) in accordance wi such as on-b) devices	ver possible broad er appropriate freq c)signs the app ith c) due to oard transponders, c) engines	cast juencies. d)warnings licable special proced- d) because of , data link, etc. should d) equipment	
 The pilo on the VHF a)congrat The airc ures. a) The airc ures. a) accord Other also be used a) machin Some sp unlawful int act. 	ot in comman emergency f ulations b) craft should j ing b) l. nes b) pecial terference oc	nd should whenever frequency and othe pletters proceed) in accordance with such as on-be) devices are intent cours and the aircr	ver possible broade er appropriate freq c)signs the app ith c) due to oard transponders c) engines ided as guidance for aft is unable to not	cast juencies. d)warnings licable special proced- d) because of , data link, etc. should d) equipment or use by aircraft when tify an ATS unit of this	
 The pilo on the VHF a)congrat The airc ures. a) The airc ures. a) accord Otheralso be used a) machin Some sp unlawful int act. a) notes 	ot in comman emergency f ulations b) craft should j ing b) l. nes b) pecial terference oc b)	nd should whenev frequency and oth)letters proceed) in accordance wi such as on-b) devices are inten curs and the aircr	ver possible broade er appropriate freq c)signs the app ith c) due to oard transponders c) engines ided as guidance for aft is unable to not c) talks	cast juencies. d)warnings licable special proced- d) because of d) because of , data link, etc. should d) equipment or use by aircraft when tify an ATS unit of this d) acts	

Fill in the gaps in the following sentences and sentence fragments.

1. If no applicable regional procedures have been established, an aircraft should at the level which differs from the cruising levels normally used for IFR flights.

- 2. Broadcast should be on the VHV emergency ______.
 3. Applicable special procedures have been ______ in Doc.7030.
 4. Necessary actions shall be taken to expedite the conduct of all ______ of the flight, especially the safe landing of the aircraft.
- 5. Different equipment such as on-board transponders, data links, etc. should be used when it is ______ to do so.

Make up your own sentences with the following words:

unlawful interference; to occur; guidance; to notify; to take place; the safe conduct of the blight; necessary actions; all phases of the flight; the safe landing; otherwise; radar coverage; radiotelephony contact; advantageous; in accordance with; regional procedures; emergency frequency; assigned cruising level; at least; the pilot in-command.

PART 5

AIR-GROUND COMMUNICATION FAILURE

Exercise 1

Read AIR-GROUND COMMUNICATION FAILURE and translate the text into your language. Use the word list after the text.

AIR-GROUND COMMUNICATION FAILURE

Action by air traffic control units when unable to maintain two-way communication with an aircraft operating in a control area or control zone shall be as outlined in the following paragraphs:

As soon as it is known that two-way communication has failed, action shall be taken to ascertain whether the aircraft is able to receive transmissions from the air traffic control unit by requesting it to execute a special manoeuvre which can be observed by radar or transmit, if possible, a specified signal in order to indicate acknowledgement. (SSR Code 7600)

If the aircraft fails to indicate that it is able to receive and acknowledge transmission, separation shall be maintained between aircraft having communication failure and other aircraft, based on the assumption that the aircraft will:

If in visual meteorological conditions (WMC):

- a) continue to fly in VMC
- b) land at the nearest suitable aerodrome,
- c) report its arrival by the most expeditious means to the appropriate air traffic control unit.

If in instrument meteorological conditions (UMC)

or when weather conditions are such that is does not appear feasible to complete the flight in accordance with VMC:

a) proceed according to the current flight plan to the appropriate designated navigation aid serving the aerodrome of destination and when required to ensure compliance with b) hold over this aid unit commencement of descent; b) commence descent from the navigation aid specified in a) as close as possible to the expected approach time received and acknowledged or if no expected approach time has been received and acknowledged, at, or as close as possible to the estimated time of arrival resulting from the current flight plan;

c) complete a normal instrument approach procedure as specified for the designated navigation aid, and

d) land, if possible within 30 minutes after the estimated time of arrival specified in b) or the last received and acknowledged expected approach time, whichever is later.

To find out whether a pilot is able to receive radio calls, controllers should use the possibility of **"blind transmissions".**

EXAMPLE:

IF YOU READ SQUAWK (... mode/code ...).

IF YOU READ TURN LEFT HEADING 320° FOR ONE MINUTE.

IF YOU READ SNOW LANDING LIGHTS.

Action taken to ensure suitable separation shall cease to be based on assumption if it becomes apparent that aircraft can not receive, and when

- a) it is determined that the aircraft is following a different procedure
 - b) through the use of electronic or other aids, air traffic control units determine that pilots action may be taken without impairing safety, or
- c) positive information is received that the aircraft has landed.

As soon as it is known that two-way communication has failed, appropriate information describing the action taken by the air traffic control unit, or instructions justified by any emergency situation, shall be transmitted blind for the attention of the aircraft concerned, on the frequencies available on which the aircraft is believed)to be listening, including voice frequencies of available radio navigation or approach aids. Information shall also be given concerning

- a) weather conditions favourable for a cloud-breaking procedure in areas where congested traffic may be avoided, and
- b) weather conditions at suitable aerodromes.

If the aircraft has not reported within thirty minutes after:

- the estimated time of arrival provided by the pilot;
 - b) the estimated time of arrival calculated by the area control centre, or
 - c) the last acknowledged expected approach time

whichever is latest, pertinent information concerning the aircraft shall be forwarded to aircraft operators, or their designated representatives, and pilots-in command of any aircraft concerned and normal control resumed if they so desire. It is the responsibility of the aircraft operators, or their representatives, and pilots-in-command of aircraft to determine whether they will resume normal operation or take other action.

acknowledgment	[Ek7nOlid3mEnt]	подтверждение
apparent	[E7pXrEnt]	видимый, явный, очевидный
ascertain	[6XsE7tein]	устанавливать, выяснять
assumption	[E7sVmpS(E)n]	предположение
avoid	[E7vOid]	избегать, уклоняться
blind	[blaind]	слепой; ослеплять
cease	[si:s]	прекращать, приостанавливать
commence	[kE7mens]	начинать
complete	[kEm7pli:t]	заканчивать, завершать
current	[7kVr(E)nt]	струя; поток
desire	[dE7saiE]	требование, желание
execute	[7eksikju:t]	выполнять, исполнять
favourable	[7feivErEbl]	подходящий, удобный
feasible	[7fi:zEbl]	возможный, вероятный
forward	[7f0:wEd]	ускорять; отправлять; посылать
pertinent	[7pE:tinEnt]	существенный, подходящий
manoeuvre	[mE7nu:vE]	маневр, маневрировать
respousibility	[ris6pOnsE7biliti]	ответственность; обязанность
squawk	[skwOk]	ответчик; код ответчика

WORD LIST

Exercise 2

Give English equivalents for:

сохранять; двусторонняя связь; контрольная зона; ВС, выполняющее полет в контрольной зоне; инструментальные метеорологические условия; соответствующий орган УВД; текущий план полета; для того, чтобы; начало снижения; навигационное средство; выявить; погодные условия; аэродром назначения; расчетное время прилета; выполнить процедуру подхода; по возможности; в пределах 30 минут; принять, получить радиовызов; передача "блиндом"; обеспечить необходимый интервал; аварийная ситуация; командир ВС; ответствен-

ность; скопление бортов; избегать (уклоняться); имеющийся в наличии (действительный); возобновленный; посылать (отправлять); существенная информация; частота, на которой ВС прослушивает информацию; если меня слышите; ответчик в режиме ; включите посадочные фары; найти, выяснить; быть в состоянии; ответчик; посадочные фары; необходимый интервал; определено, что ... ; соответствующая информация; погодные условия; благоприятный; процедура пробивания облачности; предполагаемое время подхода; ответственность; известно, что ... ; посредством использования необходимых средств.

Exercise 3

What do the following abbreviations mean:

SSR; VMC; IMC; ATC;

Exercise 4

True or False?

- 1. If the aircraft fails to indicate that it is able to receive and acknowledge transmission, separation shall not be maintained between aircraft having communication failure and other failure.
- 2. If in visual meteorological conditions, do not continue to fly in VMC.
- 3. In VMC conditions, land at the nearest suitable aerodrome if the aircraft fails to indicate that it is able to receive and acknowledge transmissions.
- 4. To find out wheather a pilot is able to receive radio calls, controllers should not the possibility of "blind transmissions".
- 5. It is the responsibility of the aircraft operators, or their representatives, and pilots-in-command of aircraft to determine wheather they will resume normal operation or take other action.
- 6. To find out wheather a pilot is able to receive radio calls, controllers should use the possibility of "blind transmissions".
- 7. Information shall also be given concerning weather conditions at suitable aerodromes.
- 8. Of two-way communication describing the action taken by the air traffic control unit, shall be transmitted blind for the attention of the aircraft concerned.

Exercise 5

Answer the question:

- 1. What actions shall be taken in case of two-way communication failure?
- 2. What specified signal should be used to indicate acknowledgement in case of communication failure?
- 3. Shall the separation be maintained between aircraft having communication failure and other aircraft?
 - 4. What are the aircraft actions? While flying in VMC conditions?
 - 5. Why do the controllers have to use the possibility of "blind transmissions"?
 - 6. Why is communication failure considered to be an emergency situation?
 - 7. What is one-way communication failure?
 - 8. What is two-way communication failure?

- 9. When should a controller use the possibility of "blind transmission"?
- 10. Shall information be given concerning weather conditions?

Give the synonyms for:

failure; aircraft; as soon as; action; to receive; to execute; manoeuvre; if possible; to indicate; acknowledgement; transmissions; suitable; in accordance with; to proceed; to commence; as close as possible; within 30 minutes; to find out; a call; congested traffic; a pilot-in-command; to determine; blind; radio calls; to ensure; available; to believe; aid; to desire; representative; favourable.

Exercise 7

Find the related words in the directory:

operate; fail; specify; indicate; acknowledge; suit; navigate; land; assume; responsible; to transmit; to separate; to determine; favour; to calculate; responsible; to designate.

Exercise 8

Make up sentences using the following words:

- 1. approach; normal; instrument; a; procedure; complete.
- 2. if; land; 30; within; minutes; possible.
- 3. turn; read; if; left; you; 320; heading; degrees.
- 4. information; landed; has; received; is; positive; aircraft; that; the.
- 5. be; shall; the; on; frequencies; information; which; aircraft; is; listening; on; the; available; transmitted.
- 6. should; the; use; controllers; of; "blind transmission"; possibility.
- 7. show; lights; read; if; you; landing.
- 8. shall; information; given; also; be; concerning; conditions; weather.

Exercise 9

Fill in the gaps choosing the necessary words:

- 1. If you read _____ left heading 320.
 - a) go b) show c) turn d) say
- 2. To find out whether a pilot is able to ______ radio calls, controllers should use the possibility of "blind transmissions".

a) maintain b) hear c) listen d) receive

- 3. A specified ______ should be used to indicate acknowledgment.
 - a) note b) signal c) message d) sign
- 4. If you read snow _____ lights.
 - a) descending b) landing c) approach d) RW

5	i erators, or the	nformation concernerity designated repre	ning the aircraft sh sentatives.	all be forwarded to) air-
a)	received	b) known	new	pertinent	
6. Informa	tion shall also	b be given concerni	ing weather		
a) :	situations	b) pictures	c) descriptions	d) conditions	
Exercise 1 <i>Fill in the</i>	. 0 gaps in the fo	llowing sentence fi	ragments:		
1. As s	oon as it is ki	nown that two-way	communication h	as	,
special a	actions shall b	be taken.			
2. Comple	te the flight in	1	with VMC.		
3. Proc	eed accordin	g to the current flig	tht plan to the	d	lesig-
nated na	vigation aid	serving the aerodro	me of destination.		
4. Comple	te a normal ir	strument approach	l	as specified fo	or the
designat	ted navigatior	n aid.			
5. Thro	ough the use of	of electronic or othe	er aids, air traffic c	control units	
	th	at pilots action may	y be taken without	impairing safety.	
6. Informa	tion shall also	be given concerni	ing weather condit	ions	
for a clo	oud-breaking	procedures.			
7. Positive	information	is	that the aircraf	t has landed.	
8. Inst	ructions justif	ied by any emerge	ncy situation, shall	be transmitted blin	nd for
the atter	ntion of the ai	rcraft concerned, o	n the frequencies		on
which the	ne aircraft is b	believed to be lister	ning.		

Make up your own sentences with the following words:

traffic control units; two-way communication; control area; to indicate; to execute; according to; as close as possible; within 30 minutes; to fail; to ensure; appropriate; navigation aids; responsibility; a pilot-in-command; positive information; congested traffic; expected approach time; favourable; emergency situations; to ensure; electronic aids; pertinent information.

PART 6 RADAR FAILURE

Exercise 1

Read RADAR FAILURE and translate text into your language. Use the word list after the text.

RADAR FAILURE

In case of radar-failure or notification of a possible radar failure, take immediate steps to establish non-radar separation and inform pilots affected by the radar failure.

To avoid acute danger vertical emergency separation may be applied.

If, in case of radar failure or notification of a possible radar failure

radar procedures cannot be applied throughout the entire ATC unit and if the situation is expected to last for a longer period, care shall be taken, by coordinating with adjacent ATC units and the Flow Management Service, that traffic will be reduced to a volume which can be accepted and so specified delegate tasks to adjacent ATC units.

application of radar procedures is impossible at one or a few working positions of the ATC unit, traffic shall be handled by other working positions. If necessary, the acceptance rate shall be reduced to a volume that can be accepted by the remaining working positions.

WORD LIST

acceptance	[Ek7septEns]	принятие. прием
acute	[E7kju:t]	острый, резкий
adjacent	[E7d3eisEnt]	примыкающий. соседний
affected	[E7fektid]	поврежденный
apply	[E7plai]	применять, прилагать
case	[keis]	случай
delegate	7deligeit]	уполномочивать
entire	[in7taiE]	сплошной, целый
handle	[hXndl]	управлять
in case of		в случае
notification	[neutifi7keiSEn]	уведомление, извещение

Exercise 2

Give English equivalents for:

Возможный отказ локатора; в случае отказа локатора; немедленный; принять необходимые меры; установить; информировать пилотов; опасность; повсеместно; длиться, продолжаться; согласовать свои действия с ... ; невозможный; рабочее место; органы УВД; если необходимо; уменьшать; применять; предполагать, рассчитывать.

Exercise 3

True or False?

- 1. In case of radar-failure or notification of a possible radar failure, don't take any immediate steps.
- 2. It is not necessary to inform pilots affected by the radar failure.
- 3. To avoid acute danger vertical emergency separation may be applied.
- 4. If necessary, the acceptance rate shall be reduced to a volume that can be accepted by the remaining working positions.
- 5. In case of radar failure or notification of a possible radar failure application of radar procedures is impossible at only one or a few working positions of the ATC units, traffic shall be handled by other working positions.

Exercise 4

Answer the questions.

- 1. Is it necessary to take immediate necessary steps in case of radar failure?
- 2. What separation may be applied to avoid acute danger?
- 3. Why is it important to co-ordinate with adjacent ATC units and the Flow Management Service?
- 4. Will traffic be reduced to a volume which can be accepted non-radar separation procedures?
- 5. What reasons can cause radar failure?

Exercise 5

Give the synonyms for:

Failure; in case of; notification; possible; immediate; to take immediate steps; to establish; to inform; a pilot; to avoid; acute; emergency; separation; entire; to last; co-ordination; adjacent; to reduce; task; a few; position.

Exercise 6

Find the related words in the dictionary:

Notify; failure; separation; establish; danger; expect; co-ordinate; accept; re-main.

Exercise 7

Make up sentences using the following words:

- 1. danger; emergency; applied; be may; to; avoid; acute; vertical; separation.
- 2. take; in; of; case; radar-failure; steps; immediate; necessary.

3. application; at; one; only; a; or; of; procedures; radar; working; positions; the; few; ATC; of; unit; impossible; is.

Exercise 8

Fill in the gaps choosing the necessary words:

1. In case of radar-failure or notification of a _____ radar failure, take immediate necessary steps.

a) necessary b) possible c) available d) suitable

2. Take immediate steps to ______ non-radar separation and inform pilots affected by the radar failure.

a) give b) operate c) qualify d) establish

3. To avoid acute danger ______ emergency separation may be applied.

a) longitudinal b) lateral c) vertical d) horizontal

4. If the situation is expected to last for a longer period, care shall be taken by

with adjacent ATC units and the Flow Management Service.

a) reading b) working c) phoning d) coordinating

Exercise 9

Fill in the gaps in the following sentences and sentence fragments.

- 1. In case of radar ______ take immediate steps.
- 2. Establish non-radar separation and ______ pilots affected by the radar failure.
- 3. To avoid acute ______ vertical emergency separation may be
- 4. Coordination with ______ ATC units and the Flow Management Service can be applied.
- 5. If necessary the acceptance rate shall be ______ to a volume that can be accepted by the remaining working positions.

Exercise 10

Make up your sentences with the following words:

in case; shall be reduced; remaining; radar failure; notification; the entire ATC unit; immediate steps; if necessary; Follow Management Service; adjacent units

PART 7

NO GYRO PROCEDURE

Exercise 1

Read NO GYRO PROCEDURE and translate the text into your language. Use the word list after the text.

NO GYRO PROCEDURES

In case of gyro failure, inform the pilot about the type of approach. Give a short explanation of procedure.

EXAMPLE:

THIS WILL BE "NO-GYRO VECTOR" FOR (... type of approach ...) TO (... runway or other limit...) EXECUTE DIRECTIONAL INSTRUCTIONS IMMEDIATELY UPON RECEIPT OF THE WORD <u>"N O W"</u>, MAKE TURNS RATE ONE

In case of heading changes, specify the direction of turn and determine start and end of the turn by adding the word "NOW"

EXAMPLE:

TIRN LEFT <u>NOW</u> STOP TURN <u>NOW</u>

When established on the final approach course, instruct the pilot to execute the prescribed turns at half standard rate, unless the pilot continues his approach on own navigation.

EXAMPLE:

MAKE ALL TURNS RATE HALF

WORD LIST

determine	[di7tE:min]	определять, устанавливать
execute	[7eksikj:t]	выполнять, исполнять
explanation	[iksplE7neiSEn]	объяснение

gyro	[7d3aiErou]	гирокомпас
specify	[7spEsifai]	определять
unless	[un7les]	если не
vector	[7vektE]	вектор

Give English equivalents for:

Процедура; определять начало разворота; добавить слово; вид захода; выполняйте указания; в случае; если; краткое объяснение; информировать пилота; гирокомпас; после получения; это будет ...; немедленно; изменение курса; направление разворота; повернуть влево/вправо; пример; самостоятельное самолетовождение; определять конец разворота; неисправность, отказ гирокомпаса; курс окончательного захода на посадку.

Exercise 3

True or False?

- 1. In case of gyro failure, inform the pilot about the type of approach.
- 2. It is not necessary to give a short explanation of the procedure.
- 3. Execute directional instructions immediately upon receipt of the world "NOW".
- 4. When established on the final approach course, it is necessary to instruct the pilot to execute the prescribed turns at half standard rate.
- 5. It is not necessary to specify the direction of turn and determine start and end of the turn in case of heading changes.

Exercise 4

Answer the question:

- 1. What is it necessary to do in case of gyro failure?
- 2. What should a pilot do when he hears the instruction to make turns rate one?
- 3. Give an example of a controller's instructions in case of heading changes.
- 4. Why is it necessary to specify the direction of turn and determine start and end of the turn by adding the word "NOW"?
- 5. What does "make all turns rate one" mean?
- 6. Have you ever experienced gyro failure?

Exercise 5

Give the synonyms for:

in case of; a short explanation; failure; vector; immediately; upon receipt; to make; to execute; to specify; to add; final; to instruct; prescribed; own; navigation.

Exercise 6

Find the related words in the dictionary:

fail; inform; explain; direct; immediate; specify; determine; establish; prescribe; continue; navigate.

Exercise 7

Make up sentences using the following words:

- 1) pilot; the; inform; a; about; approach; of; type.
- 2) rate; make; turns; one.
- 3) turn; stop; now.
- 4) all; half; make; rate; turns.
- 5) instructions; execute; immediately; receipt; upon.

Exercise 8

Fill in the gaps choosing the necessary words:

1. In case of gyro fa	ilure, inform the pi	lot about the	of approach.
a)number	b)colour	c)sign	d)type
2. Execute direction word "NOW".	al instructions imm	nediately upon	of the
a)getting	b)receipt	c)taking	d)hearing
3. Make all	rate hal	f.	
a)circles	b)stops	c)turns	d)returns
4. In case of heading start and end of the start and end of the start and st	g changes, ne turn.	the direc	ction of turn and determine
a)say	b)give	c)specify	d)tell

Exercise 9

Fill in the gaps in the following sentences and sentence fragments:

- 1. Execute instructions ______ upon receipt.
- 2. Make all _____ rate half.
- 3. In case of gyro _____, inform the pilot about the _____ of approach.
- 4. It is necessary to give a short ______ of the procedure.
- 5. In case of heading changes, specify the ______ of turn and determine start and end of the turn by adding the word "NOW".

Exercise 10

Make up your own sentences with the following words:

gyro; in case of; to inform; the type of approach; failure; explanation; to execute instructions; immediately; heading changes; to instruct; own navigation; the prescribed turns; to specify; to determine; by adding; final approach; this will be ...; start of the turn; procedure.

Exercise 11

Make up your own sentences with the following words:

in case of; gyro failure; the start of the turn; to instruct the pilot; immediately upon receipt; to specify; the type of approach; a short explanation; this will be ... ; own navigation; stop turn.

PART 8

Exercise 1

Read FUEL DAMPING and translate the text into your language. Use the word list after the text.

FUEL DUMPING

When a pilot intends to dump fuel, obtain information from him as to where and how long he wishes to conduct this operation.

If possible, fuel dumping should be conducted clear of large cities and in airspace of low traffic density, however large enough to allow the pilot to take any necessary safety measures.

Consider the possibility that aircraft might off their R/T equipment while dumping fuel.

For fuel dumping, assign levels above terrain which are not below the minimum levels prescribed by the ATS authority of the State.

EXAMPLE:

The German Air Navigation Service has prescribed the following minima for terrain clearance and separation from other aircraft.

Clearance from terrain:

5000 ft above ground in case of kerosene dumping,

2000 ft in case of gasoline dumping

Separation:

Separate controlled flight from the airspace in which fuel dumping is in progress by at least

5MN to either side from the flight path of the aircraft dumping fuel, or

1000 ft above the aircraft dumping fuel, or

5000 ft below the aircraft dumping fuel in case of kerosene, or

2000 ft below the aircraft dumping gasoline.

Flights in radio contact with ATS units shall not be allowed to penetrate the airspace mentioned above before 15 minutes have elapsed since the termination of the dumping.

If airspaces, within which VFR traffic is possible, are affected by the fuel dumping, ATS shall transmit warnings about the fuel dumping at regular intervals.

EXAMPLES:

ALL STATIONS – MÜNCHEN RADAR USE CAUTION, FUEL DUMPING IN PROGRESS BY B-707 OVER ALLERSBERG, HEADING SOUTHEAST FROM FLIGHT LEVEL 130, AVOID FLIGHT WITHIN 5 NM OF FUEL DUMPING AREA

ALL STATIONS – NÜNCHEN RADAR FUEL DUMPING WAS IN PROGRESS OVER ALLERSBERG FROM FL 130. AVOID THIS AREA UNTIL TIME 1135

WORLD LIST

intend	[in7tend]	намереваться
wish	[wiS]	желать
dump	[dVmp]	сливать горючее
density	[7densiti]	плотность
allow	[E7lau]	разрешать; позволять
assign	[E7sain]	предписывать
terrain	[tB7rein]	ландшафт
prescribe	[pri7skraib]	предписывать; прописать
authority	[O:7Qoriti]	власть
kerosene	[7kBrEsi:n]	керосин
gasoline	[7gXsEli:n]	(US) бензин
elaps	[i7lXps]	проходить, протекать (о време-

warning

[7wO:niN]

предупреждение

ни)

Exercise 2

Give English equivalent for:

Намереваться; если возможно; сливать топливо; получить информацию; большие города; позволять; разрешать; принимать любые необходимые меры безопасности; возможность; оборудование; выключать; предписанный; интервал от другого ВС; в случае; если; ведется слив топлива; по крайней мере; органы ЦВД; проникать в воздушное пространство; предупреждения; транслировать; курс; в пределах; морская миля; зона слива топлива; избегать, уклоняться; юго-восточное направление; контролируемые полеты; над землей; радиосвязь; однако; осуществлять, выполнять что-либо; плотность; отдельный; внимание.

Exercise 3

What do the following abbreviations mean:

R/T; ATS; VFR; NM; B-707.

Exercise 4

True or False?

- 1. When a pilot indents to dump fuel, obtain information from him as to where and how long he wishes to conduct thus operation.
- 2. If possible, fuel dumping should not be conducted clear of large cities and in airspace of low traffic density.
- 3. For fuel dumping, assign levels above terrain which are below the minimum levels prescribed by the ATS authority of the State.
- 4. Flights in radio contact with ATS units shall be allowed to penetrate the airspace before 15 minutes have elapsed since the termination of the dumping.
- 5. If airspaces, within which VFR traffic is possible are affected by the fuel dumping, ATS shall not transmit warnings about the fuel dumping at regular intervals.
- 6. Consider the possibility that aircraft might switch off their R/T equipment while dumping fuel.

Exercise 5

Answer the question:

- 1. What information has to be received when a pilot intends to dump fuel?
- 2. Where should fuel dumping be conducted?

- 3. Why is it necessary to inform other aircraft about fuel dumping?
- 4. How shall a controller inform a pilot about fuel dumping?
- 5. What levels should be used for dumping fuel?
- 6. Give some reasons for dumping fuel.
- 7. Why is it important to take necessary safety measures while dumping fuel?

Give the synonyms for:

To dump; to intend; to obtain; to wish; to conduct; an operation; if possible; large; to switch off; to prescribed; separation; aircraft; in case of; clearance; contact; to allow; to penetrate; termination; to mention; warning; regular; use caution; to avoid; within; in progress.

Exercise 7

Find the related words in the dictionary:

Intend; inform; operate; necessary; safe; possible; equip; clear; separate; transmit; warn; prescribe.

Exercise 8

Make up sentences using the following words:

- 1. a; pilot; information; how; where; and; to; long; as; obtain; to; he; fuel; dump-ing; intends.
- 2. might; switch; R?T; equipment; possibility; consider; the; dumping; while; fuel; that; aircraft; their; off.
- 3. different; measures; safety; take; pilot; a; can; while; fuel; dumping.
- 4. ATC; transmit; the; about; intervals; regular; fuel; warnings shall; dumping; at.
- 5. progress; caution; use; fuel; in; dumping.
- 6. should; clear; be; fuel; of; large; and; cities; in; of; density; airspace; traffic; low; conducted; dumping.

Exercise 9

Fill in the gaps choosing the necessary words:

- 1. When a pilot intends to dump fuel, obtain information from him as to where and how long he wishes to conduct this ______.
 - a) business b) problem c) operation d) work
- 2. A pilot should take some necessary safety ______.
 - a) problems b) actions c) d) measures
- 3. Consider the possibility that aircraft might switch off their R/T equipment while ______ fuel.
 - a) refueling b) dumping c) buying d) taking

- 4. ATS shall transmitabout the fuel dumping at regular intervals.a) messagesb) callsc) instructionsd) warnings
- 5. All stations. Munchen Radar. Use, fuel dumping in progress.a) attentionb) cautionc) sightd) warning

Fill in the gaps in the following sentences and sentence fragments:

- 1. If airspaces , within which VFR traffic is possible, are affected by the fuel dumping, ATS shall ______ warnings about the fuel dumping at regular intervals.
- 2. _____ flight within 5 NM of fuel dumping area.
- 3. For fuel dumping, assign levels above terrain which are not below the minimum levels ______ by the ATS authority of the State.
- 4. When a pilot ______ to dump fuel, obtain information from him about this operation.
- 5. Aircraft might switch off their R/T _____ while dumping fuel.

Exercise 11

Make up your own sentences with the following words:

Fuel dumping; all stations; in progress; R/T equipment; necessary safety measures; to conduct; obtain information; the possibility; ATS authority; to penetrate; in case of; terrain clearance; separation; low traffic density; large cities.

UNIT 8

Exercise 1

Read AIR TRAFFIC INCIDENT REPORT and translate the text into your language. Use the word list after the text.

AIR TRAFFIC INCIDENT REPORT

An air traffic incident report should be submitted, normally to the air traffic services unit concerned, for incidents specially related to the provision of air traffic services involving such occurrences as aircraft proximity (AIRPROX) or other serious difficulty resulting in **a** hazard to aircraft, caused by, e.g. faulty procedures, non-compliance with procedure, or failure of ground facilities.

Procedures should be established for the reporting of aircraft proximity incidents and their investigation to promote the safety of aircraft. The degree of risk involved in an aircraft proximity should be determined in the incident investigation and classified as:

> " risk of collision " " safety not assured " " no risk of collision " ,or " risk not determined "

When an accident / incident investigative authority conducts an investigation of an aircraft proximity incident, the air traffic services aspects should be included.

Instructions for the completion of the Air Traffic Incident Form

A Aircraft identification or the aircraft filing the report;

B An AIRPROX report should be filed by radio;

(Note: in this radio-report the shaded items should be transmitted)

C1 Date/time group UTC and position in bearing and distance from a navigation aid or LAT/LONG.;

C2 Information regarding the aircraft filing the report, tick as necessary;

C2c e.g. FL 350/1013 hPa", or 2500 ft/QNH 1007 hPa, or 1200 ft /QFE 998 hPa;

C3 Information regarding the other aircraft involved;

C4 Distance between the two aircraft when passing; (state unit of measurement e.g. NM, km, ft);

C6 Attach additional papers as required. The diagrams may be used to show aircraft's positions;

D1f State name of AT§ unit and date/time group; Dig Date/time group;

E2 Include details of ATS unit such as service provided, radiotelephony frequency, SSR codes assigned and altimeter setting. Use diagram to show aircraft positions and attach additional papers as required.

WORD	LIST
n+1	

incident	[7insident]	происшествие, случай
submit	[sEb7mit]	подчинять, покорять
involve	[in7volv]	включать в себя; вовлекать
occurence	[E7kVrEns]	случай, явление, происшествие
proximity	[prOk7simiti]	опасность сближения
hazard	[7hXzEd]	риск, опасность
fault	[7f0:lt]	недостаток, ошибка
promote	[prE7mout]	способствовать, продвигать
determine	[di7tEmn]	определять, устанавливать
investigate	[in7vestideit]	расследовать, разузнавать
authority	[o:7Qoriti]	власть, полномочие; pl власти
measurement	[7mezEmEnt]	измерение
bearing	[7bBErin]	пеленг
shaded	[7Seidid]	затемненный, заштрихованный
restriction	[ris7trikS(E)n]	ограничение

Exercise 2

Give the English equivalents for:

доклад об авиационном происшествии; орган УВД; вовлекать; надежность ВС; серьезные трудности; опасность для ВС; невыполнение процедуры; отказ наземного оборудования; опасность столкновения; безопасность не обеспечивается; власти; осуществлять расследование; информация, касающаяся ВС; расстояние между двумя ВС; прилагать дополнительные листы как требуется (как необходимо); положение ВС; ЭП; курс и маршрут; система предупреждения столкновений; другая полезная информация; посадочные фары; ограничения; тип и позывной ВС; регистрационные знаки; тип плана полета; аэродром вылета; аэродром первой посадки; "РАЗНОЕ"; любая другая информация, считающаяся важной со стороны командира ВС; полетные погодные условия; подпись; дополнительная информация.

Exercise 3

What do the following abbreviations mean? AIRPROX; UTC; LAT; LONG; FL; hPa; QNH; QFE; NM; ATS; ft; SSR; ACAS.

True or False?

- 1. An air traffic incident report should not be submitted, normally to the air traffic services unit concerned.
- 2. Procedures should be established for the reporting of aircraft proximity incidents and their investigation to promote the safety of aircraft.
- 3. The degree of risk involved in an aircraft proximity should be determined in the incident investigation.
- 4. When an ancident/incident investigative authority conducts an investigation of an aircraft proximity incident, the air traffic services aspects shouldn't be included.
- 5. It is necessary to use diagram to show aircraft positions and attach additional papers as required.
- 6. You don't have to include details of ATS unit such as service provided, radiotelephony frequency, SSR codes assigned and altimeter setting.

Exercise 5

Answer the question?

- 1. What is air traffic incident report?
- 2. What reasons can cause the filling of Air Traffic Incident Report Form?
- 3. Should procedures be established for the reporting of aircraft proximity incidents?
- 4. How shall the degree of risk involved in an aircraft proximity be determined in the incident investigation?
- 5. Why is it necessary to include the traffic services aspects?
- 6. What are the instructions for the completion of the Air Traffic Incident Form?
- 7. Details of ATS unit have to be included, don't they?
- 8. What is the role of diagrams?
- 9. Have you over filed an air traffic incident report?

Exercise 6

Give the synonyms for:

to involve; to determine; risk; to investigate; an aspect; to transmit; clearance.

Exercise 7

Find the related words in the dictionary:

procedure; supplemented; additional; compliance; establish; investigation; classified; measurement; attach; transmitted; inform; lighting; determined.

Exercise 8

Make up sentences using the following words:

- 1) to; show; be; may; the; diagrams; positions; aircraft's; used.
- 2) information; the; other; involved; regarding; aircraft.
- 3) additional attach; required; as; papers.

- 4) details; ATS; of; include; unit.
- 5) AIRPROX; an; should; report; by; filed; radio; be.

Fill in the gaps choosing the necessary words:

1. An air traffic incident	should be submitted normally to the air
traffic services unit concerned.	

a) plan b) form c) chart d) report

2. When an incident investigative authority conducts an ______ of an aircraft proximity incident, the air traffic services aspects should be included.

a) conversation b) negotiations c) interview d) inverstigation

3. Use diagram to ______ aircraft positions and attach additional papers as required.
a) give b) write c) show d) attach

Exercise 10

Fill in the gaps in the following sentences and sentence fragments:

- 1. Procedures should be ______ for the reporting of aircraft proximity incidents and their investigation to ______ the safety of aircraft.
- 2. Attach additional papers as ______.
- 3. Include details of ATS unit such as service provided, radiotelephony ________, SSR codes assigned and altimeter ______.
- 4. The degree of risk involved in the aircraft proximity should be ______ in the incident investigation.

Exercise 11

Make up your own sentences with the following words:

aircraft proximity; faulty procedures; failure of ground facilities; the incident investigation; to conduct an investigation; navigation aids; additional papers; the diagrams; SSR codes; as required; as necessary; to attach; radio-report; risk of collision; the degree of risk; date/time group; ACAS; aircraft identification; type of incident; cabin lights; other information.

l) Radar identification			
() No radar available	() Radar identification	() No fica	radar identi- ation
m) Other aircraft sighted			
() Yes	() No	() Wi	rong aircraft hted
n) Avoiding action taken			
() Yes	() No		
o) Type of flight plan	IFR / VFR / note		
3. Other aircraft			
a) Type and call sign / reg	istration (if known)		
b) If a) above not known,	describe below		
() High wing	() Mid wing	()	Low wing
() Potorcraft			
() 1 engine	() 2 engines	()	3 engines
() 4 engines	() More than 4 engines		
Marking, colour or other a	vailable details		
c) Aircraft dimbing or des	scending		
() Level flight	() Climbing	()	Descending
() Unknown			
d) Aircraft bank angle			
() Winds level	() Sight bank	()	Moderate bank
() Sleep bank	() Inverted	()	Unknown
e) Aircraft direction of ba	nk		
() Left	() Right	()	Unknown
f) Lights displayed		~ /	
() Navigation lights	() Strobe lights	()	Cabin lights
() Red anti collision lights	() Landing / taxi lights	()	Logo (tail fin) lights

() Other	() None	() Unknown
g) Traffic avoidance ad	vice issued by ATS	
() Yes, based on radar	() Yes, based sighting	l of visual () Yes, based on other inform- ation
() No	() Unknown	
h) Traffic information	issued	
() Yes, based on radar	() Yes, based sighting	l on visual () Yes, based on other informa- tion
() No	() Unknown	
Avoiding action taken		
() Yes	() No	() Unknown
 b) Closest vertical distant 5. Flight weather conditional IMC / VMC 	nce	
b) Above / below clouds	/ fog / haze or betw	een lavers
c) Distance vertically fr d) In cloud / rain / snow e) Flying into / out ol su f) Flight visibility	om loud m/h / sleet / fog / haze n m / km	n below m/h above
6. Any other information	considered importar	nt by the pilot-in command

D-MISCELLANIOUS		
1. Information regarding reporting	g aircraft	
a) Aircraft registration	-	
b) Aircraft type		
c) Operator		
d) Aerodrome of departure		
e) Aerodrome of first landing	destination	
f) Reported by radio or other m time UTC	eans to (name of ATS unit) at	
g) Data / time / place of completi	ion of form	
2. Function, address and signature a) Function	e of person submitting report	
b) Address		
c) Signature		
d) Telephone number		
3. Function and signature of person receiving report		
a) Function	b) Signature	

E – SUPLEMENTARY INFORMATION BY ATS UNIT CONCENED

1. Receipt of report

a) Report received via AFTN / radio / telephone / other (specify)

b) Report received by _	
unit)	

(name of ATS

2. Details of ATS action

Clearance, incident seen (radar/ visually, warring given, result of local enquiry, etc.)

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