

Temeljem članka 104. Zakona o zračnom prometu („NN“ br. 69/09, 84/11, 54/13, 127/13 i 92/14)

Hrvatska kontrola zračne plovidbe d.o.o. predlaže, a Hrvatska agencija za civilno zrakoplovstvo

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## **POSTUPKE**

**za obavljanje**

## **GOVORNE KOMUNIKACIJE**

(Radiokomunikacija u pokretnoj zrakoplovnoj vezi)

Pursuant to paragraph 104 of the Air Traffic Act (*Official Gazette* No. 69/09, 84/11, 54/13, 127/13 & 92/14)

Croatia Control Ltd. proposes and Croatian Civil Aviation Agency

Lays down

## **VOICE COMMUNICATION PROCEDURES**

in

(Radio Communications in Aeronautical Mobile Service)

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# 1 Uvod

## 1.1 Izvor dokumenta

- 1.1.1 ICAO frazeologija sastavni je dio procedura napisanih u Provedbenoj uredbi Komisije (EU) 2016/1185 Aneksu 10 - *Aeronautical Telecommunications*, Volume II — *Communication Procedures including those with PANS status* i u dokumentu *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM, Doc 4444). ICAO dokument 9432-AN/925 *Manual of Radiotelephony* sadrži primjere koji se temelje na tim dokumentima i reprezentativni su primjeri frazeologije u uporabi. Svrha ICAO frazeologije je pružanje učinkovite, jasne, sažete i jednoznačne komunikacije. **Važnost pravilne uporabe standardne frazeologije ne može se dovoljno naglasiti.**

## 1.2 Svrha dokumenta

- 1.2.1 Svrha frazeologije sadržane u ovom dokumentu je osiguravanje ujednačenosti radiotelefonske komunikacije. Međutim, nije moguće propisati frazeologiju za svaku situaciju i stoga primjeri frazeologije sadržani u ovom dokumentu nisu konačni. U situacijama u kojima je nužna uporaba općeg jezika izričaj treba biti jasan, sažet i jednoznačan. Također je neophodno posjedovati dovoljnu razinu jezičnog znanja jezika na kojem se komunicira. Potrebna jezična znanja i vještine definirani su u ICAO Aneksu 10, drugi dio i u Aneksu 1 – *Personnel Licensing*.
- 1.2.2 Osim pravilne uporabe frazeologije i primjerene razine jezične sposobnosti, također je važno znati da jezik radiotelefonske komunikacije često nije materinski jezik primatelja ili pošiljatelja poruke. Osvještenost o mogućim poteškoćama s kojima se suočavaju govornici stranog jezika doprinosi sigurnijem komunikacijskom procesu.

## 1.3 Primjena dokumenta

- 1.3.1 Govorna komunikacija između radiopostaje zrakoplova i zemaljske radiopostaje uspostavlja se i održava radiokomunikacijom zemlja-zrak na način utvrđen propisom donesenim na temelju Zakona o zračnom prometu ili EU propisima (Zakon o zračnom prometu NN 69/09, 84/11, 54/13, 127/13 i 92/14, čl. 104).

# 1 Introduction

## 1.1 Document source

- 1.1.1 ICAO phraseologies are contained in procedures found in Commission Implementing Regulation (EU) 2016/1185 Annex 10 — *Aeronautical Telecommunications*, Volume II — *Communication Procedures including those with PANS status* and in the *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM, Doc 4444). ICAO Doc 9432-AN/925 *Manual of Radiotelephony* contains examples, based on the above documents, which are intended to be representative of radiotelephony in common use. ICAO phraseologies have been developed to provide efficient, clear, concise, and unambiguous communications. **The importance of using correct and precise standard phraseology cannot be over-emphasised.**

## 1.2 Document purpose

- 1.2.1 The phraseologies detailed in this document have been established for the purpose of ensuring uniformity in RTF communications. However, it is not possible to provide phraseologies to cover every conceivable situation which may arise, and the examples contained in this document are not exhaustive. When it is necessary to use plain language it should be clear, concise and unambiguous. Sufficient proficiency in the language being used is also required. ICAO language proficiency requirements are found in ICAO Annex 10, Volume II and Annex 1 – *Personnel Licensing*.
- 1.2.2 In addition to correct use of phraseologies and adequate language proficiency, it is also important to keep in mind that the language being used in radiotelephony is often not the first language of the receiver or originator of a transmission. An awareness of the special difficulties faced by second-language speakers contributes to safer communications.

## 1.3 Document applicability

- 1.3.1 Voice communications between aircraft stations and aeronautical stations are established and maintained as air-ground communications in compliance with the provisions of Air Traffic Act or EU regulations (Air Traffic Act, Official Gazette No. 69/09, 84/11, 54/13, 127/13 and 92/14, article 104).

<p><b>1.3.2</b> Ove postupke na odgovarajući način koriste hrvatski i inozemni zrakoplovi koji se koriste u vojne, policijske i carinske svrhe kada izvode letačke operacije po postupcima i pravilima za opći zračni promet (GAT) unutar zračnog prostora Republike Hrvatske i zračnog prostora koji je međunarodnim ugovorom dodijeljen u nadležnost Republici Hrvatskoj (Područje letnih informacija Zagreb).</p>	<p><b>1.3.2</b> These procedures are used by radio equipped Croatian and foreign military, police and customs general air traffic within the airspace of the Republic of Croatia and airspace allocated to Croatia (FIR Zagreb) under the provisions of international agreements.</p>
<p><b>1.3.3</b> Letačke operacije vojnih zrakoplova kada lete po postupcima i pravilima za operativni zračni promet (OAT) uređuju se posebnim propisom.</p>	<p><b>1.3.3</b> For military flights conducted according to operational air traffic the appropriate national rules and procedures apply.</p>
<p><b>1.3.4</b> Ove procedure primjenjuje jedinica nadležna za pružanje operativnih usluga u zračnom prometu kada u granicama svojih prava, dužnosti i odgovornosti, obavlja svoje poslove u zračnom prostoru Republike Hrvatske i u zračnom prostoru iznad Jadranskoga mora, izvan teritorijalnog mora Republike Hrvatske, u skladu s međunarodnim ugovorima koji obvezuju Republiku Hrvatsku.</p>	<p><b>1.3.4</b> These procedures are used by the appropriate Air Traffic Control Units when providing air navigation service in line with prescribed rights, duties and responsibilities in the airspace of the Republic of Croatia, above the Adriatic Sea, and outside the territorial waters of Croatia under the provisions of legally binding international agreements.</p>
<p><b>1.3.5</b> Opći postupci za obavljanje RT komunikacije sukladni su Pravilniku o stjecanju privilegije za obavljanje radiotelefonske komunikacije.</p>	<p><b>1.3.5</b> General procedures for radiotelephony communications are compliant with RT Communication Licencing Regulations.</p>
<p><b>1.3.6</b> Razlike u odnosu na preporučenu ICAO frazeologiju nalaze se u Dodatku 2.</p>	<p><b>1.3.6</b> Differences to ICAO recommended phraseologies can be found in Appendix 2.</p>
<p><b>1.4 Jezik u uporabi</b></p>	<p><b>1.4 Language in use</b></p>
<p><b>1.4.1</b> Radiotelefonska komunikacija odvija se na engleskom ili hrvatskom jeziku.</p>	<p><b>1.4.1</b> Radiotelephony communications shall be conducted in the English or Croatian language.</p>
<p><b>1.4.2</b> Tijekom letenja po pravilima instrumentalnog letenja radiotelefonska komunikacija mora se obavljati na engleskom jeziku.</p>	<p><b>1.4.2</b> All IFR traffic radiotelephony communications shall be conducted in the English language.</p>
<p><b>1.4.3</b> Engleski jezik mora biti dostupan, na zahtjev bilo kojeg zrakoplova, u svim postajama na zemlji koje pružaju usluge određenim aerodromima i rutama kojima se služi međunarodni zračni prijevoz. Osim ako je nadležno tijelo drukčije propisalo za posebne slučajeve, u komunikacijama jedinice ATS i zrakoplova na aerodromima s više od 50000 međunarodnih IFR kretanja godišnje mora se upotrebljavati engleski jezik.</p>	<p><b>1.4.3</b> The English language shall be available, on request of any aircraft, at all stations on the ground serving designated aerodromes and routes used by international air services. Unless otherwise prescribed by the competent authority for specific cases, the English language shall be used for communications between the ATS unit and aircraft, at aerodromes with more than 50000 international IFR movements per year.</p>
<p><b>1.4.4</b> Kada se zrakoplov nalazi u nuždi komunikacija se može obavljati na engleskom ili hrvatskom jeziku pod uvjetom da svi sudionici komunikacijskog procesa imaju dovoljnu razinu jezične sposobnosti za komunikaciju na jednom od ovih jezika.</p>	<p><b>1.4.4</b> In case of emergency English or Croatian may be used provided that it is sufficiently known by all stations involved.</p>

## 1.5 Protokol dokumenta

1.5.1 U ovom dokumentu sljedeće riječi imaju ovo značenje:

- I. riječ **morati** –označava obavezu
- II. riječ **trebalo bi** – označava preporuku
- III. riječ **može** – označava opciju

1.5.2 Uporaba muškog roda u ovom dokumentu odnosi se na muški i na ženski rod.

## 1.5 Document protocol

1.5.1 The words listed below have the following meaning in this document:

- I. the word **shall** - means that compliance is compulsory
- II. the word **should** – indicates a recommendation
- III. the word **may** – indicates an option

1.5.2 Any reference in this document to the male gender should be understood to include both male and female persons.

## 2 Općenito

### 2.1 Uvod

Standardna ICAO frazeologija mora se koristiti u svim situacijama za koje je definirana. Opći jezik koristi se jedino kada standardna frazeologija nije dovoljna za prenošenje željene komunikacije. Komunikacija na radio frekvenciji mora se odvijati po najvišim standardima. Pretjerana uporaba uljudnih fraza nije dozvoljena.

### 2.2 Tehnika predaje

Primjenom ovih tehnika osigurava se jasna predaja i prijam izgovorenog sadržaja:

- a) prije govorenja na frekvenciji slušajte frekvenciju i provjerite da nema interferencije s nekom drugom postajom,
- b) informirajte se o tehnikama ispravnog govorenja u mikrofon,
- c) koristite normalan konverzacijski ton, govorite jasno i razgovijetno,
- d) govorite ravnomjernom brzinom govora ne izgovarajući više od 100 riječi u minuti. Govorite polaganije kada znate da primatelj mora zapisati dijelove poruke,
- e) govorite ujednačenom jačinom govora,
- f) prije ili nakon izgovora brojeva kratko stanite – time ćete olakšati razumijevanje,
- g) izbjegavajte zastajkivanje u govoru kao npr. korištenje uzvika 'm-m-m'
- h) prestanite govoriti ako morate okrenuti glavu od mikrofona,
- i) pritisnite tipku do kraja prije nego što počnete govoriti i otpustite ju tek kad u potpunosti izgovorite poruku. Tako se osigurava cjelovito prenošenje poruke,
- j) prilikom prenošenja dugačkih poruka napravite povremene stanke za vrijeme kojih pošiljalac može potvrditi jasnoću frekvencije, a primatelj zatražiti ponavljanje dijelova poruke ako je to potrebno.

## 2 General

### 2.1 Introduction

ICAO standardized phraseology shall be used in all situations for which it has been specified. Only when standardized phraseology cannot serve an intended transmission, plain language shall be used. In all communications the highest standard of radio discipline shall be observed at all times. Excessive use of courtesies shall be avoided.

### 2.2 Transmission technique

The following transmitting techniques will assist in ensuring that transmitted speech is clear and satisfactorily received:

- a) before transmitting, listen out on the frequency to be used to ensure that there will be no interference with a transmission from another station;
- b) be familiar with good microphone operating techniques;
- c) use a normal conversational tone, and speak clearly and distinctly;
- d) maintain an even rate of speech not exceeding 100 words per minute. When it is known that elements of the message will be written down by the recipient, speak at a slightly slower rate;
- e) maintain the speaking volume at a constant level;
- f) a slight pause before and after numbers will assist in making them easier to understand;
- g) avoid using hesitation sounds such as "er";
- h) suspend speech temporarily if it becomes necessary to turn the head away from the microphone;
- i) depress the transmit switch fully before speaking and do not release it until the message is completed. This will ensure that the entire message is transmitted;
- j) the transmission of long messages should be interrupted momentarily from time to time to permit the transmitting operator to confirm that the frequency in use is clear and, if necessary, to permit the receiving operator to request repetition of parts not received.

## 2.3 Vrste poruka

Vrste poruka koje se šalju putem pokretne veze i slijed prednosti pri uspostavi komunikacije i predaji poruka odvija se sukladno ovoj tablici:

## 2.3 Categories of messages

The categories of messages handled by the aeronautical mobile service and the order of priority in the establishment of communications and the transmission of messages shall be in accordance with the table below:

Tablica/Table 1: Vrste poruka/Categories of messages

Vrsta poruke i slijed prednosti signala u radiotelefonoj komunikaciji Message category and radiotelephony order of priority signal	Radiotelefonski signal Radiotelephony signal
(1) <i>Poziv u nevolji, poruke o nevolji i promet u nevolji</i> Distress calls, distress messages and distress traffic	<b>MAYDAY</b>
(2) <i>Poruke hitnosti, uključujući poruke kojima prethodi signal medicinskog prijevoza</i> Urgency messages, including messages preceded by the medical transports signal	<b>PAN PAN or PAN PAN MEDICAL</b>
(3) <i>Poruke o radiogoniometarskom smjeru</i> Communications relating to direction finding	---
(4) <i>Poruke o sigurnosti leta</i> Flight safety messages	---
(5) <i>Meteorološke poruke</i> Meteorological messages	---
(6) <i>Letačko operativne poruke</i> Flight regularity messages	---
(7) <i>Državni telegram</i> State telegrams	---

(1) *Poruke o nevolji* odnose se na zrakoplov i putnike u ozbiljnoj i neposrednoj opasnosti koja zahtjeva neodgodivo pružanje pomoći.

(2) *Poruke hitnosti* odnose se na sigurnost zrakoplova, plovila ili bilo kojeg drugog vozila ili osobe.

(3) *Poruke o radiogoniometrijskom smjeru* odnose se na predaju goniometarskih vrijednosti.

(4) *Poruke o sigurnosti leta* su:

- a. poruke vezane za distribuciju plana leta i poruke kontrole zračnog prometa
- b. poruke koje šalje operator zrakoplova ili pilot koje su od neposredne važnosti za zrakoplov u letu

(1) *Distress messages* are those concerning aircraft and passengers threatened by serious and imminent danger requiring immediate assistance.

(2) *Urgency messages* are messages concerning the safety of an aircraft, a vessel, any other vehicle or a person.

(3) *Messages relating to direction finding* are messages for transmission of direction finding values.

(4) *Flight safety messages* are:

- a. movement and control messages;
- b. messages originated by an aircraft operator or by an aircraft of immediate concern to an aircraft in flight;

- |  |  |
|--|--|
| <p>c. meteorološke poruke od neposrednog značaja za zrakoplov koji je već u letu ili se sprema uzletjeti (individualne poruke ili poruke koje se emitiraju neodređenom primatelju)</p> <p>d. ostale poruke koje se odnose na zrakoplov u letu ili koji se sprema uzletjeti.</p>  | <p>c. meteorological advice of immediate concern to an aircraft in flight or about to depart (individually communicated or for broadcast); and</p> <p>d. other messages concerning aircraft in flight or about to depart.</p>  |
| <p>(5) <i>Meteorološke poruke</i> odnose se na predaju vremenskih podataka.</p>  | <p>(5) <i>Meteorological messages</i> are messages for transmission of weather data.</p>   |
| <p>(6) <i>Letačko operativne poruke</i> su:</p> <p>a. poruke koje se odnose na promjene u operativnom redu letenja</p> <p>b. poruke koje se odnose na opsluživanje zrakoplova</p> <p>c. poruke predstavnika operatora zrakoplova koje se odnose na promjene u zahtjevima za putnike i posadu, a koje nastaju kao posljedica neizbježnih odstupanja od uobičajenih operativnih redova letenja. Individualni zahtjevi putnika i posade nisu dopušteni</p> <p>d. poruke koje se odnose na nestandardna slijetanja</p> <p>e. poruke koje se odnose na žurno potreban materijal i dijelove zrakoplova</p> <p>f. poruke koje se odnose na rad ili održavanje službi neophodnih za sigurnost ili letačku operativnost zrakoplova.</p> | <p>(6) <i>Flight regularity messages</i> are:</p> <p>a. messages concerning changes in aircraft operation schedules</p> <p>b. messages concerning servicing of aircraft</p> <p>c. instructions of aircraft operator representatives concerning changes in requirements for passengers and crew, caused by unavoidable deviations from normal operating schedules; individual requirements of passengers and crew are not permitted</p> <p>d. messages concerning non-routine landings</p> <p>e. messages concerning aircraft parts and materials urgently required</p> <p>f. messages concerning operation or maintenance of facilities essential for the safety or regularity of aircraft operations.</p> |
| <p>(7) <i>Državni telegram</i> odnosi se na poruke koje državni suvereni ili osobe istoga ranga predaju iz zrakoplova u letu.</p>  | <p>(7) <i>State telegrams</i> are messages transmitted by sovereigns or persons of equal rank who are on board an aircraft.</p>  |

*Napomena:*

*Redosljed navedenih poruka ujedno predstavlja i redosljed njihovog prioriteta.*

*Letačko operativne poruke i državni telegrami predaju se na frekvencijama Službe letnih informacija (FIS) ili na drugim frekvencijama koje odredi nadležna kontrola zračnog prometa kako bi se izbjeglo ometanja rada kontrole zračnog prometa.*

*Note:*

*For the messages listed, the sequence indicated is decisive for the priority.*

*Flight regularity messages and state telegrams shall be transmitted on frequencies of the Flight Information Service (FIS) or on another frequency assigned by appropriate ATS unit in order to avoid interference with air traffic control.*

## **2.4 Predaja slova ICAO abecede**

Riječi napisane u donjoj tablici moraju se koristiti za sricanje slova. Naglašeni slogovi istaknuti su masnim slovima.

### **2.4.1 Sricanje slova u radiotelefoniji**

Kako bi se ubrzala komunikacija, slova se ne moraju sricati jedino u slučaju kada ne postoji nikakva opasnost negativnog utjecaja na prijam i razumljivost poruke.

## **2.4 Transmission of letters**

The words in the table below shall be used when using the phonetic spelling. Syllables to be emphasised are in bold.

### **2.4.1 The radiotelephony spelling alphabet**

To expedite communications the use of phonetic spelling should be dispensed with if there is no risk of this affecting correct reception and intelligibility of the message.

Tablica/Table 2: Tablica izgovora ICAO abecede/Radiotelephony spelling alphabet

Slovo Letter	Riječ Word	Približan izgovor Approximate pronunciation	Hrvatski izgovor Croatian pronunciation
<b>A</b>	Alpha	[ˈɒlfə]	<b>AL FA</b>
<b>B</b>	Bravo	[ˈbravə]	<b>BRA VO</b>
<b>C</b>	Charlie	[ˈtʃɑːli]	<b>ČAR LI</b>
<b>D</b>	Delta	[ˈdeltə]	<b>DEL TA</b>
<b>E</b>	Echo	[ˈekə]	<b>EK O</b>
<b>F</b>	Foxtrot	[ˈfɒkstrot]	<b>FOKS TROT</b>
<b>G</b>	Golf	[ˈgɒlf]	<b>GOLF</b>
<b>H</b>	Hotel	[ˈhəʊtel]	<b>HO TEL</b>
<b>I</b>	India	[ˈɪndiə]	<b>IN DIJA</b>
<b>J</b>	Juliett	[ˈdʒuːliət]	<b>DŽU LI JET</b>
<b>K</b>	Kilo	[ˈkiːlə]	<b>KI LO</b>
<b>L</b>	Lima	[ˈliːmə]	<b>LI MA</b>
<b>M</b>	Mike	[ˈmaɪk]	<b>MAJK</b>
<b>N</b>	November	[ˈnəʊvembə]	<b>NO VEM BE</b>
<b>O</b>	Oscar	[ˈɒskə]	<b>OS KA</b>
<b>P</b>	Papa	[ˈpɑːpə]	<b>PA PA</b>
<b>Q</b>	Quebec	[kwɪˈbeɪk]	<b>KVI BEK</b>
<b>R</b>	Romeo	[ˈrəʊmiəʊ]	<b>RO MIO</b>
<b>S</b>	Sierra	[ˈsiːərə]	<b>SIJE RA</b>
<b>T</b>	Tango	[ˈtæŋɡəʊ]	<b>TEN GO</b>
<b>U</b>	Uniform	[ˈjuːnɪfɔːm]	<b>JUNI FOM</b>
<b>V</b>	Victor	[ˈvɪktə]	<b>VIK TOR</b>
<b>W</b>	Whiskey	[ˈwɪski]	<b>VIS KI</b>
<b>X</b>	X-ray	[ˈeksreɪ]	<b>EKS REJ</b>
<b>Y</b>	Yankee	[ˈjæŋki]	<b>JEN KI</b>
<b>Z</b>	Zulu	[ˈzulu]	<b>ZULU</b>

**Napomena:**

Normirane ICAO kratice koje su dio poruka upućenih radiopostajama u zrakoplovu, obično se koriste kao cjelovite riječi ili fraze koje te kratice predstavljaju u korištenom jeziku, osim kada se radi o kraticama koje su zbog frekvencije uporabe i uobičajene prakse poznate zrakoplovnom osoblju.

Neke kratice mogu se izgovarati tako da se ne koristi ICAO abeceda nego da se pojedinačno izgovaraju slova koja ih čine, npr. ATC, FIR, IFR, IMC, NDB, VFR, VMC, VOR ili Q-grupa npr. QNH, QFE, QDM, QDR, QTE itd.

**Note:**

Approved ICAO abbreviations contained in messages to be transmitted to aircraft stations should normally be converted into the unabbreviated words or phrases which these abbreviations represent in the language used, except for those which, owing to frequent and common practice, are generally understood by aeronautical personnel.

Some abbreviations may be spoken using their constituent letters rather than the spelling alphabet, for example: ATC, FIR, IFR, IMC, NDB, VFR, VMC, VOR or Q-Groups e.g. QNH, QFE, QDM, QDR, QTE etc.

#### 2.4.2 Načela prema kojima se vodi identifikacija ruta ATS koje nisu standardne odlazne i dolazne rute

- a. Upotreba oznaka ruta ATS u komunikacijama
- 1) U govornim komunikacijama osnovno se slovo oznake mora izgovarati u skladu s abecedom za sricanje kako je definirano u Tablici 2.
  - 2) Kada se upotrebljavaju prefiksi K, U ili S, oni se u govornoj komunikaciji moraju izgovarati kako slijedi:  
  
K – KOPTER  
U – UPPER  
S – SUPERSONIC
- b. Riječ 'kopter' mora se izgovarati kao u riječi 'helikopter', a riječi 'upper' i 'supersonic' kao u engleskom jeziku.

#### 2.4.3 Značajne točke

Za upućivanja prema značajnim točkama u govornim komunikacijama obično se mora upotrebljavati zemljopisno ime ako je značajna točka označena lokacijom radionavigacijskih sredstava ili jedinstveno 'kodno ime' koje se sastoji od pet slova i može se izgovoriti ako je riječ o značajnim točkama koje nisu označene lokacijom radionavigacijskih sredstava. Ako se ne upotrebljava zemljopisno ime lokacije radionavigacijskih sredstava, isto se mora zamijeniti kodiranom oznakom koja se, u govornim komunikacijama mora izgovarati u skladu s abecedom za izgovor.

#### 2.4.4 Upotreba oznaka za standardne instrumentalne odlazne i dolazne rute

U govornim komunikacijama oznake za standardne instrumentalne odlazne i dolazne rute moraju se upotrebljavati na govornom jeziku.

#### 2.5 Predaja brojeva

Kada je jezik komunikacije engleski, brojevi se izgovaraju na način naveden u tablici ispod:

*Napomena:*

*Naglašeni slogovi napisani su velikim slovima: npr. dva sloga u riječi ZE-RO jednako su naglašena, dok je u riječi FOW-er naglašen prvi slog.*

#### 2.4.2 Principles governing the identification of ATS routes and other than standard departure and arrival routes

- a. Use of ATS route designators in communications
- 1) In voice communications, the basic letter of a designator shall be spoken in accordance with the spelling alphabet as defined in Table 2.
  - 2) Where the prefixes K, U or S are used, they shall, in voice communications, be spoken as follows:  
  
K – KOPTER  
U – UPPER  
S – SUPERSONIC
- b. The word 'kopter' shall be pronounced as in the word 'helicopter' and the words 'upper' and 'supersonic' as in the English language.

#### 2.4.3 Significant points

Normally, the plain language name for significant points marked by the site of a radio navigation aid, or the unique five-letter pronounceable 'name-code' for significant points not marked by the site of a radio navigation aid, shall be used to refer to the significant point in voice communications. If the plain language name for the site of a radio navigation aid is not used, it shall be replaced by the coded designator which, in voice communications, shall be spoken in accordance with the spelling alphabet.

#### 2.4.4 Use of designators for standard instrument departure and arrival routes

The plain language designator for standard instrument departure or arrival routes shall be used in voice communications.

#### 2.5 Transmission of numbers

When the language used for communication is English, numbers shall be transmitted using the following pronunciation:

*Note:*

*The syllables printed in capital letters are to be stressed; for example, the two syllables in ZE-RO are given equal emphasis, whereas the first syllable of FOW-er is given primary emphasis.*

Tablica/Table 3: Predaja brojeva/Transmission of numbers

Hrvatski Croatian	Brojke ili znakovi Numeral or numeral element	Engleski English
NU LA	<b>0</b>	ZE RO
JE DAN	<b>1</b>	WUN
DVA	<b>2</b>	TOO
TRI	<b>3</b>	TREE
ČE TIRI	<b>4</b>	FOW-er
PET	<b>5</b>	FIFE
ŠEST	<b>6</b>	SIX
SE DAM	<b>7</b>	SEV-en
O SAM	<b>8</b>	AIT
DE VET	<b>9</b>	NIN-er
STO	<b>100</b>	HUN-DRED
TI SU ĆA	<b>1000</b>	TOU-SAND
TOČKA	<b>POINT / DECIMAL</b>	POINT/DAY-SEE-MAL

PRIMJER / EXAMPLE:

Numeral element	Transmitted as
Ma 0.72	Mach <b>point</b> seven two
8.33	eight <b>point</b> three three
11.5NM	distance one one <b>point</b> five miles
135.050	one three five <b>decimal</b> zero five zero

- |   |  |
|---|--|
| <p>(1) Svi brojevi, koji se upotrebljavaju u predaji pozivnog znaka zrakoplova, smjera leta, uzletno-sletne staze, smjera i brzine vjetra moraju se predavati tako da se izgovara svaka znamenka zasebno.</p>   | <p>(1) All numbers, used in the transmission of aircraft call sign, headings, runway, wind direction and speed shall be transmitted by pronouncing each digit separately.</p>  |
| <p>(a) Razine leta moraju se izgovarati svaka znamenka zasebno, osim u slučaju razina leta u cijelim stoticama.</p>   | <p>(a) Flight levels shall be transmitted by pronouncing each digit separately, except for the case of flight levels in whole hundreds.</p>  |
| <p>(b) Postavke visinomjera moraju se izgovarati svaka znamenka zasebno, osim u slučaju postavke od 1 000 hPa, koja se predaje kao TISUĆA.</p>  | <p>(b) The altimeter setting shall be transmitted by pronouncing each digit separately, except for the case of a setting 1 000 hPa, which shall be transmitted as 'ONE THOUSAND'.</p>  |
| <p>(c) Svi brojevi koji se upotrebljavaju u predaji kodova transpondera moraju se izgovarati svaka znamenka zasebno osim što se, ako kodovi transpondera sadržavaju samo cijele tisućice, te informacije predaju izgovaranjem znamenke broja tisućica nakon koje se izgovara riječ TISUĆA.</p>  | <p>(c) All numbers used in the transmission of transponder codes shall be transmitted by pronouncing each digit separately except that, when the transponder codes contain whole thousands only, the information shall be transmitted by pronouncing the digit in the number of thousands followed by the word 'THOUSAND'.</p>           |
| <p>(2) Svi brojevi koji se upotrebljavaju u predaji ostalih informacija, osim onih opisanih u točki (a)(1), moraju se izgovarati svaka znamenka zasebno, osim što se svi brojevi koji sadržavaju cijele stotice i cijele tisućice predaju izgovaranjem svake znamenke u broju stotica ili tisućica nakon čega slijedi riječ STO odnosno TISUĆA.</p> | <p>(2) All numbers used in transmission of other information than those described in point (a)(1) shall be transmitted by pronouncing each digit separately, except that all numbers containing whole hundreds and whole thousands shall be transmitted by pronouncing each digit in the number of hundreds or thousands followed by</p> |

Kombinacije tisućica i cijelih stotica predaju se tako da se izgovara svaka znamenka u broju, a iza toga slijedi riječ TISUĆA za tisućice odnosno riječ STO za stotice.

the word 'HUNDRED' or 'THOUSAND'. Combinations of thousands and whole hundreds shall be transmitted by pronouncing each digit in the number of thousands followed by the word THOUSAND followed by the number of hundreds followed by the word HUNDRED.

(3) Kada postoji potreba za razjašnjenjem broja prenesenog u cijelim tisućicama i/ili stoticama, taj se broj mora izgovarati svaka znamenka zasebno.

(3) In cases where there is a need to clarify the number transmitted as whole thousands and/or whole hundreds, the number shall be transmitted by pronouncing each digit separately.

Tablica/Table 4: Primjeri predaje brojeva/Examples of transmission of numbers

<i>aircraft call signs / pozivni znak zrakoplova</i>	<i>transmitted as / predaje se</i>
CCA 238	Air China <b>two three eight</b>
OAL 242	Olympic <b>two four two</b>
<i>flight levels / razina leta</i>	<i>transmitted as</i>
FL 180	flight level <b>one eight zero</b>
FL 200	flight level <b>two hundred</b>
<i>headings / smjer</i>	<i>transmitted as</i>
100 degrees	heading <b>one zero zero</b>
080 degrees	heading <b>zero eight zero</b>
<i>wind direction and speed / smjer i brzina vjetra</i>	<i>transmitted as</i>
200 degrees 70 knots	wind <b>two zero zero</b> degrees <b>seven zero</b> knots
160 degrees 18 knots gusting 30 knots	wind <b>one six zero</b> degrees <b>one eight</b> knots gusting <b>three zero</b> knots
<i>transponder codes / transponder</i>	<i>transmitted as</i>
2000	squawk <b>two thousand</b>
4200	squawk <b>four two zero zero</b>
<i>runway / uzletno sletna staza</i>	<i>transmitted as</i>
27	runway <b>two seven</b>
30	runway <b>three zero</b>
<i>altimeter setting / postavke visinomjera</i>	<i>transmitted as</i>
1 000	QNH <b>one thousand</b>
1100	QNH <b>one one zero zero</b>
<i>altitude / visina leta</i>	<i>transmitted as</i>
800	<b>eight hundred</b>
3 400	<b>three thousand four hundred</b>
12 000	<b>one two thousand</b>
<i>cloud height / visina podnice oblaka</i>	<i>transmitted as</i>
2 200	<b>two thousand two hundred</b>
4 300	<b>four thousand three hundred</b>
<i>visibility / vidljivost</i>	<i>transmitted as</i>
1 000	visibility <b>one thousand</b>
700	visibility <b>seven hundred</b>
750	visibility <b>seven five zero</b>
<i>runway visual range/ vidljivost uzduž staze</i>	<i>transmitted as</i>
600	RVR <b>six hundred</b>
1 700	RVR <b>one thousand seven hundred</b>

### 2.5.1 Izuzeci od pravila prilikom predaje brojeva:

- (i) Kada se informacije o relativnom smjeru prema nekom objektu ili prometu u konfliktu daju u obliku brojki na satu s 12 odjeljaka ta se informacija mora davati izgovaranjem brojki u obliku DESET SATI ili JEDANAEST SATI.
- (ii) upute za zaokret od 360° izgovaraju se 'Napravite jedan tristošezdeset u desno/lijevo.'
- (iii) upute za zaokret od 180° izgovaraju se 'Napravite lijevi/desni zaokret od stoosamdeset.'
- (iv) vidljivost 9999 prilikom predaje METAR informacija izgovara se *DESET*.

### 2.5.2 Izgovaranje frekvencije

Prilikom identificiranja frekvencije izgovara se svih šest znamenki bez obzira radi li se o 25 kHz ili 8.33 kHz. Prve četiri znamenke izgovaraju se jedino u slučaju kada su zadnje dvije znamenke nula. Samo se u frekvencijama 'TOČKA' izgovara 'DECIMAL'.

PRIMJER / EXAMPLE:

*Frequency*  
118.000  
118.025  
118.005  
118.010

### 2.5.3 Predaja vremena

Prilikom predaje vremena (sati i minute) obično se izgovaraju samo minute. Svaka znamenka izgovara se odvojeno. Međutim, ako postoji mogućnost zabune treba izgovoriti i brojku koja se odnosi na sat.

U zrakoplovnoj pokretnoj komunikaciji koristi se koordinirano univerzalno vrijeme (UTC).

Početak dana označava se kao 0000, a kraj kao 2359.

PRIMJER / EXAMPLE:

*Time*  
0920  
1643

### 2.5.1 Exceptions to the transmission of numbers:

- (i) When providing information regarding the relative bearing to an object or to conflicting traffic in terms of the 12-hour clock, the information shall be given pronouncing the digits together such as 'TEN O'CLOCK' or 'ELEVEN O'CLOCK'.
- (ii) instruction to fly a 360° turn shall be transmitted as "Make one three-sixty to the right/left".
- (iii) instruction to make a 180° turn shall be transmitted as "Make one left/right one-eighty (turn)".
- (iv) visibility 9999 in transmission of METAR information is pronounced *TEN*.

### 2.5.2 Transmission of frequencies

All six figures shall be used when identifying frequencies irrespective of whether they are 25 kHz or 8.33 kHz. Exceptionally, when the final two digits of the frequency are both zero, only the first four digits need be given. In frequencies a decimal point is indicated by the word 'DECIMAL'.

*Transmitted as*

ONE ONE EIGHT DECIMAL ZERO  
ONE ONE EIGHT DECIMAL ZERO TWO FIVE  
ONE ONE EIGHT DECIMAL ZERO ZERO FIVE  
ONE ONE EIGHT DECIMAL ZERO ONE ZERO

### 2.5.3 Transmission of time

When transmitting time, only the minutes of the hour should normally be required. Each digit should be pronounced separately. However, the hour should be included when any possibility of confusion is likely to result.

In the aeronautical mobile service, Coordinated Universal Time (UTC) shall be used.

The beginning of the day shall be designated as 0000, the end as 2359.

*Transmitted as*

TWO ZERO or ZERO NINE TWO ZERO  
FOUR THREE or ONE SIX FOUR THREE

### 2.5.3.1 Provjera vremena

Piloti mogu tražiti provjeru vremena od nadležne kontrole zračnog prometa. Provjera vremena izražava se na najbližu minutu.

### 2.5.3.1 Time check

Pilots may check the time with the appropriate ATS unit. Time checks shall be given to the nearest minute.

PRIMJER / EXAMPLE:

A: (aircraft call sign) REQUEST TIME CHECK  
G: (aircraft call sign) TIME 0611

### 2.5.4 Predaja razine

Razine se izražavaju sukladno postavkama visinomjera.

Kada se razina predaje u odnosu na QNH (apsolutna visina) ili QFE (visina) iza vrijednosti koristi se riječ STOPA.

Kada se razina predaje u odnosu na specifičnu vrijednost tlaka od 1013,25 hPa, iza riječi RAZINA LETA dolazi broj.

### 2.5.4 Transmission of levels

Levels shall be reported according to altimeter settings.

When the level of an aircraft is reported in relation to QNH (altitude) or QFE (height), the level value shall be followed by the word FEET.

When the level of an aircraft is reported in relation to the standard atmospheric pressure 1013.25 hPa, the words FLIGHT LEVEL shall be followed by the number.

PRIMJER / EXAMPLE:

FL 200  
FL 110  
A 7000 FT

FLIGHT LEVEL TWO HUNDRED  
FLIGHT LEVEL ONE ONE ZERO  
[ALTITUDE] SEVEN THOUSAND FEET

### 2.6 Standardne riječi i fraze

U radiotelefonskoj komunikaciji koriste se u tablici navedene riječi i fraze, a one imaju sljedeća značenja:

### 2.6 Standard words and phrases

The following words and phrases shall be used in radiotelephony communications as appropriate and shall have the meaning given below:

Phrase Fraza	Meaning Značenje
ACKNOWLEDGE POTVRDITE	"Let me know that you have received and understood this message." "Potvrdite da ste primili i razumjeli poruku."
AFFIRM DA	"Yes" "Da"
APPROVED ODOBRENO	"Permission for proposed action granted." "Dozvola za traženi postupak odobrena."
BREAK PREKID	"I hereby indicate the separation between the portions of the message." "Ovime označavam razdvajanje dijelova poruke."
BREAK BREAK PREKID PREKID	"I hereby indicate the separation between messages transmitted to different aircraft in a very busy environment." "Ovim naglašavam odvajanje poruka prosljeđenih različitim zrakoplovima u vrlo gustom prometu."

Phrase Fraza	Meaning Značenje
CANCEL PONIŠTITE	"Annul the previously transmitted clearance." "Poništite prethodno dodijeljeno odobrenje."
CHECK PROVJERITE	"Examine a system or procedure." "Provjerite sustav ili postupak."
CLEARED SLOBODNO /ODOBRENO /DOZVOLJENO	"Authorized to proceed under the conditions specified." "Odobreno nastaviti prema utvrđenim uvjetima."
CONFIRM POTVRDITE	"I request verification of: ( <i>clearance, instruction, action, information</i> )" "Tražim verifikaciju: ( <i>odobrenja, upute, radnje, informacije</i> )"
CONTACT POZOVITE	"Establish communications with ..." "Uspostavite radiokomunikaciju s ..."
CORRECT TOČNO	"True" or "Accurate" "Točno"
CORRECTION ISPRAVAK	"An error has been made in this transmission ( <i>or message indicated</i> ). The correct version is ..." "Učinjena je pogreška u predaji, ispravna inačica je ..."
DISREGARD ZANEMARITE	"Ignore." "Zanemarite."
HOW DO YOU READ KAKO ČUJETE	"What is the readability of my transmission?" "Kakva je čujnost moje predaje/postaje?"
I SAY AGAIN PONAVLJAM	"I repeat for clarity or emphasis." "Ponavljam radi bolje razumljivosti ili naglašavanja"
MAINTAIN ZADRŽITE	"Continue in accordance with the condition(s) specified" or in its literal sense, e.g. "Maintain VFR." "Nastavite u skladu s navedenim uvjetom (uvjetima)" ili u doslovnom smislu, npr. "Zadržite VFR."
MONITOR SLUŠAJTE	"Listen out on (frequency)." "Slušajte/pratite na (frekvenciji)."
NEGATIVE NE/NEMATE DOPUŠTENJE/NIJE TOČNO/NIJE U STANJU	"No" or "Permission not granted" or "That is not correct" or "Not capable". "Ne" ili "Nemate dopuštenje" ili "To nije točno" ili "Nisam u stanju."
OVER PRIJAM	"My transmission is ended and I expect a response from you." "Ova predaja je završena i očekujem odgovor."

Phrase Fraza	Meaning Značenje
OUT KRAJ/GOTOVO	"This exchange of transmission is ended and no response is expected." "Izmjena predaje je završena i ne očekujem odgovor."
READ BACK PONOVI TE DOSLOVCE	"Repeat all, or the specified part, of this message back to me exactly as received." "Doslavno ponovite cijelu, ili određeni dio, primljene poruke."
RECLEARED IZMIJENJENO ODOBRENJE	"A change has been made to your last clearance and this new clearance supersedes your previous clearance or part thereof." "Izmijenjeno je vaše posljednje odobrenje i ovo novo ukida prethodno ili jedan njegov dio."
REPORT JAVITE	"Pass me the following information..." "Javite traženu informaciju..."
REQUEST TRAŽIM	"I should like to know..." or "I wish to obtain..." "Tražim..." ili "Molim dopuštenje..."
ROGER PRIMIO	"I have received all of your last transmission." "Primio sam u potpunosti vašu posljednju predaju."
SAY AGAIN PONOVI TE	"Repeat all, or the following part, of your last transmission." "Ponovite cijelu ili sljedeći dio vaše posljednje predaje."
SPEAK SLOWER GOVORITE SPORIJE	"Reduce your rate of speech." "Smanjite brzinu govora."
STANDBY PRIČEKAJTE	"Wait, and I will call you." "Čekajte, pozvat ću vas."
UNABLE NE MOGU	"I cannot comply with your request, instruction, or clearance." "Ne mogu postupiti prema traženom, uputi ili odobrenju."
WILCO POSTUPIT ĆU	"I understand your message and will comply with it." (Abbreviation for "will comply") "Razumijem vašu poruku i postupit ću u skladu s njom."
WORDS TWICE RIJEČI DVAPUT	a) <i>As a request:</i> "Communication is difficult. Please send every word, or group of words, twice." b) <i>As information:</i> "Since communication is difficult, every word, or group of words, in this message will be sent twice." a) Kao <i>zahtjev:</i> "Komunikacija je otežana. Molim dvaput izrecite svaku riječ ili skupinu riječi." b) Kao <i>informacija:</i> "S obzirom da je komunikacija otežana svaka riječ ili skupina riječi bit će izrečena dvaput."

**Napomena:**

Fraza **GO AHEAD** se ne koristi. Umjesto nje izgovaranje pozivnog znaka radiopostaje koju se zove smatra se pozivom za nastavak emitiranja od strane radiopostaje koja poziva.

**Note:**

The phrase **GO AHEAD** has been deleted, in its place the use of the calling aeronautical station's call sign shall be considered the invitation to proceed with transmission by the station calling.

## 2.7 Pozivni znak

### 2.7.1 Pozivni znak zemaljske radiopostaje

Zemaljska radiopostaja identificira se imenom lokacije iza koje slijedi ime jedinice ili službe kontrole zračnog prometa.

## 2.7 Call signs

### 2.7.1 Call signs for aeronautical stations

Aeronautical stations are identified by the name of the location followed by a suffix. The suffix indicates the type of unit or service provided.

Jedinica ili služba	Pozivni znak	Unit or service	Call sign suffix
Centar oblasne kontrole	KONTROLA	Area control centre	CONTROL
Radar (općenito)	RADAR	Radar (in general)	RADAR
Prilazna KZP	PRILAZNA	Approach control	APPROACH
Aerodromska KZP	TORANJ	Aerodrome control	TOWER
Služba letnih informacija	INFORMACIJE	Flight information service	INFORMATION
Izdavanje odobrenja	DELIVERY	Clearance delivery	DELIVERY
Zemaljska KZP	GROUND	Surface movement control	GROUND
Kompanijska/aerodromska operativna služba	OPERATIONS	Company/Aerodrome Handling	OPERATIONS
Zrakoplovna/zemaljska radiopostaja	RADIO	Aeronautical station	RADIO
<i>Napomena*:</i> Primjeri zemaljskih radiopostaja koje se u Hrvatskoj ne koriste napisane su na engleskom jeziku u stupcu desno.		<i>Note*:</i> Currently not used in Croatia:	
		Approach control radar arrivals	ARRIVAL
		Approach control radar departures	DEPARTURES
		Precision approach radar	PRECISION
		Direction-finding station	HOMER
		Apron control	APRON
		Company dispatch	DISPATCH

#### *Napomena\*\*:*

Kada je komunikacija uspješno uspostavljena i ako nema opasnosti od zabune, može se ispustiti ime lokacije ili ime jedinice / službe kontrole zračnog prometa.

#### *Note\*\*:*

When satisfactory communication has been established, and provided that it will not be confusing, the name of the location or the call sign suffix may be omitted.

### 2.7.2 Pozivni znak radiopostaje zrakoplova

U radiotelefonskoj komunikaciji pozivni znak radiopostaje zrakoplova pripada jednom od sljedećih tipova:

tip (a)	Znakovi koji odgovaraju registracijskoj oznaci zrakoplova
tip (b)	Radiotelefonska oznaka operatora zrakoplova zajedno s četiri posljednje oznake iz registracijske oznake zrakoplova
tip (c)	Radiotelefonska oznaka operatora zrakoplova iza koje slijedi brojana oznaka leta

Pozivni znak za vojne zrakoplove sastoji se od najviše sedam znakova.

#### **Napomena:**

Naziv proizvođača zrakoplova ili tipa zrakoplova može se koristiti kao radiotelefonski prefiks za pozivni znak tipa (a) kako je naznačeno u tablici.

### 2.7.2 Radiotelephony call signs for aircraft

An aircraft radiotelephony call sign shall be one of the following types:

type (a)	the characters corresponding to the registration marking of the aircraft
type (b)	the telephony designator of the aircraft operator followed by the last four characters of the registration marking of the aircraft
type (c)	the telephony designator of the aircraft operator, followed by the flight identification

Call signs for military aircraft contain a maximum of seven characters.

#### **Note:**

The name of the aircraft manufacturer or name of aircraft model may be used as a radiotelephony prefix to the type (a) above.

### 2.7.2.1 Skraćivanje pozivnog znaka radiopostaje zrakoplova

Nakon uspješne uspostave komunikacije, te pod uvjetom da ne može doći do zabune, gore navedeni pozivni znakovi radiopostaje zrakoplova mogu se skraćivati (vidjeti tablicu ispod). Pilot zrakoplova smije koristiti skraćeni pozivni znak svoje radiopostaje isključivo nakon što mu se na takav način obrati zemaljska radiopostaja.

tip (a)	Prva oznaka registracije i najmanje dvije posljednje oznake pozivnog znaka.
tip (b)	Radiotelefonska oznaka dodijeljena operateru zrakoplova zajedno s najmanje dvije posljednje oznake pozivnog znaka.
tip (c)	Nema skraćenog oblika.

### 2.7.2.1 Abbreviated aircraft call signs

After satisfactory communication has been established, and provided that no confusion is likely to occur, aircraft call signs specified above may be abbreviated (see table below). An aircraft shall use its abbreviated call sign only after it has been addressed in this manner by the aeronautical station.

type (a)	the first character of the registration and at least the last two characters of the call sign;
type (b)	the telephony designator of the aircraft operator, followed by at least the last two characters of the call sign;
type (c)	no abbreviated form.

PRIMJER / EXAMPLE:

	Type / tip (a)			Type / tip (b)	Type / tip (c)
<b>Full call sign/ Puni pozivni znak</b>	N 57826	CESSNA FABCD	CITATION FABCD	VARIG PVMA	SCANDINAVIAN 937
<b>Abbreviated call sign /Skraćeni pozivni znak</b>	N 26 or N 826	CESSNA CD or CESSNA BCD	CITATION CD or CITATION BCD	VARIG MA or VARIG VMA	No abbreviated form/ Nema skraćenog oblika

### 2.7.2.2 Promjena pozivnog znaka

Tip radiotelefonskog pozivnog znaka ne smije se mijenjati tijekom leta osim privremeno prema uputi jedinice ATC izdanoj radi sigurnosti. Osim radi sigurnosti zrakoplovu se tijekom uzlijetanja, posljednjeg dijela završnog prilazanja i zaustavljanja nakon slijetanja ne smije upućivati bilo kakav prijenos.

PRIMJER / EXAMPLE:

G: CHANGE YOUR CALL SIGN TO (new call sign) [(UNTIL FURTHER ADVISED)]

Prilikom promjene pozivnog znaka, radiopostaja zrakoplova bit će informirana da se u trenutku predaje drugoj jedinici kontrole zračnog prometa mora vratiti na pozivni znak naznačen u planu leta, osim u slučaju kada je promjena pozivnog znaka unaprijed koordinirana s nadležnom jedinicom.

PRIMJER / EXAMPLE:

G: REVERT TO FLIGHT PLAN CALL SIGN (call sign) AT (significant point)

### 2.7.2.2 Change of aircraft call sign

An aircraft shall not change the type of its radiotelephony call sign during flight except temporarily on the instruction of an ATC unit in the interests of safety. Except for reasons of safety no transmission shall be directed to an aircraft during takeoff, during the last part of the final approach or during the landing roll.

When a call sign of an aircraft is being changed, the aircraft station shall be advised to revert to the call sign indicated by the flight plan when it is transferred to another ATC unit, except when the call sign change has been coordinated with the unit concerned.

### 2.7.2.3 Gdje staviti pozivni znak radiopostaje zrakoplova

Nakon uspostavljene komunikacije pozivni znak radiopostaje zrakoplova predaje se na početku poruke, osim u slučaju ponavljanja (READ-BACK), kada dolazi na kraju poruke.

### 2.7.2.3 Where to place an aircraft call sign

After communication has been established aircraft call signs shall be transmitted at the beginning of a message; except in case of 'READ-BACK' when it shall be transmitted at the end of a message.

PRIMJER / EXAMPLE:

G: (aircraft call sign), REPORT HEADING  
A: (aircraft call sign), HEADING 270  
G: (aircraft call sign), TURN RIGHT HEADING 290  
A: TURNING RIGHT HEADING 290 (aircraft call sign)

### 2.7.2.4 Ukazivanje na kategoriju jake vrtložne turbulencije

Zrakoplovi u kategoriji vrtložne turbulencije *heavy* moraju uvijek prilikom uspostave radio-komunikacije s nadležnom kontrolom zračnog prometa svojem pozivnom znaku pridodati riječ 'HEAVY', a zrakoplovi A380 (A388) moraju pridodati riječ 'SUPER'.

### 2.7.2.4 Indication of heavy wake turbulence category

Aircraft in the heavy wake turbulence category shall include the word 'HEAVY' immediately after the aircraft call sign in the initial call to each ATS unit. For the A380 (A388) aircraft the word 'SUPER' shall be included after the call sign on initial contact only.

### 3 Radiotelefonska komunikacija

#### 3.1 Uspostava radiotelefonske komunikacije

3.1.1 Radiotelefonska komunikacija uspostavlja se na sljedeći način:

- (1) Početni poziv
  - a. pozivni znak radiopostaje s kojom se uspostavlja komunikacija
  - b. pozivni znak radiopostaje koja poziva
- (2) Odgovor na početni poziv
  - a. pozivni znak radiopostaje koja uspostavlja komunikaciju
  - b. pozivni znak radiopostaje koja odgovara

PRIMJER / EXAMPLE:

A: ZAGREB TOWER, (aircraft call sign)  
G: (aircraft call sign), ZAGREB TOWER

Kada je riječ o komunikacijskim prijenosima unutar jedne jedinice ATS, pozivni znak jedinice ATS može se izostaviti ako to odobri nadležno tijelo.

Nakon uspostave početnog poziva između radiopostaje zrakoplova i zemaljske radiopostaje, ATS jedinica može izostaviti svoj pozivni znak za svaki sljedeći komunikacijski prijenos, ako tako odobri nadležno tijelo.

**3.1.2** Kada se želi uspostaviti kontakt, radiotelefonska komunikacija započinje pozivom i odgovorom na poziv ali ako je sigurno da će pozvana postaja poziv primiti, radiopostaja koja poziva može prosljediti poruku ne čekajući odgovor pozivane radiopostaje.

*Napomena:*  
*Ne odnosi se na letove koji se obavljaju prema pravilima VFR letenja.*

PRIMJER / EXAMPLE:

A: ZAGREB RADAR, (aircraft call sign), FL 280, REQUEST DESCENT

### 3 Communications

#### 3.1 Establishment of R/T communications

3.1.1 Radio communications shall be established as follows:

- (1) Initial call
  - a. call sign of the radio station called
  - b. call sign of the calling radio station
- (2) Reply
  - a. call sign of the radio station calling
  - b. call sign of the replying radio station

For transfers of communication within one ATS unit, the call sign of the ATS unit may be omitted, when so authorised by the competent authority.

Where authorised by the competent authority, after the initial establishment of radiotelephony contact between an aircraft and an ATS unit, for subsequent transfers of communication within the same ATS unit, the ATS position being called need not reply with its call sign.

**3.1.2** Communications shall commence with a call and a reply when it is desired to establish contact, except that, when it is certain that the station called will receive the call, the calling station may transmit the message without waiting for a reply from the station called.

*Note:*  
*Does not apply to VFR flights.*

### Daljnje radiotelefonske komunikacije

- (1) Skraćeni radiotelefonski pozivni znakovi, kako je propisano u točki SERA.14050(b), moraju se upotrebljavati samo nakon što je komunikacija uspješno uspostavljena i pod uvjetom da se ne unosi zabuna. Zrakoplov mora upotrebljavati svoj skraćeni pozivni znak samo nakon što mu se na taj način obratila dotična zrakoplovna postaja.
- (2) Kada se izdaju i ponavljaju odobrenja ATC, kontrolori i piloti uvijek moraju dodavati pozivni znak zrakoplova na koji se to odobrenje primjenjuje. U ostalim se slučajevima kontinuirana dvosmjerna komunikacija nakon uspostave kontakta mora dopustiti bez daljnje identifikacije ili poziva sve do završetka kontakta.

#### 3.1.3 Promjena frekvencije

- (a) U zračnom prostoru u kojem se provodi radarska usluga prilikom svake promjene frekvencije pilot zrakoplova mora objaviti sljedeće:
1. pozivni znak jedinice kontrole zračnog prometa koju poziva
  2. pozivni znak zrakoplova i kategoriju vrtložne turbulencije (heavy/super)
  3. razinu, uključujući prolazne i odobrene razine ako se ne zadržava odobrena razina
  4. brzinu, ako ju je dodijelila kontrola zračnog prometa
  5. dodatne elemente, kako ih zahtijeva ANSP odgovoran za pružanje usluga i kako ih je odobrilo nadležno tijelo.
- (b) Piloti moraju dati informacije o razinama zaokružene na najbližih 30 m ili 100 stopa visinomjera zrakoplova.
- (c) Početni poziv aerodromskom kontrolnom tornju. Početni poziv zrakoplovima kojima se pruža aerodromska kontrola mora sadržavati:
1. oznaku jedinice ATS koju se poziva
  2. pozivni znak zrakoplova i kategoriju vrtložne turbulencije
  3. poziciju

PRIMJER / EXAMPLE:

A: ZAGREB RADAR (aircraft call sign) FL 310 MH.78  
A: ZAGREB TOWER (aircraft call sign) OUTER MARKER

### Subsequent radiotelephony communications

- (1) Abbreviated radiotelephony call signs, as prescribed in point SERA.14050(b) shall be used only after satisfactory communication has been established and provided that no confusion is likely to arise. An aircraft shall use its abbreviated call sign only after it has been addressed in this manner by the aeronautical station.
- (2) When issuing ATC clearances and reading back such clearances, controllers and pilots shall always add the call sign of the aircraft to which the clearance applies. For other than those occasions, continuous two-way communication after contact has been established shall be permitted without further identification or call until termination of the contact.

#### 3.1.3 Change of frequency

- (a) In radar airspace environment with every frequency change, the pilot shall report:
1. designation of the ATS unit being called
  2. aircraft call sign and wake turbulence category (heavy/super)
  3. level, including passing and cleared levels, if not maintaining the cleared level
  4. speed, if assigned by ATC
  5. additional elements, as required by the ANSP responsible for the provision of services and approved by the competent authority.
- (b) Pilots shall provide level information at the nearest full 30 m or 100 ft as indicated on the pilot's altimeter.
- (c) Initial call to aerodrome control tower. For aircraft being provided with aerodrome control service, the initial call shall contain:
1. the designation of the ATS unit being called
  2. call sign and wake turbulence category (heavy/super)
  3. position

**3.1.4** Ako primatelj ne razumije pozivni znak radiopostaje koja poziva, koristi frazu 'SAY AGAIN YOUR CALL SIGN'.

**3.1.4** If the call sign of the calling station is not understood, the phrase 'SAY AGAIN YOUR CALL SIGN' shall be used.

PRIMJER / EXAMPLE:

G: STATION CALLING PULA TOWER, SAY AGAIN YOUR CALL SIGN

**3.1.5** Ako radiopostaja nije sigurna je li poziv upućen njoj ili nije, na poziv se ne smije odgovarati već se mora čekati sljedeći jasniji poziv.

**3.1.5** In case a station is uncertain as to whether it has been called or not, this call shall not be answered but another clarifying call shall be awaited.

### **3.2 Višestruki poziv**

Radiopostaja u zrakoplovnoj pokretnoj komunikaciji može istodobno pozvati **više** radiopostaja. Pozvane radiopostaje moraju potvrditi prijam poruke istim redoslijedom kojim su pozivane.

### **3.2 Multiple call**

Stations in the aeronautical mobile service may simultaneously call **several** stations. Stations called in a multiple call shall acknowledge receipt of the message in the sequence used by the calling station.

*Napomena:*  
*Ne koristi se za emitiranje odobrenja KZP.*

*Note:*  
*Not used for transmission of ATC clearances.*

PRIMJER / EXAMPLE

G: CTN 380 - AZA 234 - DLH 424 MONITOR ATIS INFORMATION C

### **3.3 Opći poziv**

Radiopostaja u zrakoplovnoj pokretnoj komunikaciji može istodobno pozvati **sve** radiopostaje koje slušaju na istoj frekvenciji. Opći poziv počinje frazom 'ALL STATIONS' (SVIM POSTAJAMA) nakon čega slijedi pozivni znak radiopostaje koja emitira poziv. Nije potrebno potvrditi prijam općeg poziva.

### **3.3 General call**

Stations in the aeronautical mobile service may simultaneously call **all** stations maintaining listening watch on a frequency. A general call starts with the phrase 'ALL STATIONS' followed by the call sign of the transmitting station. An acknowledgment of a general call is not expected.

PRIMJER / EXAMPLE:

G: ALL STATIONS, ZAGREB TOWER ANTI-HAIL ACTIVITY SOUTH OF THE AERODROME COMPLETED

A: ALL STATIONS, (aircraft call sign), REQUEST ASSISTANCE (BOUND) FOR RIJEKA, RELAY THE MESSAGE

### **3.4 Potvrda prijama poruke**

**3.4.1** Zemaljska radiopostaja potvrđuje prijam poruke radiopostaje zrakoplova predajom pozivnog znaka radiopostaje zrakoplova i pozivnim znakom te zemaljske radiopostaje (ako se smatra potrebnim).

### **3.4 Acknowledgement of message receipt**

**3.4.1** An aeronautical station shall acknowledge the receipt of a message of an aircraft station by the transmission of the call sign of the aircraft station and if considered necessary, by the call sign of the aeronautical station.

PRIMJER / EXAMPLE:

A: (aircraft call sign) PASSING 4000 FEET CLIMBING [TO ALTITUDE] 8000 FEET  
G: (aircraft call sign) [unit call sign]

<b>3.4.2</b>	Radiopostaja zrakoplova mora potvrditi prijam poruke predajom vlastitog pozivnog znaka.	<b>3.4.2</b>	An aircraft station shall acknowledge the receipt of a message by the transmission of its own call sign.
<b>3.4.3</b>	<b>Kraj razgovora</b>  Radiotelefonsku komunikaciju mora završiti prijamna postaja ATS jedinice ili zrakoplov, upotrebljavajući svoj pozivni znak.	<b>3.4.3</b>	<b>End of conversation</b>  A radiotelephone conversation shall be terminated by the receiving ATS unit or the aircraft using its own call sign.
<b>3.5</b>	<b>Izdavanje odobrenja</b>	<b>3.5</b>	<b>Issue of clearance</b>
<b>3.5.1</b>	Kontrolori zračnog prometa trebaju izdavati odobrenja polako i jasno jer ih pilot mora zapisati, a na takav način se izbjegavaju nepotrebna ponavljanja. Kad god je to moguće rutna odobrenja treba proslijediti prije pokretanja motora zrakoplova. U svakom slučaju <b>kontrolori zračnog prometa izbjegavat će izdavanje odobrenja pilotu u trenutku kada je on zauzet složenim manevrima voženja, a nikako ne smiju emitirati odobrenja/poruke pilotu zrakoplova tijekom uzlijetanja, posljednjeg dijela završnog prilazanja i zaustavljanja nakon slijetanja.</b>	<b>3.5.1</b>	Air traffic controllers should pass a clearance slowly and clearly since the pilot needs to write it down and wasteful repetition will thus be avoided. Whenever possible, a route clearance should be passed to an aircraft before start up. In any case controllers <b>will avoid passing a clearance to a pilot engaged in complicated taxiing manoeuvres and on no occasion should a clearance/message be passed when the pilot is engaged in take-off, short final and landing roll manoeuvres.</b>
<b>3.5.2</b>	Rutno odobrenje <b>ne predstavlja</b> odobrenje za polijetanje sa ili ulazak na aktivnu uzletno-sletnu stazu. Riječi 'TAKE OFF' koriste se jedino kada zrakoplov ima odobrenje za uzlijetanje ili kada se prethodno izdano odobrenje za uzlijetanje poništava. U svim drugim slučajevima koriste se riječi 'DEPARTURE' ili 'AIRBORNE'.	<b>3.5.2</b>	An ATC route clearance is <b>not</b> an instruction to take off or enter an active runway. The words 'TAKE OFF' are used only when an aircraft is cleared for take-off or when cancelling a take-off clearance. At other times, the word 'DEPARTURE' or 'AIRBORNE' is used.
<b>3.6</b>	<b>Obaveza ponavljanja</b>	<b>3.6</b>	<b>Read-back requirements</b>
<b>3.6.1</b>	Strogost obaveze ponavljanja proizlazi iz mogućnosti nastanka ozbiljnih posljedica uslijed nesporazuma u predaji i prijemu odobrenja i uputa kontrole zračnog prometa. <b>Strogo pridržavanje procedure ponavljanja jamči ne samo da je primatelj pravilno primio odobrenje nego i da je odobrenje predano na željeni način.</b> Također služi kao provjera da će baš taj zrakoplov, a ne neki drugi, postupiti sukladno izdanom odobrenju.	<b>3.6.1</b>	The stringency of the read-back requirement is directly related to the possible seriousness of a misunderstanding in the transmission and receipt of ATC clearances and instructions. <b>Strict adherence to read-back procedures ensures not only that the clearance has been received correctly but also that the clearance was transmitted as intended.</b> It also serves as a check that the right aircraft, and only that aircraft, will take action on the clearance.
<b>3.6.2</b>	<b>Što podliježe ponavljanju?</b>  Posada zrakoplova ponovit će odobrenja i upute koje se predaju govorom, a odnose se na sigurnost. Ovo su dijelovi koji se uvijek moraju ponoviti:	<b>3.6.2</b>	<b>What shall be read back?</b>  The flight crew shall read back to the air traffic controller safety-related parts of ATC clearances and instructions which are transmitted by voice. The following items shall always be read back:

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>(i) rutna odobrenja koja izdaje kontrola zračnog prometa</li> <li>(ii) odobrenja i upute za ulazak, slijetanje, uzlijetanje, čekanje uz, prelazak, vožnju i povratnu vožnju po uzletno-sletnoj stazi, uključujući i uvjet iz uvjetnog odobrenja</li> <li>(iii) stazu u uporabi, postavke visinomjera, kodove sekundarnog radara, frekvenciju u slučaju dodjeljivanja nove frekvencije, smjer i brzinu leta, oznaku ATIS-a, SLOT te</li> <li>(iv) prijelaznu razinu bez obzira je li podatak prosljedio kontrolor ili je emitiran kao dio ATIS-a.</li> </ul> | <ul style="list-style-type: none"> <li>(i) ATC route clearances</li> <li>(ii) clearances and instructions to enter, land on, take off from, hold short of, cross, taxi and backtrack on any runway including the condition of a conditional clearance</li> <li>(iii) runway-in-use, altimeter settings, SSR codes, frequency in case of a newly assigned frequency, level instructions, heading and speed instructions, ATIS code letter, SLOT time, and</li> <li>(iv) transition levels, whether issued by the controller or contained in ATIS broadcasts.</li> </ul> |
|--|--|

### 3.6.3 Slušanje ponavljanja

Kontrolor zračnog prometa mora slušati ponovljenu poruku kako bi utvrdio da je posada zrakoplova točno primila odobrenje ili uputu, te će odmah ispraviti svako odstupanje u ponovljenoj poruci.

### 3.6.3 Listening to read-back

The controller shall listen to the read-back to ascertain that the clearance or instruction has been correctly acknowledged by the flight crew and shall take immediate action to correct any discrepancies revealed by the read back.

### 3.6.4 Uporaba fraze 'CORRECT'

Ispravno ponavljanje uvjetnog i rutnog odobrenja potvrđuje se emitiranjem pozivnog znaka radiopostaje zrakoplova i fraze 'CORRECT'.

### 3.6.4 Use of the phrase 'CORRECT'

Correct read-back of conditional clearances and ATC route clearances shall be acknowledged by the aircraft call sign and the phrase 'CORRECT'.

### 3.6.5 Netočno ponavljanje

Ako se provjerom ispravnosti ponavljanja opaze neispravni elementi, na kraju ponavljanja moraju se prenijeti riječi 'NEGATIVE I SAY AGAIN', a nakon toga i ispravna verzija dotičnih elemenata.

### 3.6.5 Incorrect read-back

If, in checking the correctness of a readback, incorrect items are noticed, the words 'NEGATIVE I SAY AGAIN' shall be transmitted at the conclusion of the readback followed by the correct version of the items concerned.

#### PRIMJER / EXAMPLE:

G: (aircraft call sign), DESCEND FL 130 CROSS ZAG AT FL 170 OR ABOVE  
 A: LEAVING FL 280 DESCENDING FL 130 TO CROSS ZAG AT FL 170 OR ABOVE,  
 (aircraft call sign)  
 G: (aircraft call sign), CORRECT

G: (aircraft call sign), DESCEND FL 130  
 A: LEAVING FL 280 DESCENDING FL 120, (aircraft call sign)  
 G: (aircraft call sign), NEGATIVE I SAY AGAIN DESCEND FL 130  
 A: DESCENDING FL 130, (aircraft call sign)  
 G: (aircraft call sign), CORRECT

<p><b>3.7 Postupanje u skladu s odobrenjima i uputama KZP-a</b></p> <p><b>3.7.1 Mogućnost postupanja</b></p> <p>Postaja zrakoplova mora potvrditi prijam drugih uputa korištenjem vlastitog pozivnog znaka i fraze 'WILCO'.</p> <p><b>3.7.2 Nemogućnost postupanja</b></p> <p>Ako postoji sumnja da pilot zrakoplova može postupiti u skladu s izdanim odobrenjem ili uputom, kontrolor zračnog prometa može dodati frazu 'IF UNABLE' te ponuditi alternativno odobrenje ili uputu. Ako u bilo kojem trenutku pilot dobije odobrenje ili uputu u skladu s kojom ne može postupiti, on o tome treba obavijestiti kontrolora zračnog prometa koristeći frazu 'UNABLE' (te navesti razlog).</p>	<p><b>3.7 Complying with ATC clearances and instructions</b></p> <p><b>3.7.1 Able to comply</b></p> <p>The aircraft station shall acknowledge the receipt of other instructions by using its own call sign and the phrase 'WILCO'.</p> <p><b>3.7.2 Unable to comply</b></p> <p>If there is a doubt as to whether a pilot can comply with an ATC clearance or instruction, the controller may follow the clearance or instruction by the phrase 'IF UNABLE' and subsequently offer an alternative. If at any time a pilot receives a clearance or instruction which cannot be complied with, that pilot should advise the controller using the phrase 'UNABLE' (and give the reasons).</p>
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PRIMJER / EXAMPLE:

G: (aircraft call sign) MAINTAIN MH.80  
A: UNABLE DUE TURBULENCE (aircraft call sign)

<p><b>3.7.3 Promptnost u postupanju</b></p> <p>Kada nadležna KZP želi da se bez odgađanja postupi u skladu s odobrenjem ili uputom, kontrolor će u svojoj poruci izreći riječ 'SAD' ili 'ODMAH'.</p> <p>Uporaba riječi 'SAD' kazuje da se treba postupiti u skladu s redovnim operativnim procedurama zrakoplova, no bez hitnosti.</p> <p>Uporaba riječi 'ODMAH' ukazuje na najviši stupanj hitnosti. U tim uvjetima piloti trebaju postupiti u skladu s odobrenjem ili uputom što je prije moguće vodeći računa o sigurnosti zrakoplova.</p>	<p><b>3.7.3 Prompt compliance</b></p> <p>If an ATS unit wishes to indicate that the clearance or instruction must be complied with at once, the controller's message will include the word 'NOW' or 'IMMEDIATELY'.</p> <p>Use of the word 'NOW' indicates that the instruction should be complied with in accordance with normal aircraft operating procedures, but without delay.</p> <p>Use of the word 'IMMEDIATELY' indicates that urgency exists. In such circumstances, the pilot should take action to comply with the instruction as soon as practicable, subject to the safety of the aircraft.</p>
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PRIMJER / EXAMPLE:

G: (aircraft call sign), REDUCE SPEED NOW 210 KTS  
A: REDUCING SPEED NOW 210 KTS, (aircraft call sign)

G: (aircraft call sign), LOW ALTITUDE WARNING, CHECK YOUR ALTITUDE IMMEDIATELY, QNH IS 1006 MINIMUM FLIGHT ALTITUDE IS 1500 FEET

G: (aircraft call sign), TURN RIGHT IMMEDIATELY, HEADING 160, TRAFFIC 11 O'CLOCK 4 MILES

### 3.8 Ispravci i ponavljanja

**3.8.1** Kada dođe do greške u predaji izriče se fraza 'CORRECTION', ponavlja se zadnja točna skupina informacija ili fraza, te se prosljeđuje točna verzija poruke.

PRIMJER / EXAMPLE:

G: (aircraft call sign) QNH 1001, CORRECTION QNH 1010

**3.8.2** Ako je ponavljanje cijele poruke najbolje rješenje, pošiljalatelj će izreći frazu 'CORRECTION I SAY AGAIN' prije nego što ponovo preda poruku.

**3.8.3** Ako prijamna postaja sumnja u ispravnost primljene poruke, mora se zahtijevati ponavljanje cijele poruke ili njezinog dijela. Ako je potrebno ponoviti poruku u cijelosti ili djelomično, riječi 'SAY AGAIN' koriste se na sljedeći način:

PRIMJER / EXAMPLE:

<i>Phrase</i>	<i>Meaning</i>
SAY AGAIN	Repeat entire message
SAY AGAIN ... (item)	Repeat specific item
SAY AGAIN ALL BEFORE... (the first word satisfactorily received)	Repeat part of message
SAY AGAIN ALL AFTER ... (the last word satisfactorily received)	Repeat part of message
SAY AGAIN ALL BETWEEN ... AND ...	Repeat part of message

### 3.9 Praćenje komunikacija/vrijeme rada

(a) Tijekom leta zrakoplov prati komunikacije kako to zahtijeva nadležno tijelo i ne prekida nadzor, osim zbog sigurnosnih razloga, a da o tome ne obavijesti relevantnu jedinicu ATS.

1. Zrakoplov na dugim prekomorskim letovima ili na letovima preko određenih područja nad kojima se zahtijeva opremljenost odašiljačem signala za lociranje u hitnim slučajevima (ELT), mora neprestano pratiti VHF frekvenciju za slučaj opasnosti 121,5 MHz, osim u razdobljima kada zrakoplov komunicira na drugim kanalima VHF-a ili kada se zbog ograničenja opreme smještene na zrakoplovu ili obaveza u pilotskoj kabini ne mogu istodobno pratiti dva kanala.

### 3.8 Corrections and repetitions

**3.8.1** When an error has been made in transmission, the word 'CORRECTION' shall be spoken, the last correct group or phrase repeated, and then the correct version transmitted.

**3.8.2** If a correction can best be made by repeating the entire message, the operator shall use the phrase 'CORRECTION I SAY AGAIN' before transmitting the message a second time.

**3.8.3** If the receiving station is in doubt as to the correctness of the message received, a repetition either in full or in part shall be requested. If repetition of a message either in full or in part is required, the words 'SAY AGAIN' shall be used as follows:

### 3.9 Communications watch/Hours of service

(a) During flight, aircraft shall maintain watch as required by the competent authority and shall not cease watch, except for reasons of safety, without informing the ATS unit concerned.

1. Aircraft on long over-water flights or on flights over designated areas over which the carriage of an emergency locator transmitter (ELT) is required, shall continuously guard the VHF emergency frequency 121,5 MHz, except for those periods when aircraft carry out communications on other VHF channels or when airborne equipment limitations or cockpit duties do not permit simultaneous guarding of two channels.

- |   |   |
|---|---|
| <p>2. Zrakoplov neprestano prati VHF frekvenciju za slučaj opasnosti od 121,5 MHz u područjima ili na rutama na kojima postoji mogućnost od presretanja zrakoplova ili drugih rizičnih situacija i takav je zahtjev utvrdilo nadležno tijelo.</p>   | <p>2. Aircraft shall continuously guard the VHF emergency frequency 121,5 MHz in areas or over routes where the possibility of interception of aircraft or other hazardous situations exists, and a requirement has been established by the competent authority.</p>  |
| <p>(b) Zrakoplovne postaje neprestano slušaju VHF kanal za hitne slučajeve na 121,5 MHz tijekom radnog vremena jedinica na kojima je on instaliran. Kada su dvije ili više takvih postaja smještene zajedno, taj se zahtjev ispunjava praćenjem kanala na 121,5 MHz na jednoj od njih.</p>  | <p>(b) Aeronautical stations shall maintain a continuous listening watch on VHF emergency channel 121,5 MHz during the hours of service of the units at which it is installed. Where two or more such stations are co-located, provision of 121,5 MHz listening watch at one of them shall meet that requirement.</p>   |
| <p>(c) Kada je nužno da zrakoplov ili jedinica ATS iz bilo kojih razloga prekine taj rad, oni, ako je moguće, o tome obavješćuju druge relevantne postaje i daju im vrijeme za koje se očekuje da će taj rad biti nastavljen. Kada se rad nastavi, o tome se obavješćuju ostale relevantne postaje. Kada je prekid rada nužno produljiti nakon vremena iz prvotne obavijesti, ako je moguće, šalje se ispravljeno vrijeme nastavka rada točno ili približno u to vrijeme.</p> | <p>(c) When it is necessary for an aircraft or ATS unit to suspend operation for any reason, it shall, if possible, so inform other stations concerned, giving the time at which it is expected that operation will be resumed. When operation is resumed, other stations concerned shall be so informed. When it is necessary to suspend operation beyond the time specified in the original notice, a revised time of resumption of operation shall, if possible, be transmitted at or near the time first specified.</p> |

### 3.10 Promjena frekvencije VHF komunikacija

### 3.10 Transfer of VHF communications

- |  |   |
|--|---|
| <p>(a) Odgovarajuća jedinica ATS mora obavijestiti zrakoplov da prijede s jedne radijske frekvencije na drugu u skladu s dogovorenim postupcima. Ako takve obavijesti nema, zrakoplov mora obavijestiti jedinicu ATS prije takve promjene.</p> | <p>(a) An aircraft shall be advised by the appropriate ATS unit to transfer from one radio frequency to another in accordance with agreed procedures. In the absence of such advice, the aircraft shall notify the ATS unit before such a transfer takes place.</p> |
| <p>(b) Ako je ANSP koji je odgovoran za pružanje usluga možda propisao, a nadležno tijelo odobrilo postupak uspostave i napuštanje VHF frekvencije, zrakoplov mora poslati informaciju o uspostavi ili napuštanju te frekvencije.</p>          | <p>(b) When establishing initial contact on, or when leaving, a VHF frequency, an aircraft shall transmit such information as may be prescribed by the ANSP responsible for the provision of services and approved by the competent authority.</p>                  |
| <p>(c) Prilikom prijenosa radiotelefonske komunikacije s jedne jedinice kontrole zračnog prometa na drugu, poruka mora sadržavati pozivni znak i frekvenciju nadležne jedinice.</p>  | <p>(c) When communications are transferred from an ATS unit to another, this message shall contain the unit call sign and frequency.</p>  |

#### PRIMJER / EXAMPLE

G: (aircraft call sign), CONTACT DUBROVNIK RADAR 123.6  
A: 123.6 (aircraft call sign)

**3.10.1** Ako nakon potvrde prijama poruke pilot više ne emitira nikakve poruke, može se zaključiti da je prijenos radiotelefonske komunikacije uspješan.

**3.10.1** If no further communication is received from the pilot after an acknowledgement, satisfactory transfer of communication may be assumed.

**3.10.2** Radiopostaja zrakoplova može primiti zahtjev da pričeka ('STAND BY') na frekvenciji u slučaju kada nadležna kontrola zračnog prometa namjerava inicirati radiotelefoniku komunikaciju u kratkom vremenu, kao i da sluša ('MONITOR') na frekvenciji na kojoj se emitiraju informacije.

**3.10.2** An aircraft station may be requested to 'STAND BY' on a frequency when it is intended that the ATS unit will initiate communications soon, and to 'MONITOR' a frequency on which information is being broadcast.

PRIMJER / EXAMPLE:

G: (aircraft call sign), STANDBY FOR ZAGREB RADAR 135.8  
A: 135.8 (aircraft call sign)

G: (aircraft call sign), MONITOR ATIS 124.575  
A: MONITORING 124.575 (aircraft call sign)

G: (aircraft call sign), MONITOR LUČKO RADIO 118.075 WITH SECOND STATION  
A: MONITORING 118.075 (aircraft call sign)

### **3.11 Posebni komunikacijski postupci**

#### **(a) Kretanje vozila**

Frazeologije za kretanje vozila, osim traktora za vuču, na manevarskoj površini moraju biti iste kao one koje se upotrebljavaju za kretanje zrakoplova, uz iznimku uputa za voženje po tlu, u kojem slučaju se u komunikaciji s vozilima riječ 'PROCEED' ('nastavite put') upotrebljava umjesto riječi 'TAXI' ('vozite po tlu').

**(b)** Operateri vozila koja se kreću ili se namjeravaju kretati po manevarskim površinama obavezni su ponoviti dijelove uputa koje se predaju govorom, a odnose se na sigurnost npr. upute za ulazak, čekanje uz, prelazak i kretanje po aktivnoj uzletno-sletnoj stazi ili stazi za vožnju.

**(c)** Kontrolor zračnog prometa mora slušati ponovljenu poruku kako bi utvrdio da je operater vozila točno primio uputu, te će odmah ispraviti svako odstupanje u ponovljenoj poruci.

#### **(d) Savjetodavna usluga u zračnom prometu**

Savjetodavna usluga u zračnom prometu ne izdaje 'odobrenja' nego samo 'savjete' i ako zrakoplovu predlaže neki niz radnji, mora upotrebljavati riječ 'advise (savjet/savjetujemo)' ili 'suggest (prijedlog/predlažemo)'.

### **3.11 Specific communication procedures**

#### **(a) Movement of vehicles**

Phraseologies for the movement of vehicles, other than tow-tractors, on the manoeuvring area shall be the same as those used for the movement of aircraft, with the exception of taxi instructions, in which case the word 'PROCEED' shall be substituted for the word 'TAXI' when communicating with vehicles.

**(b)** Vehicle drivers operating or intending to operate on the manoeuvring area shall read back to the air traffic controller safety-related parts of instructions which are transmitted by voice, e.g. instructions to enter, hold short of, cross and operate on any operational runway or taxiway.

**(c)** The controller shall listen to the read-back to ascertain that the instruction has been correctly acknowledged by the vehicle driver and shall take immediate action to correct any discrepancies revealed by the read-back.

#### **(d) Air traffic advisory service**

Air traffic advisory service does not deliver 'clearances' but only 'advisory information' and it shall use the word 'advise' or 'suggest' when a course of action is proposed to an aircraft.

### **3.12 Poništavanje poruka**

**3.12.1** Ako se predaja mora poništiti, kontrolor zračnog prometa izreći će uputu pilotu da zanemari poruku ili njezin dio uporabom fraze 'DISREGARD'.

### **3.12 Cancellation of messages**

**3.12.1** If a transmission has to be cancelled, the pilot shall be instructed to disregard the message or part thereof by using the phrase 'DISREGARD'.

**3.12.2** Za poništenje odobrenja kontrole zračnog prometa koristi se fraza 'CANCEL'. Ista fraza koristi se kada se poništava let ili status leta. Mora se potvrditi prijem poruke kao i vrijeme poništenja.

**3.12.2** To cancel an ATC clearance the phrase 'CANCEL' shall be used. The same phrase is used when a flight or a flight status is cancelled. The acknowledgment of a message cancellation including the time of cancellation shall be provided.

PRIMJER / EXAMPLE:

G: (aircraft call sign) REPORT SPEED, (aircraft call sign) DISREGARD  
G: (aircraft call sign) IFR FLIGHT CANCELLED AT 1220

### **3.13 Provjera čujnosti radiopostaje**

### **3.13 Test procedures**

**3.13.1** Provjera čujnosti emitiranih poruka odvija se na sljedeći način:

- a) identifikacija zrakoplovne radiopostaje s kojom se uspostavlja komunikacija
- b) identifikacija radiopostaje koja poziva
- c) riječi "RADIO CHECK"
- d) frekvencija koja se koristi.

**3.13.1** The form of test transmissions shall be as follows:

- a) the identification of the aeronautical station being called
- b) the identification of the station calling
- c) the words "RADIO CHECK"; and
- d) the frequency being used.

**3.13.2** Odgovor na provjeru čujnosti radiopostaje odvija se na sljedeći način:

- a) identifikacija radiopostaje koja traži provjeru čujnosti
- b) identifikacija radiopostaje koja odgovara
- c) informacija o stupnju čujnosti radiopostaje koja traži provjeru čujnosti

**3.13.2** The reply to a test transmission shall be as follows:

- a) the identification of the station requesting the test
- b) the identification of the station replying; and
- c) information regarding the readability of the station requesting the test transmission.

**3.13.3** Nakon izvođenja provjere čujnosti koristi se ova ljestvica stupnjevanja čujnosti radiopostaje:

Ljestvica čujnosti

- (1) 1 nerazumljivo / ne čujemo se
- (2) 2 čujemo se za dva / povremeno
- (3) 3 čujemo se za tri / s poteškoćama
- (4) 4 čujemo se za četiri
- (5) 5 čujemo se za pet / savršeno

**3.13.3** When the tests have been performed, the following readability scale shall be used:

Readability scale

- (1) 1 Unreadable
- (2) 2 Readable now and then
- (3) 3 Readable but with difficulty
- (4) 4 Readable
- (5) 5 Perfectly readable

PRIMJER / EXAMPLE:

A: ZAGREB RADAR, (aircraft call sign), RADIO CHECK ONE THREE FIVE DECIMAL EIGHT  
G: (aircraft call sign), ZAGREB RADAR, READ YOU THREE

### **3.14 Predaja općih informacija**

### **3.14 Transmission of general information**

Zrakoplovne radio emisije

Aeronautical broadcasts

Sljedeće informacije šalju se kao zrakoplovne radio emisije: Opasnosti i ograničenja za zračni promet koja se događaju u kratkom roku i koja se ne mogu publicirati na vrijeme; Informacije o

The following information shall be disseminated preferably as aeronautical broadcast:

meteorološkim pojavama na ruti koje mogu utjecati na sigurnost operacija zrakoplova (SIGMET) i Informacije o meteorološkim pojavama na ruti koje mogu utjecati na sigurnost operacija zrakoplova na malim visinama (AIRMET); Automatsko emitiranje informacija za slijetanje i uzlijetanje (ATIS).

Hazards and restrictions to air traffic which cannot be published in short time; Meteorological information on route – SIGMET and AIRMET; Automatic Terminal Information Service - ATIS

**Postupci za predaju METAR informacija:**

**Procedures for the transmission of METAR information:**

Izvornici / References:

- ICAO Annex 3 Meteorological Services
- ICAO Doc. 4444 PANS-ATM
- ICAO Doc. 9377 Coordination between Air Traffic Services, Aeronautical Information Services and Aeronautical Meteorological Services
- ICAO Doc. 9432 Radiotelephony Manual

Ovi se postupci primjenjuju pri odašiljanju poruka meteorološkog motrenja (METAR) u ATIS ili u VOLMET radio emisijama (Meteorološka informacija za zrakoplove u letu) i u Službi letnih informacija (FIS).

These procedures apply to the transmission of meteorological observation messages (METAR – Aviation routine weather report) by ATIS or Meteorological information for aircraft in flight (VOLMET) broadcast and to the Flight Information Service (FIS).

Tablica/Table 5: Odašiljanje METAR informacija/Transmission of METAR information

METAR Information	Description	Example
<b>Wind</b>	The word " <i>wind</i> " shall be spoken before the wind group also in case of 00000 KT value	
01015KT		WIND ZERO ONE ZERO DEGREES ONE FIVE KNOTS
VRB03KT		WIND VARIABLE THREE KNOTS
00000KT		WIND CALM
12050G70KT	The "G" shall be spoken as " <b>gusting</b> "	WIND ONE TWO ZERO DEGREES FIVE ZERO KNOTS GUSTING SEVEN ZERO KNOTS
13007KT 090V170	The "V" shall be spoken as " <b>varying between</b> "	WIND ONE THREE ZERO DEGREES SEVEN KNOTS VARYING BETWEEN ZERO NINE ZERO AND ONE SEVEN ZERO DEGREES
... 000V140	The wind direction shall be spoken as <b>360V140</b>	... VARYING BETWEEN THREE SIX ZERO AND ONE FOUR ZERO DEGREES
<b>Visibility</b>		
0750	When visibility is less than 800 metres, it shall be expressed in steps of 50 metres	VISIBILITY SEVEN FIVE ZERO METRES
4900	When visibility is 800 metres or more/and over but less than 5 kilometres, it shall be expressed in steps of 100 metres	VISIBILITY FOUR THOUSAND NINE HUNDRED METRES
5000	When visibility is 5 kilometres or more/over, but less than 10 kilometres, it shall be expressed in kilometre steps	VISIBILITY FIVE KILOMETRES
9999	Visibility shall be indicated with supplementary words " <i>or more</i> "	VISIBILITY TEN KILOMETRES OR MORE
0900NE	The variation shall be spoken as " <i>to northeast</i> ". Valid also for all other directions	VISIBILITY NINE HUNDRED METRES TO NORTHEAST
<b>Runway Visual Range and tendency</b>		
R25/0400N	Spoken as " <b>no distinct tendency</b> "	RVR RUNWAY TWO FIVE FOWER HUNDRED METRES NO DISTINCT TENDENCY
R18L/0650U	Spoken as " <b>upward tendency</b> "	RVR RUNWAY ONE EIGHT LEFT SIX FIVE ZERO METRES UPWARD TENDENCY

R18C/0800D	Spoken as " <b>downward tendency</b> "	RVR RUNWAY ONE EIGHT CENTRE EIGHT HUNDRED METRES DOWNWARD TENDENCY	
R09//0375V0600U	Shall be spoken as " <b>varying between</b> "	RVR RUNWAY ZERO NINE VARYING BETWEEN THREE SEVEN FIVE AND SIX HUNDRED METRES UPWARD TENDENCY	
<b>Present weather</b>			
- RA	If neither light (-) nor heavy (+), the word "moderate" shall be spoken before the description of the precipitation	LIGHT RAIN	
RA		MODERATE RAIN	
+ RA		HEAVY RAIN	
FZRA		FREEZING RAIN	
DZ		MODERATE DRIZZLE	
FZDZ		MODERATE FREEZING DRIZZLE	
GR		MODERATE HAIL	
GS		MODERATE SMALL HAIL	
IC		MODERATE ICE CRYSTALS	
PL		MODERATE ICE PELLETS	
SG		MODERATE SNOW GRAINS	
SN		MODERATE SNOW	
- SH		If neither light (-) nor heavy (+), the word "moderate" shall be spoken before the description of the present weather	LIGHT SHOWERS
SH			MODERATE SHOWERS
+ SH	HEAVY SHOWERS		
SHRA	MODERATE RAIN SHOWERS		
SHSN	MODERATE SNOW SHOWERS		
SHGR	MODERATE HAIL SHOWERS		
OBS TS	MODERATE OBSCURED THUNDERSTORM		
TS	MODERATE THUNDERSTORM		
EMBD TS GR	EMBEDDED THUNDERSTORMS WITH HAIL		
BLSN	MODERATE BLOWING SNOW		
TS SN	MODERATE THUNDERSTORM WITH SNOW		
+TSGRRA	Shall be spoken according to the example	THUNDERSTORM WITH HEAVY HAIL AND RAIN	
VC ...	Shall be spoken according to the example	... IN VICINITY	
FG FZFG MIFG BCFG PRFG  BR HZ	Shall be spoken according to the example	FOG FREEZING FOG SHALLOW FOG FOG PATCHES AERODROME PARTIALLY COVERED WITH FOG MIST HAZE	
Clouds			
SCT010 OVC020	When clouds are reported, the word "cloud" shall be spoken before the first cloud group SKY CLEAR FEW (1 – 2/8) SCATTERED (3 – 4/8) BROKEN (5 – 7/8) OVERCAST (8/8) NO SIGNIFICANT CLOUDS CAVOK (clouds and visibility OK)	CLOUD SCATTERED ONE THOUSAND FEET OVERCAST TWO THOUSAND FEET	
FEW 005 SCT TCU 075 BKN CB 090		CLOUD FEW FIVE HUNDRED FEET SCATTERED TOWERING CUMULUS SEVEN THOUSAND FIVE HUNDRED FEET BROKEN CB NINE THOUSAND FEET	
NSC		NO SIGNIFICANT CLOUD	
SKC ISOL CB MOD TURB SEV ICE		SKY CLEAR ISOLATED CB MODERATE TURBULENCE SEVERE ICING	
Phenomenon encountered or observed, prompting a special air-report:  • Moderate turbulence • Severe turbulence • Moderate icing		TURBULENCE MODERATE TURBULENCE SEVERE ICING MODERATE	

<ul style="list-style-type: none"> <li>• Severe icing</li> <li>• Severe mountain wave</li> <li>• Thunderstorms without hail</li> <li>• Thunderstorms with hail</li> <li>• Heavy dust/sandstorm</li> <li>• Volcanic ash cloud</li> <li>• Pre-eruption volcanic activity or volcanic eruption</li> </ul>	<p>ICING SEVERE  MOUNTAIN WAVE SEVERE  THUNDERSTORMS  THUNDERSTORMS WITH HAIL  DUST STORM or SANDSTORM HEAVY  VOLCANIC ASH CLOUD  PRE-ERUPTION VOLCANIC ACTIVITY or VOLCANIC ERUPTION</p>
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**VOLMET**

VOLMET is comprised of METAR and TREND.

The METAR is a report giving the actual weather conditions at an aerodrome at the time of the report. METARs are issued every 30 minutes during the opening hours of the aerodrome.

METAR messages shall contain the following elements of information in the order listed:

- a) report type
- b) location indicator
- c) date and time (UTC – Universal Time Coordinated)
- d) wind
- e) visibility
- f) RVR (Runway Visual Range)
- g) weather
- h) cloud
- i) temperature/dew point
- j) altimeter (QNH)
- k) recent weather
- l) wind shear
- m) TREND

**ATIS –  
Automatic Terminal  
Information Service**

ATIS messages containing both arrival and departure information shall contain the following elements of information in the order listed:

- a) name of aerodrome
- b) arrival and/or departure indicator
- c) contract type, if communication is via D-ATIS
- d) designator
- e) time of observation, if appropriate
- f) type of approach(s) to be expected
- g) the runway(s) in use; status of arresting system constituting a potential hazard, if any
- h) significant runway surface conditions and, if appropriate, braking action
- i) holding delay, if appropriate
- j) transition level, if applicable
- k) other essential operational information
- l) surface wind direction (in degrees magnetic) and speed, including significant variations and, if surface wind sensors related specifically to the sections of the runway(s) in use are available, and the information is required by operators, the indication of the runway and the section of the runway to which the information refers
- m) visibility and, when applicable RVR and, if visibility/RVR sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers
- n) present weather

- o) cloud below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater; cumulonimbus; if the sky is obscured, vertical visibility when available
- p) air temperature
- q) dew point temperature
- r) altimeter setting(s)
- s) any available information on significant meteorological phenomena in the approach, and climb-out areas including wind shear, and information on recent weather of operational significance
- t) trend forecast, when available; and
- u) specific ATIS instructions

### 3.15.1 Objava opasnosti i ograničenja za zračni promet

Zrakoplovna radio emisija mora sadržavati sljedeće:

- opći poziv
- podatak o jedinici koja je šalje
- razlog emitiranja
- podatke o radijusu, mjestu (zemljopisni opis ili lokacija s obzirom na najbliže navigacijsko sredstvo) i razini
- podatak o vrsti ograničenja.

### 3.15.1 Hazards and restrictions to air traffic

The aeronautical broadcast shall contain the following details:

- general call
- sending unit
- reason of broadcast
- radius, place (geographical description or location with reference to the nearest navigational aid) and level
- type of restriction.

## 4 Frazeologija

### 4.1 Općenito

- 4.1.1 Frazeologija napisana u poglavljima koja slijede nije sveobuhvatna. Zato se po potrebi koriste dodatne fraze koje moraju biti kratke i nedvosmislene.
- 4.1.2 Zbog jednostavnijeg korištenja dokumenta, fraze su grupirane prema vrstama službe kontrole zračnog prometa. Međutim, korisnici moraju poznavati i po potrebi koristiti fraze iz svih relevantnih grupa, a ne samo onih koje se specifično odnose na određenu vrstu kontrole zračnog prometa.
- 4.1.3 Obavezno je korištenje dijelova frazeologije napisanih velikim slovima.
- 4.1.4 Dijelovi frazeologije označeni zvjezdicom (\*) koriste se dodatno, koliko je potrebno.
- 4.1.5 Dijelovi frazeologije označeni kosom crtom (/) koriste se alternativno, koliko je potrebno.
- 4.1.6 Dijelovi frazeologije označeni zagradama (...) moraju se nadopuniti odgovarajućim informacijama.
- 4.1.7 Dijelovi frazeologije označeni uglatim zagradama [...] označavaju opcionalne dodatne riječi koje mogu biti potrebne u određenim specifičnim situacijama.
- 4.1.8 Upute za promjenom razine leta predaju se:

## 4 Phraseology

### 4.1 General

- 4.1.1 The phraseologies listed below cannot cover all situations. Therefore additional phraseology, which is short and cannot be misinterpreted, shall be used, if required.
- 4.1.2 The phraseologies are grouped according to types of air traffic service for convenience of reference. However, users shall be familiar with and use as necessary, phraseologies from groups other than those referring specifically to the type of air traffic service being provided.
- 4.1.3 The parts of phraseology printed in block letters shall be used.
- 4.1.4 The parts of phraseology marked by asterisks (\*) shall be used additionally, as far as necessary.
- 4.1.5 The parts of phraseology divided by diagonals (/) shall be used alternatively, as far as necessary.
- 4.1.6 The parts of phraseology marked by brackets (...) shall be completed with appropriate information.
- 4.1.7 The parts of phraseology marked by brackets [...] indicate optional additional words that may be necessary in specific instances.
- 4.1.8 Instructions to change levels are normally transmitted as follows:

PRIMJER / EXAMPLE:

#### G: CLIMB/DESCEND [TO] FLIGHT LEVEL 110

Kada postoji opasnost nastanka nesporazuma mora se upotrijebiti riječ TO.

When any possibility of flight level confusion is likely to result, the word TO must be transmitted.

4.1.9 U hrvatskoj frazeologiji koriste se sljedeća slova:

4.1.9 In the English phraseology the following letters are used to denote:

Z – radiopostaja zrakoplova  
T – zemaljska radiopostaja  
H – radiopostaja helikoptera - SAMO

A – Aircraft Radio Station  
G – Ground Radio Station  
H – Helicopter Radio Station - ONLY

## 5 English phraseology and procedures

### 5.1 Phrases for aerodrome traffic – Uncontrolled aerodromes

Procedures to be followed by pilots at and in the vicinity of uncontrolled aerodromes - not attended by the aeronautical station operator.

Messages are transmitted blind on the published frequency (UNICOM)

The call sign of the aerodrome is (location) RADIO.

Position report	A: (aerodrome call sign) (aircraft identification and type) (position and level) (intention)
	A: (type of aircraft) (position report) FOR LANDING/LOW APPROACH/TOUCH AND GO
Joining the traffic circuit	A: (aerodrome call sign) (aircraft identification and type) JOINING LEFT-HAND/RIGHT-HAND (position in aerodrome traffic circuit e.g. downwind/base, runway number)
Taxi-in/Taxi-out	A: TAXIING FROM (position) TO (position)
	A: TAXING VIA (position/taxi route) TO (position) AVOIDING *(information)
	A/H: TAXIING/AIR-TAXIING TO HELICOPTER STAND/HELIPAD/ HELICOPTER PARKING POSITION (position)
	A: WILL CROSS RUNWAY (number)
	A: WILL CROSS RUNWAY (number) BEHIND LANDING/DEPARTING (type of aircraft)
	A: (aerodrome call sign) (aircraft identification and type) VACATING THE RUNWAY (number) TAXIING/AIR TAXIING VIA (position/taxiway) TO (intention, position)
	A/H: (aerodrome call sign) (aircraft identification and type) TAXIING/AIR TAXIING/CROSSING GLIDER STRIP/RUNWAY VIA (position/taxiway) TO (intention, position)
	A: (aerodrome call sign) (aircraft identification and type) (position) (runway to be used) (taxi route) (intentions)
Take-off/Departure	A: (aerodrome call sign) (aircraft identification and type) ENTERING THE RUNWAY/LINING UP RUNWAY (number)
	A: (aerodrome call sign) TAKING OFF/WILL TAKE OFF BEHIND LANDING/DEPARTING (type of aircraft)

Special intentions of the pilot

A: GOING AROUND  
A: MAKING LOW APPROACH  
A: MAKING SHORT/LONG LANDING  
A: MAKING (FULL) STOP LANDING  
A: APPROACHING FOR BANNER PICK-UP  
A: APPROACHING TO DROP BANNER/ROPE  
A: FLYING TRAFFIC CIRCUIT/CIRCUITS  
A: MAKING TOUCH AND GO  
A: VACATING RUNWAY  
A: LEAVING YOUR FREQUENCY

## 5.2 Phrases for flights from and to controlled aerodromes

To request time check and/or aerodrome data for departure

A: REQUEST TIME CHECK

G: TIME (time)

ATIS broadcast not available

A: REQUEST DEPARTURE INFORMATION

*Note:*

*If multiple visibility and RVR observations are available, those that represent the roll-out/stop end zone should be used for take-off.*

G: RUNWAY (number), WIND (direction and speed) (units), QNH (or QFE) (number) \*(units), TEMPERATURE (MINUS) (number), \*VISIBILITY (distance) (units) or RUNWAY VISUAL RANGE \*(or RVR) (distance) (units), \*TIME (time)

ATIS broadcast available

G: ATIS AVAILABLE ON (frequency) CHECK INFORMATION (ATIS identification)

G: CHECK INFORMATION (ATIS identification)

## 5.3 Air traffic flow management (ATFM) phraseology

Slot Information (CTOT – delivery)

*Calculated Take-Off Time (CTOT) delivery resulting from a slot allocation message shall be communicated to the pilot at first contact with ATC (usually prior to or when issuing a start-up clearance).*

Slot Information (CTOT delivery – SAM message)

G: SLOT (time)

Slot Revision (CTOT change – SRM message)

G: REVISED SLOT (time)

Slot Cancellation (CTOT cancellation – SLC message)

G: SLOT CANCELLED, REPORT READY

Flight suspension until further notice (Flight suspension – FLS message)

G: FLIGHT SUSPENDED UNTIL FURTHER NOTICE, DUE (reason)

Flight de-suspension (Flight de-suspension - DES message)

G: SUSPENSION CANCELLED, REPORT READY

Denial of start-up when requested too late to comply with the given CTOT

G: UNABLE TO APPROVE START-UP CLEARANCE DUE SLOT EXPIRED/REQUEST A NEW SLOT

Denial of start-up when requested too early to comply with the given CTOT

G: UNABLE TO APPROVE START-UP CLEARANCE DUE SLOT (time), REQUEST START-UP AT (time)

#### 5.4 Start up procedures

A: (aircraft location) REQUEST START UP  
G: START UP APPROVED, \*QNH (number)  
A: STARTING UP, \*QNH (number)

A: (aircraft location) REQUEST START UP INFORMATION (ATIS identification) \*RECEIVED, \*QNH (number)  
G: INFORMATION (ATIS identification), START UP APPROVED  
A: STARTING UP

G: EXPECT START UP AT (time) \*QNH (number)  
A: ROGER \*QNH (number)

G: START UP AT (time), \*QNH (number)  
A: TO START UP AT (time), \*QNH (number)

G: EXPECT DEPARTURE AT (time) START UP AT OWN DISCRETION \*QNH (number)  
A: ROGER \*QNH (number)

G: EARLIEST TIME OF DEPARTURE ACCORDING TO SLOT (time) AT (time), START UP AT OWN DISCRETION  
A: SLOT (time), ROGER

G: YOUR SLOT is (time), START UP AT OWN DISCRETION

G: UNABLE TO APPROVE START UP \*(reason)

G: NEGATIVE START UP \*(reason)

Push-back /Power-back procedures

*Note:*  
Authorization for Push-back/Power-back shall be obtained from Tower/Ground controller

A: (aircraft location) REQUEST PUSH BACK/POWER BACK  
G: PUSH BACK/POWER BACK APPROVED \*RUNWAY (number)

G: PUSH BACK/POWER BACK APPROVED FACING EAST (or WEST or NORTH or SOUTH)

*Note:*  
If the aircraft is not in the Tower/Ground Controller's sight

G: PUSH BACK/ POWER BACK AT OWN DISCRETION RUNWAY (number)

Tow procedures

- A: (aircraft location) REQUEST START UP AND PUSH BACK/POWER BACK
- G: START UP AND PUSH BACK/POWER BACK APPROVED RUNWAY (number)
  
- G: STAND BY (reason)
  
- G: EXPECT (number) MINUTES DELAY DUE (reason)
  
- A: REQUEST TOW (company name), (aircraft type) FROM (location) TO (location)
- G: TOW APPROVED VIA (specific route to be followed)
  
- G: HOLD POSITION \*(reason)
  
- G: STAND BY \*(reason)

## 5.5 Taxi procedures

For departure

- A: (aircraft type) (wake turbulence category if "heavy"/"super") (aircraft location) REQUEST TAXI [intentions]
  
- G: TAXI TO HOLDING POINT/CAT III HOLDING POINT RUNWAY (number)

Departure without data information

- G: TAXI TO HOLDING POINT (number) \*(RUNWAY (number)) \*(HOLD SHORT OF RUNWAY (number) or CROSS RUNWAY (number)) \*(TIME (time))
  
- A: \*(aircraft type) \*(wake turbulence category if "heavy"/"super") \*(aircraft location) (flight rules) TO (aerodrome of destination) REQUEST TAXI \*(intentions)
  
- G: TAXI TO HOLDING POINT RUNWAY (number) VIA (specific route to be followed) WIND (direction, speed)(units), QNH (number)

Where detailed taxi instructions are required

- A: \*(aircraft type) \*(wake turbulence category if "heavy"/"super") REQUEST DETAILED TAXI INSTRUCTIONS
  
- G: TAXI TO HOLDING POINT (number) \*(RUNWAY (number)) VIA (specific route to be followed) \*(TIME (time)) \*(HOLD SHORT OF RUNWAY (number) or \*CROSS RUNWAY(number))

<p>Where aerodrome information is not available from an alternative source such as ATIS</p>	<p>G: TAXI TO HOLDING POINT *(number) (followed by aerodrome information as applicable) *TIME (time)</p> <p>G: TAKE (or TURN) FIRST (or SECOND) LEFT (or RIGHT)</p> <p>G: TAXI VIA (specific route, *identification of taxiway)</p> <p>G: TAXI VIA RUNWAY (number)</p> <p>G: TAXI TO APRON/TERMINAL/STAND (number)</p>
<p>For helicopter operations</p>	<p>A: REQUEST AIR-TAXIING FROM (or VIA) TO (location or routing as appropriate)</p>
<p><i>Note: For rotorcraft traffic, TAXI is substituted by AIR-TAXI if the rotorcraft hovers</i></p>	<p>G: AIR-TAXI TO (or VIA) (location or routing as appropriate) *(CAUTION (dust, blowing snow, loose debris, taxiing light aircraft, personnel, etc.))</p> <p>G: AIR TAXI VIA (direct, as requested, or specified route) TO (location, heliport, operating or movement area, active or inactive runway). AVOID (aircraft or vehicles or personnel)</p>
<p>After landing</p>	<p>G: TAXI/AIR-TAXI TO HELICOPTER STAND/HELIPAD/ HELICOPTER PARKING POSITION (position)</p> <p>A: REQUEST BACKTRACK</p> <p>G: BACKTRACK APPROVED</p> <p>G: BACKTRACK RUNWAY (number)</p>
<p>General</p>	<p>A: (aircraft location) REQUEST TAXI TO (destination on aerodrome)</p> <p>G: TAXI STRAIGHT AHEAD</p> <p>G: TAXI WITH CAUTION *(reason)</p> <p>G: GIVE WAY TO (description and position of other aircraft)</p> <p>A: GIVING WAY TO (traffic)</p> <p>A: TRAFFIC (or type of aircraft) IN SIGHT</p> <p>G: TAXI INTO HOLDING BAY</p> <p>G: FOLLOW (description of other aircraft or vehicle)</p> <p>G: VACATE RUNWAY *(VIA TAXIWAY (identification of taxiway))</p> <p>A: RUNWAY VACATED</p>

Holding procedures

G: EXPEDITE TAXI \*(reason)  
A: EXPEDITING

G: \*CAUTION TAXI SLOWER \*(reason)  
G: HOLD POSITION  
A: HOLDING

To hold not closer to the runway than specified

G: HOLD (direction) OF (position/runway)  
G: HOLD (distance) FROM (position)  
A: HOLDING (position)

To hold not closer to the runway than at the taxi holding position (if available) or otherwise at least 50 m from the runway edge

G: HOLD SHORT OF (position)

A: HOLDING SHORT

G: HOLD AT \*CAT II/III HOLDING POINT  
RUNWAY (number)

**Note:**

*The procedure words ROGER and WILCO are insufficient acknowledgement of the instructions HOLD, HOLD POSITION and HOLD SHORT OF (position). In each case the acknowledgement shall be by the phraseology HOLDING or HOLDING SHORT, as appropriate.*

A: HOLDING AT \*CAT II/III HOLDING POINT  
RUNWAY (number)

Crossing procedures

**Note 1:**

*If the controller is unable to see the crossing aircraft or vehicle (e.g. at night, in low visibility), the above instruction shall always be accompanied by the request to report when the aircraft or vehicle has vacated the runway.*

A: REQUEST \*TO CROSS RUNWAY (number)

G: CROSS RUNWAY (number) \*REPORT  
VACATED

A: CROSSING RUNWAY (number) WILCO

**Note 2:**

*When requested the pilot or driver will report 'RUNWAY VACATED' after the aircraft or vehicle is well clear of the runway (when the entire aircraft is beyond the relevant runway-holding position).*

G: EXPEDITE CROSSING RUNWAY \*(number)  
TRAFFIC (aircraft type) (distance) KILOMETERS  
(or MILES) FINAL

A: RUNWAY VACATED

**Note 1:**

*Unless otherwise specified by ATC, instructions/clearances which require crossing of the runway include permission to cross that runway.*

G: TAXI TO HOLDING POINT \*(number) \*RUNWAY  
(number) VIA (specific route to be followed),  
\*HOLD SHORT OF RUNWAY (number) or  
\*CROSS RUNWAY (number)

**Note 2:**

*For safety reasons the permission to cross the runway shall be issued explicitly.*

## 5.6 Departure instructions and ATC route clearances

*Note:*

*ATC route clearances shall be read back and acknowledged accordingly.*

IFR	<p>G: (call sign) CLEARED TO (destination) FLIGHT PLANNED ROUTE, LEVEL (numbers), (SID designator - name and number) DEPARTURE, SQUAWK (figures) *(other information if necessary)</p> <p>A: CLEARED TO (destination) FLIGHT PLANNED ROUTE, LEVEL (numbers), (SID designator - name and number) DEPARTURE, SQUAWK (code) (call sign)</p> <p>G: (call sign) CORRECT</p>
Request for a visual departure	<p>A: REQUEST VISUAL DEPARTURE DIRECT TO/UNTIL PASSING (significant point/altitude)</p>
ATS initiated visual departure	<p>G: ADVISE *IF ABLE TO ACCEPT VISUAL DEPARTURE DIRECT TO/UNTIL PASSING (significant point/altitude)</p> <p>A: ABLE TO ACCEPT VISUAL DEPARTURE RUNWAY (number)</p>
Clearance for visual departure	<p>G: CLEARED *FOR VISUAL DEPARTURE RUNWAY (number) TURN LEFT/RIGHT /DIRECT TO *(heading/significant point) MAINTAIN VISUAL REFERENCE UNTIL (altitude)</p> <p>A: CLEARED *FOR VISUAL DEPARTURE TURN LEFT/RIGHT/DIRECT TO *(heading/significant point) TO MAINTAIN VISUAL REFERENCE UNTIL (altitude)</p> <p>G: (call sign) CORRECT</p>
VFR	<p>G: (call sign) CLEARED VFR *FLIGHT TO (clearance limit-destination/point/FIR boundary, etc.) LEVEL (figures) WHEN AIRBORNE TURN LEFT/RIGHT/PROCEED TO (instructions), SQUAWK (code)</p> <p>A: CLEARED/PROCEED VFR FLIGHT TO (clearance limit-destination/point/FIR boundary, etc.) LEVEL (numbers) WHEN AIRBORNE TO TURN LEFT/RIGHT/PROCEED TO (instructions), SQUAWK *(code) (call sign)</p> <p>G: (call sign) CORRECT</p>

Preparation for take-off	<p>A: REQUEST DEPARTURE INSTRUCTIONS *(details)</p> <p>G: LEAVE CONTROL ZONE VIA (route) AT (numbers) FEET/OR *ABOVE/BELOW</p> <p>G: LEAVE CONTROL ZONE SPECIAL VFR VIA (route) AT (numbers) FEET OR *BELOW</p> <p>G: AFTER DEPARTURE TURN RIGHT (or LEFT, or CLIMB) (instructions as appropriate)</p> <p>G: STAND-BY *(reason)</p> <p>G: UNABLE TO ISSUE (designator) DEPARTURE *(reason)</p> <p>G: REPORT *(WHEN) READY *(FOR DEPARTURE)</p> <p>G: ARE YOU READY *(FOR DEPARTURE)</p> <p>A: READY/AFFIRM/NEGATIVE</p> <p>G: ARE YOU READY FOR IMMEDIATE *(DEPARTURE)</p> <p>A: READY/AFFIRM/NEGATIVE</p>
Clearance to enter the runway and await take-off clearance	<p>G: LINE UP/LINE UP *(AND WAIT)</p> <p>G: LINE UP BE READY FOR IMMEDIATE DEPARTURE</p> <p>G: LINE UP AND WAIT RUNWAY (number) INTERSECTION (name of intersection), (essential traffic information)</p> <p>A: (readback)</p>
<p><i>Note:</i>  <i>Line-up instructions may be issued to more than one aircraft at different points on the same runway, taking into account that intersection take-off criteria shall be complied with and conditions of application fulfilled according to local operating instructions.</i></p>	
Conditional clearances	<p>G: (condition) LINE UP (brief reiteration of the condition)</p> <p>A: (condition) TO LINE UP/LINING UP (brief reiteration of the condition)</p> <p>G: (call sign) *(THAT IS) CORRECT (or NEGATIVE) *(I SAY AGAIN) (as appropriate)</p>
<p><i>Note:</i>  <i>Conditional clearances shall be read back including the conditions.</i></p>	
Take-off procedures	<p>G: RUNWAY (number) CLEARED FOR TAKE-OFF WIND (direction, speed) (units)</p>

In poor visibility (applicable for low visibility operations)	G: RUNWAY (number), CLEARED FOR TAKE-OFF, WIND (direction, speed) (units) REPORT AIRBORNE
When take-off clearance has not been complied with	G: TAKE-OFF IMMEDIATELY OR VACATE RUNWAY(instructions)
	A: TAKING OFF/VACATING
	G: TAKE-OFF IMMEDIATELY OR HOLD SHORT OF RUNWAY
	A: TAKING OFF/HOLDING SHORT
To cancel the take-off clearance (before take-off run has begun)	G: HOLD POSITION CANCEL TAKE-OFF I SAY AGAIN, CANCEL TAKE-OFF (reason)
	A: HOLDING
To stop the take-off in emergency conditions (when take-off run has commenced)	G: STOP IMMEDIATELY (repeat aircraft call sign) STOP IMMEDIATELY
	A: STOPPING
For helicopter operations	G: CLEARED FOR TAKE-OFF *(FROM (location) (present position, taxiway, final approach and take-off area, runway and number) WIND (direction, speed) (units)
Turn or climb instructions after take-off	A: REQUEST RIGHT/LEFT TURN
	G: RIGHT/LEFT TURN APPROVED/NOT APPROVED
	G: WILL ADVISE LATER FOR RIGHT/LEFT TURN
	G: AFTER PASSING (level) (position) (instructions)
	G: REPORT AIRBORNE
	A: AIRBORNE (time)
Heading to be followed	G: CONTINUE RUNWAY HEADING (instructions)
	G: TRACK EXTENDED CENTRE LINE (instructions)
	G: CLIMB STRAIGHT AHEAD (instructions)
	G: FLY HEADING (figures) (instructions)

Runway intersection take-off, requested by a pilot	A:	REQUEST DEPARTURE FROM RUNWAY (number), INTERSECTION (name of intersection)
Departure from published intersection take-off position upon request of the pilot, or if initiated by air traffic control (ATC) and accepted by the pilot.	G:	APPROVED, TAXI TO HOLDING POINT RUNWAY (number), INTERSECTION (name of intersection)
	G:	NEGATIVE, TAXI TO HOLDING POINT RUNWAY (number), *INTERSECTION (name of intersection)
Initiated by ATC	G:	ADVISE ABLE TO DEPART RUNWAY (number), *FROM INTERSECTION (name of intersection)
<i>Note: The intersection take-off position(s) shall be identified in each line-up or take-off instruction/clearance, in addition to the standard radiotelephony phraseologies.</i>		
Upon request by the pilot, or if deemed necessary by the controller, reduced take-off run available shall be given to the pilot.	G:	REDUCED TAKE-OFF RUN AVAILABLE RUNWAY (number), FROM INTERSECTION (name of intersection) (distance in metres)

## 5.7 Landing procedures

Entering control zone / Joining aerodrome traffic circuit	A:	(type of aircraft) VFR (position report) FOR LANDING or LOW APPROACH or TOUCH AND GO
	G:	ENTER CONTROL ZONE (route) (altitude, if necessary) RUNWAY (number) WIND (direction, speed) (units) QNH (number)
	G:	ENTER CONTROL ZONE SPECIAL VFR VIA (route) (altitude, if necessary) RUNWAY (number) WIND (direction, speed) (units) QNH (number)
	G:	PROCEED TO (point) (altitude) RUNWAY (number) WIND (direction, speed) (units) QNH (number)
	A:	REQUEST LEFT-HAND/RIGHT-HAND TRAFFIC CIRCUIT
	G:	JOIN LEFT-HAND/RIGHT-HAND TRAFFIC CIRCUIT RUNWAY (number) *(SURFACE) WIND (direction, speed) (units) *(TEMPERATURE (MINUS)) (number) QNH (number) *(TRAFFIC IS *(detail)), REPORT LEFT-HAND/RIGHT-HAND DOWNWIND
	A:	(readback), WILCO

When ATIS information is available	<p>A: (aircraft type) (position) (level) INFORMATION (ATIS identification) FOR LANDING</p> <p>G: JOIN (position in circuit) RUNWAY (number) QNH (or QFE) (number) *(units) *(TRAFFIC (detail))</p>
To shorten the traffic circuit	<p>A: REQUEST LEFT-HAND/RIGHT-HAND BASE RUNWAY (number)</p> <p>G: JOIN LEFT-HAND/RIGHT-HAND BASE RUNWAY (number)</p> <p>A: (readback)</p> <p>A: REQUEST STRAIGHT-IN APPROACH RUNWAY (number)</p> <p>G: MAKE STRAIGHT-IN APPROACH RUNWAY (number)</p> <p>A: (readback)</p>
Request for position reports	<p>G: REPORT (position in traffic circuit)</p>
Instructions for landing sequence VFR flight	<p>G: NUMBER (number) FOLLOW (type of aircraft, position), REPORT (position in aerodrome traffic circuit)</p> <p>G: MAKE SHORT/LONG APPROACH</p>
VFR/IFR flight	<p>G: EXTEND DOWNWIND, TRAFFIC IS (type, position from/to, level) REPORT TRAFFIC IN SIGHT</p> <p>A: (readback) (type of aircraft) IN SIGHT</p> <p>G: NUMBER (number) FOLLOW (type of aircraft, position), CAUTION WAKE TURBULENCE, REPORT FINAL</p> <p>A: NUMBER (number) TO FOLLOW (type of aircraft, position), WILCO</p> <p>G: (call sign) CORRECT</p> <p>G: CONTINUE APPROACH, EXPECT LANDING CLEARANCE SHORTLY, TRAFFIC IS (details)</p> <p>G: CONTINUE APPROACH</p>
Landing	<p>G: RUNWAY (number) CLEARED TO LAND, WIND (direction, speed)*(units)</p> <p>G: MAKE SHORT/LONG LANDING, RUNWAY (number) WIND (direction, speed)*(units)</p>

When transmitting the runway visual range

G: RUNWAY VISUAL RANGE/RVR [RUNWAY (number)] (distance) (units)  
G: RUNWAY VISUAL RANGE/RVR RUNWAY (number) NOT AVAILABLE/NOT REPORTED  
G: RUNWAY VISUAL RANGE/RVR [RUNWAY(number)] TOUCHDOWN (distance) (units) MIDPOINT (distance) (units) STOP END (distance) (units)

## 5.8 Special operations

To make an approach along or parallel to a runway descending to a specified minimum level

G: RUNWAY (number) CLEARED TOUCH AND GO WIND (direction, speed) (units)  
A: (readback)  
G: AFTER TOUCH AND GO (instructions)  
A: (readback)  
G: MAKE FULL STOP  
A: REQUEST LOW APPROACH \*(reason)  
G: CLEARED LOW APPROACH RUNWAY (number) WIND (direction, speed) \*(altitude restrictions if required) \*QNH (numbers)  
A: (readback)  
G: CORRECT, AFTER LOW APPROACH (go around instructions-clearance limit)

Landing gear trouble - to fly past the control tower or other observation point for the purpose of visual inspection by persons on the ground

A: REQUEST LOW PASS (reason)  
G: CLEARED LOW PASS RUNWAY (number) WIND (direction, speed) (units) \*(NOT BELOW (altitude restrictions if required)) \*QNH (number)  
A: (readback)  
G: AFTER LOW PASS (instructions-clearance limit)  
A: HAVE LANDING GEAR TROUBLE  
G: LANDING GEAR APPEARS DOWN/UP  
G: LANDING GEAR DOES NOT APPEAR DOWN/UP  
G: (portion of landing gear-right/left/nose) WHEEL APPEARS DOWN/UP  
G: (portion of landing gear-right/left/nose) WHEEL DOES NOT APPEAR DOWN/UP

Delaying aircraft	G: HOLD OVER (position) UNTIL (time)
	G: ORBIT RIGHT/LEFT AT PRESENT POSITION
	G: MAKE A THREE SIXTY RIGHT/LEFT
Missed approach	G: GO AROUND (VFR/IFR instructions) A: GOING AROUND (read back of VFR/IFR instructions)
After landing	G: VACATE (direction) VIA TAXIWAY (identification of taxiway) TAXI TO THE APRON
	G: TAKE (TURN) FIRST/SECOND/CONVENIENT (direction)
	G: EXPEDITE VACATING
In low visibility	G: VACATE (direction) REPORT RUNWAY VACATED

## 5.9 Frequency change

*Note:*

*At aerodromes where SIDs are published with instruction to CONTACT (Unit call sign) (frequency) when airborne, pilots shall change frequency without specific instruction from ATC.*

*Note:*

*Pilot may be requested to:*

- 'standby' on designated frequency awaiting the appropriate ATS unit to initiate communication
- 'monitor' on designated frequency from that point on or after fulfilling the given condition

When no reply is expected from ATS unit (example: for uncontrolled airfields)

G:	CONTACT (unit call sign) (frequency)
A:	REQUEST TO LEAVE FREQUENCY
G:	APPROVED TO LEAVE FREQUENCY
A:	REQUEST TO LEAVE FREQUENCY FOR (number) MINUTE(S) (in exceptional cases)
G:	APPROVED TO LEAVE FREQUENCY
G:	REMAIN THIS FREQUENCY UNTIL (position)/FOR (number) MINUTE(S)
G:	STANDBY *FOR (unit call sign) (frequency)
G:	MONITOR (unit call sign) (frequency) *[WHEN AIRBORNE]
G:	CHANGE TO (frequency)

## 5.10 Common phrases for aerodrome traffic

Unusual situations	G: YOU SEEM TO BE LOSING FUEL/OIL
	G: YOUR AIRCRAFT IS TRAILING SMOKE
	G: YOUR ROPE/BANNER HAS NOT DETACHED
Identification of aircraft	G: SHOW LANDING LIGHTS
Aircraft with radio transmitter failure (acknowledgement by visual means)	G: IF YOU READ (unit) TOWER, ACKNOWLEDGE BY MOVING AILERONS/RUDDER
	G: MOVING AILERONS/RUDDER OBSERVED
	G: IF YOU READ (unit) TOWER, ACKNOWLEDGE BY ROCKING WINGS
	G: ROCKING WINGS OBSERVED
	G: IF YOU READ (unit) TOWER, ACKNOWLEDGE BY FLASHING LANDING LIGHTS
	G: FLASHING LANDING LIGHTS OBSERVED
Traffic information	G: TRAFFIC IS (information/details-type of aircraft, relative position, level)
	G: TRAFFIC IS (type, position from/to, level) ADDITIONAL TRAFFIC IS (type, position from/to, level)
	G: NO REPORTED TRAFFIC
	G: CLEAR OF TRAFFIC
To pass the traffic information	G: TRAFFIC IS GLIDER FLYING/MODEL FLYING/ PARACHUTE JUMPING/ACROBATICS (position, level and other information)
	G: TRAFFIC IS (classification) UNMANNED FREE BALLOON(S) WAS [or ESTIMATED] OVER (place) AT (time) REPORTED (level(s)) [or LEVEL UNKNOWN] MOVING (direction) (other pertinent information, if any)
	G: (aircraft type) (position in traffic circuit) PERFORMING/MAKING FULL STOP LANDING/TOUCH AND GO/LOW APPROACH/SPOT LANDING
	G: BANNER/GLIDER TOWING (position)
	G: TRAFFIC (details)

	G:	(aircraft type/vehicle/persons) (position) APPROACHING/HEAD ON/CROSSING/SAME DIRECTION
	G:	(aircraft type) DEPARTING/LANDING ON RUNWAY (number)
	G:	(aircraft type) APPROACHING FROM/ DEPARTING TO (direction)
	G:	UNKNOWN TRAFFIC (direction, distance and other information)
To acknowledge traffic information	A:	LOOKING OUT
	A:	TRAFFIC IN SIGHT
	A:	NEGATIVE CONTACT
	G:	CLEAR OF TRAFFIC
Wake turbulence	G:	CAUTION *ADVISED WAKE TURBULENCE *[FROM ARRIVING/DEPARTING (type of aircraft)] *(additional information, as required)]
	G:	NUMBER 2 BEHIND (type of aircraft) (position) *(altitude)
Jet Blast / Slipstream	G:	CAUTION *ADVISED JET BLAST
	G:	CAUTION *ADVISED SLIPSTREAM

## 5.11 Aerodrome information

	G:	[[location]] RUNWAY SURFACE CONDITION RUNWAY (number) (condition)
	G:	[[location]] RUNWAY SURFACE CONDITION RUNWAY (number) NOT CURRENT
	G:	LANDING SURFACE (condition)
	G:	CAUTION CONSTRUCTION WORK (location)
	G:	CAUTION (specify reasons) RIGHT/LEFT/ BOTH SIDES OF RUNWAY [number]
	G:	CAUTION WORK IN PROGRESS/ OBSTRUCTION (position and any necessary advice)
Braking action	G:	RUNWAY REPORT AT (observation time) RUNWAY (number) (type of precipitant) UP TO (depth of deposit) MILLIMETRES. ESTIMATED SURFACE FRICTION GOOD (or MEDIUM TO GOOD, or MEDIUM, or MEDIUM TO POOR, or POOR;

Operational status of visual and non-visual aids

- G: BRAKING ACTION REPORTED BY (aircraft type) AT (time) GOOD /MEDIUM to GOOD/ MEDIUM / MEDIUM to POOR/ POOR)
- G: RUNWAY/TAXIWAY (number ) WET [or STANDING WATER or SNOW REMOVED (length and width as applicable) or CHEMICALLY TREATED or COVERED WITH PATCHES OF DRY SNOW (or WET SNOW or COMPACTED SNOW or SLUSH or FROZEN SLUSH or ICE or WET ICE or ICE UNDERNEATH or ICE AND SNOW or SNOWDRIFTS or FROZEN RUTS AND RIDGES]
- G: TOWER OBSERVES (weather information)
- G: PILOT REPORTS (weather information)
- G: (specify visual or non-visual aid) RUNWAY (number) (description of deficiency)
- G: (type) LIGHTING (unserviceability)
- G: (part of lighting system) OUT OF SERVICE /UNSERVICEABLE
- G: GBAS/SBAS/MLS/ILS CATEGORY (category) (serviceability state)
- G: TAXIWAY LIGHTING (description of deficiency)
- G: (type of visual approach slope indicator) RUNWAY (number) (description of deficiency)

## 5.12 Meteorological information

Meteorological conditions

- G: WIND (direction, speed) (units)
- G: VISIBILITY (numbers) METRES/KILOMETRES
- G: REPORT FLIGHT CONDITIONS  
A: VMC/IMC
- G: HAVE YOU EXPERIENCED ANY TURBULENCE IN APPROACH/DEPARTURE AREA
- G: EXPECT TURBULENCE LIGHT/MODERATE/ SEVERE ON FINAL/AFTER TAKE OFF
- G: CAUTION WIND SHEAR BELOW (numbers) FEET
- G: CAUTION ICING MODERATE ABOVE (numbers) FEET

Pressure value for altimeter setting

G: QNH/QFE (numbers) (units)

### 5.13 Air report (AIREP)

Accept incoming AIREPs and transmit them to the local MET office and, if necessary, to other pilots and Air Traffic Control (ATC) working positions.

Accept also other aircraft reports affecting the safety of aviation or public safety and order (e.g. reports on forest fires, oil pollution of waters, traffic accidents) and forward them to the Watch Supervisor as well as to other aircraft concerned.

	ITEM	PARAMETER	TRANSMIT IN TELEPHONY as appropriate
	—	Message-type designator: - special air-report	[AIREP] SPECIAL
Section 1	1	Aircraft Identification	<i>(aircraft identification)</i>
	2	Position	POSITION <i>(latitude and longitude)</i> OVER <i>(significant point)</i> ABEAM <i>(significant point)</i> <i>(significant point) (bearing) (distance)</i>
	3	Time	<i>(time)</i>
	4	Level	FLIGHT LEVEL <i>(number)</i> or <i>(number)</i> METRES or FEET CLIMBING [TO] FLIGHT LEVEL <i>(number)</i> or <i>(number)</i> METRES or FEET DESCENDING [TO] FLIGHT LEVEL <i>(number)</i> or <i>(number)</i> METRES or FEET
	5	Next position and estimated time over	<i>(position) (time)</i>
	6	Ensuing significant point	<i>(position)</i> NEXT
Section 2	7	Estimated time of arrival	<i>(aerodrome) (time)</i>
	8	Endurance	ENDURANCE <i>(hours and minutes)</i>
Section 3	9	Phenomenon encountered or observed, prompting a special air-report: <ul style="list-style-type: none"> <li>• Moderate turbulence</li> <li>• Severe turbulence</li> <li>• Moderate icing</li> <li>• Severe Icing</li> <li>• Severe mountain wave</li> <li>• Thunderstorms without hail</li> <li>• Thunderstorms with hail</li> <li>• Heavy dust/sandstorm</li> <li>• Volcanic ash cloud</li> <li>• Pre-eruption volcanic activity or volcanic eruption</li> </ul>	TURBULENCE MODERATE TURBULENCE SEVERE ICING MODERATE ICING SEVERE MOUNTAIN WAVE SEVERE THUNDERSTORMS THUNDERSTORMS WITH HAIL DUST STORM or SANDSTORM HEAVY VOLCANIC ASH CLOUD PRE-ERUPTION VOLCANIC ACTIVITY or VOLCANIC ERUPTION

## 5.14 Ground crew-flight crew procedures

### Starting procedures

G: [ARE YOU] READY TO START UP

A: STARTING UP NUMBER (engine number(s))

#### Note 1:

*The ground crew should follow this exchange by either a reply on the intercom or a distinct visual signal to indicate that all is clear and that the start-up as indicated may proceed*

#### Note 2:

*Unambiguous identification of the parties concerned is essential in any communication between ground crew and pilots.*

### Pushback procedures (ground-cockpit)

G: [ARE YOU] READY FOR PUSHBACK

A: READY FOR PUSHBACK

G: CONFIRM BRAKES RELEASED

A: BRAKES RELEASED

G: COMMENCING PUSHBACK

G: PUSHBACK COMPLETED

A: STOP PUSHBACK

G: CONFIRM BRAKES SET

A: BRAKES SET

#### Note:

*This exchange is followed by a visual signal to the pilot to indicate that disconnect is completed and all is clear for taxiing.*

A: DISCONNECT

G: DISCONNECTING STAND BY FOR VISUAL AT YOUR LEFT (or RIGHT)

### De/anti-icing operations

#### Prior to de-icing/anti-icing (ground crew (iceman)/flight crew)

G: STANDING BY TO DE-ICE. CONFIRM BRAKES SET AND TREATMENT REQUIRED

A: [AFFIRM] BRAKES SET, REQUEST (type of de/anti-icing treatment and areas to be treated)

#### Aircraft configuration confirmation

G: HOLD POSITION AND CONFIRM AIRCRAFT CONFIGURED

A: [AFFIRM] AIRCRAFT CONFIGURED, READY FOR DE-ICING

G: DE-ICING STARTS NOW

#### Upon concluding de-icing/anti-icing procedure For de-icing operation

G: DE-ICING ON (areas treated) COMPLETE. ADVISE WHEN READY FOR INFORMATION

G: TYPE OF FLUID (Type I or II or III or IV)

G: ANTI-ICING CODE (appropriate anti-icing code)

#### For a two-step de-icing/anti-icing operation

G: FINAL STEP STARTED AT (time)

#### De-icing/anti-icing complete

G: POST DE-ICING CHECK COMPLETED  
G: PERSONNEL AND EQUIPMENT CLEAR OF AIRCRAFT

<p>Abnormal operations For spray nozzle proximity sensor activation</p>		<p>G: BE ADVISED NOZZLE PROXIMITY ACTIVATION ON (significant point on aircraft) [NO VISUAL DAMAGE or DAMAGE (description of damage) OBSERVED] [SAY INTENTIONS]</p>
<p>For other aircraft having an emergency on the de-icing bay</p>		<p>G: EMERGENCY IN DE-ICING BAY (de-icing bay number) [SHUT DOWN ENGINES or STANDBY FOR FURTHER INSTRUCTIONS]</p>

## 6 General phraseology for IFR flights

### 6.1 IFR clearances

**Note:**

*All clearances/reclearances require a full readback.*

Issuance of en-route (ATC) clearance	<p>G: CLEARED TO (destination) FLIGHT PLANNED ROUTE (or description of route) (level) STANDARD INSTRUMENT DEPARTURE (SID name/code designator) SQUAWK (code)</p> <p>A: (readback)</p> <p>G: CORRECT</p>
Issuance of route clearance	<p>G: CLEARED TO (clearance limit) (departure route/ instructions) FLIGHT PLANNED ROUTE (or description of route) (level) (additional instructions)</p> <p>G: CLEARED TO (clearance limit) (route) (level) (details)</p> <p>A: (readback)</p>
Amended en-route / route clearance	<p>G: RECLEARED (amended route portion) TO (significant point of original route) [REST OF CLEARANCE UNCHANGED]</p> <p>A: (readback)</p>
Issuance of approach clearance	<p>G: CLEARED (type of approach) APPROACH RUNWAY (number) (clearance limit)</p> <p>A: (readback)</p>
If clearance cannot be issued immediately upon request	<p>G: EXPECT CLEARANCE AT (time)</p>
When clearance for deviation cannot be issued	<p>G: UNABLE, TRAFFIC (direction) BOUND (type of aircraft) (level) ESTIMATED (or OVER) (significant point) AT (time) CALL SIGN (call sign) ADVISE INTENTIONS</p>
Indication of route and clearance limit	<p>G: JOIN (route) AT (point) AT (level/time)</p> <p>G: CLEARED FROM (location) TO (location)</p> <p>G: CLEARED (followed as necessary by):</p> <ul style="list-style-type: none"> <li>– TO</li> <li>– DIRECT</li> <li>– VIA (route and/or significant points)</li> <li>– VIA FLIGHT PLANNED ROUTE</li> </ul> <p>G: (route) NOT AVAILABLE *DUE (reason) ALTERNATIVE(S)/IS/ARE (routes) ADVISE</p>

A change has been made to the previous route clearance

Maintenance of specified levels

*Note:*

*The term "level" means: "flight level", "height" or "altitude" respectively.*

A change has been made to the previous level clearance

Level changes, reports and rates

Instruction that a climb (or descend) to a level within the vertical range defined is to commence

To require action when convenient

G: RECLEARED (followed as necessary by VIA, TO)

G: FLIGHT LEVEL (number)

G: ALTITUDE (number) FEET

G: MAINTAIN (level) TO (significant point)

G: MAINTAIN (level) UNTIL PASSING (significant point)

G: MAINTAIN (level) UNTIL (minutes) AFTER PASSING (significant point)

G: MAINTAIN (level) UNTIL ADVISED BY (name of unit)

G: MAINTAIN (level) UNTIL FURTHER ADVISED

G: RECLEARED FLIGHT LEVEL (number)

G: CLIMB/DESCEND (followed as necessary by):  
– [TO] (level)

– [TO] AND MAINTAIN BLOCK (level) TO (level)

– TO REACH (level) AT/BY (time or significant point)

– AT (numbers) FEET PER MINUTE OR GREATER/LESS/\*(restrictions)

– REPORT LEAVING (or REACHING, or PASSING) (level)

– WHEN READY (instruction)

– (instruction) AT YOUR CONVENIENCE

A1: LEAVING (level) DESCENDING/CLIMBING TO REACH (level) AT (time or point)

A2: TO DESCEND/CLIMB TO REACH (level) AT (time or point) WILL REPORT LEAVING

G: REQUEST LEVEL (or FLIGHT LEVEL or ALTITUDE) CHANGE FROM (name of unit)/AT (time or significant point)

G: RESUME NORMAL RATE OF DESCENT/CLIMB

To require action at a specific time or place	<p>A: REQUEST CLIMB/DESCENT AT (time or significant point)</p> <p>G: EXPECT LEVEL CHANGE/CLIMB/DESCENT</p> <ul style="list-style-type: none"> <li>- FROM (name of unit)</li> <li>- AT (time or significant point)</li> <li>- AFTER PASSING (significant point)</li> <li>- IN (number) MINUTES</li> <li>- WHEN READY CLIMB/DESCEND [TO] (level)</li> <li>- IMMEDIATELY</li> </ul> <p>G: STOP CLIMB/DESCENT AT (level)</p> <p>G: EXPEDITE CLIMB/DESCENT UNTIL PASSING (level)</p> <p>G: WHEN READY CLIMB/DESCEND [TO] (level) REPORT LEAVING (level)</p> <p>A: TO CLIMB/DESCEND [TO] (level) MAINTAINING (level) WILCO</p>
To require an aircraft to climb or to descend maintaining own separation and Visual Meteorological Conditions (VMC)	G: MAINTAIN OWN SEPARATION AND VMC [FROM (level)] [TO (level)]
When there is doubt that an aircraft can comply with a clearance or instruction	G: IF UNABLE (alternative instructions) AND ADVISE
When a pilot is unable to comply with a clearance or instruction	A: UNABLE *reason
Specification of cruising levels	G: CROSS (significant point) AT/ABOVE/BELOW (level)
	G: CROSS (significant point) AT (time) OR NOT LATER/BEFORE (time) AT (level)
	G: CROSS (distance) MILES (direction) OF (name of DME station) AT/ABOVE/BELOW (level)
Separation instructions	G: ARRANGE FLIGHT TO CROSS (position) AT (time) OR LATER
	G: CROSS (significant point) AT (time)
	G: ADVISE IF ABLE TO CROSS (significant point) AT (time) or (level)
	G: MAINTAIN MACH (number)
	G: MAINTAIN INDICATED/TRUE AIRSPEED (number) KNOTS

## 6.2 Change of flight rules

Change from VFR to IFR	A: REQUEST IFR CLEARANCE
	G: CLEARED TO (clearance limit) VIA (route) CLIMB (level) (number) FEET SQUAWK (code) IFR STARTS AT (position/time)/WHEN PASSING/REACHING (level)/NOW (additional instructions)
Change from IFR to VFR	A: CANCELLING MY IFR FLIGHT
	G: IFR CANCELLED AT (time four digits)
	G: UNABLE TO ACCEPT CANCELLATION DUE [TO] (reason)
Time limit for clearance validity	G: CLEARANCE VALID FROM (time) TO (time)
	G: CLEARANCE EXPIRES AT (time)

## 6.3 ACAS (Airborne Collision Avoidance System)

After a flight crew starts to deviate from any ATC clearance or instruction to comply with an ACAS resolution advisory (RA) (Pilot and controller interchange)	A: TCAS RA
	G: ROGER
After the response to an ACAS RA is completed and the assigned ATC clearance or instruction has been resumed (Pilot and controller interchange)	A: CLEAR OF CONFLICT, RETURNING TO (assigned clearance)
	G: ROGER (or alternative instruction)
	or
	A: CLEAR OF CONFLICT (assigned clearance) RESUMED
	G: ROGER (or alternative instruction)
After an ATC clearance or instruction contradictory to the ACAS RA is received, the flight crew will follow the RA and inform ATC directly (Pilot and controller interchange)	A: UNABLE, TCAS RA
	G: ROGER

## 6.4 Reduced Vertical Separation Minima (RVSM) Phraseology

To ascertain the RVSM approval status of an aircraft	G:	CONFIRM RVSM APPROVED
To report RVSM approved status	A:	AFFIRM RVSM
To report RVSM non-approved status followed by supplementary information	A:	NEGATIVE RVSM *(supplementary information, e.g. State aircraft)
To deny ATC clearance into RVSM airspace	G:	UNABLE ISSUE CLEARANCE INTO RVSM AIRSPACE, MAINTAIN [or DESCEND TO, or CLIMB TO] (level)
To report when severe turbulence affects the capability of an aircraft to maintain height-keeping requirements for RVSM	A:	UNABLE RVSM DUE TURBULENCE
To report that the equipment of an aircraft has degraded below minimum aviation system performance standards	A:	UNABLE RVSM DUE EQUIPMENT
To request an aircraft to provide information as soon as RVSM-approved status has been regained or the pilot is ready to resume RVSM operations	G:	REPORT WHEN ABLE TO RESUME RVSM
To request confirmation that an aircraft has regained RVSM approved status or a pilot is ready to resume RVSM operations	G:	CONFIRM ABLE TO RESUME RVSM
	A:	CORRECT or READY TO RESUME RVSM
Examples: A non-RVSM approved State aircraft operating as GAT, maintaining FL 260, subsequently requests a climb to FL 320	A:	REQUEST FL 320, NEGATIVE RVSM
	G:	CLIMB [TO] FL 320
	A:	LEAVING FL 260 CLIMBING [TO] FL 320, NEGATIVE RVSM
A non-RVSM approved civil aircraft maintaining FL 280 subsequently requests a climb to FL 320	A:	REQUEST FL 320, NEGATIVE RVSM
	G:	UNABLE TO ISSUE CLEARANCE INTO RVSM AIRSPACE, MAINTAIN FL 280
To report ability to resume RVSM operations after an equipment or weather-related contingency	A:	READY TO RESUME RVSM

## 6.5 RNAV Procedure Phraseology (Area Navigation)

Air traffic control service may assign a published RNAV route or an individual direct routing if it confirmed that the aircraft is RNAV equipped

G: ARE YOU ABLE TO PROCEED RNAV

G: ARE YOU RNAV EQUIPPED

A: AFFIRM/NEGATIVE

Degradation of aircraft navigation performance

A: UNABLE RNP (specify type) (or RNAV) \*DUE TO (reason, e.g. LOSS OF RAIM or RAIM ALERT)

Parallel off-set routings may be assigned if upon request the pilot confirms that the aircraft is equipped accordingly

G: ADVISE IF ABLE TO PROCEED PARALLEL OFF-SET

A: AFFIRM

Instructions associated with flying a track (offset), parallel to the cleared route

G: PROCEED OFF-SET (distance) MILES RIGHT/LEFT OF (route) (track) \*CENTRELINE, \*AT (significant point/time)/\*UNTIL (significant point/time)

A: TO PROCEED/PROCEEDING OFF-SET (distance) MILES RIGHT OF (route) (track) CENTRELINE

G: CORRECT

G: CANCEL OFF-SET, (instructions to rejoin cleared flight route/ other information) RESUME ORIGINAL TRACK OF ATS ROUTE (route designator)

A: CANCELLING OFF-SET, TO RESUME/RESUMING ORIGINAL TRACK OF ATS ROUTE (route designator)

G: CORRECT

## 6.6 8.33 Channel Spacing (En-route Phraseology)

To request confirmation of 8.33 kHz capability

G: CONFIRM EIGHT POINT THREE THREE

To indicate 8.33 kHz capability

A: AFFIRM EIGHT POINT THREE THREE

To indicate lack of 8.33 kHz capability

A: NEGATIVE EIGHT POINT THREE THREE

To request Ultra High Frequency (UHF) capability	G:	CONFIRM UHF
To indicate UHF capability	A:	AFFIRM UHF
To indicate lack of UHF capability	A:	NEGATIVE UHF
To request status in respect of 8.33 kHz exemption	G:	CONFIRM EIGHT POINT THREE THREE EXEMPTED
To indicate 8.33 kHz exempted status	A:	AFFIRM EIGHT POINT THREE THREE EXEMPTED
To indicate 8.33 kHz non-exempted status	A:	NEGATIVE EIGHT POINT THREE THREE EXEMPTED
To indicate that a certain clearance is given because otherwise a non-equipped and/or non-exempted aircraft would enter airspace of mandatory carriage	A:	DUE EIGHT POINT THREE THREE REQUIREMENT
Example	G:	DESCEND [TO] FL280 DUE 8.33 REQUIREMENTS

## 6.7 CPDLC phraseologies

Failure of CPDLC	G:	[ALL STATIONS] CPDLC FAILURE (instructions)
Failure of a single CPDLC message	G:	CPDLC MESSAGE FAILURE (appropriate clearance, instruction, information or request)
To correct CPDLC clearances, instructions, information or requests	G:	DISREGARD CPDLC (message type) MESSAGE, BREAK (correct clearance, instruction, information or request)
To correct unanswered CPDLC message	G:	DISREGARD CPDLC (message type) MESSAGE, BREAK, REPLY WITH UNABLE (correct clearance, instruction, information or request)
To instruct all stations or a specific flight to avoid sending CPDLC requests for a limited period of time	G:	[ALL STATIONS] STOP SENDING CPDLC REQUESTS [UNTIL ADVISED] [(reason)]
To resume normal use of CPDLC	G:	[ALL STATIONS] RESUME NORMAL CPDLC OPERATIONS

## 7 Approach control service phraseology – Approach procedure

### 7.1 Approach instructions

#### 7.1.1 IFR departures

In addition to the ATC route clearance, departing IFR flights may be given departure instructions in order to provide separation. These may be given in plain language or in the form of a standard instrument departure (SID).

Reclearance

IFR requesting visual departure

- A: FOLLOWING SID (designator), CLIMBING [TO] (level, altitude)  
or  
AIRBORNE (after departure)
- G: IDENTIFIED
- G: IDENTIFIED, CLIMB [TO] (FL, altitude/QNH)
- G: IDENTIFIED, FOLLOW SID (designator), CLIMB [TO] (FL, altitude/QNH)
- G: IDENTIFIED, FOLLOW DEPARTURE CLEARANCE, [CLIMB] [TO]
- G: NOT IDENTIFIED, FOLLOW DEPARTURE CLEARANCE, FOR IDENTIFICATION SQUAWK (code) IDENT
- G: IDENTIFIED, RECLEARED, AFTER PASSING/REACHING (digit) (level) /(significant point), TURN (right/left) HEADING (three digits), CLIMB [TO] (FL, altitude) (reason)
- G: IDENTIFIED, RECLEARED, AFTER PASSING/REACHING (digit) (level)/(significant point, TURN (right/left) (DIRECT) TO (significant point), CLIMB [TO] (FL, altitude)
- G: IDENTIFIED, RECLEARED, CONTINUE RUNWAY HEADING/CLIMB STRAIGHT AHEAD TO/UNTIL (passing /reaching) (level/significant point) (other instructions as required: CLIMB, TURN, etc.)
- A: RECLEARED (readback), (aircraft call sign)
- G: (aircraft call sign) [CORRECT]
- G: (aircraft call sign) [CORRECT], EXPEDITE (passing/reaching/until) (level, significant point)
- A: AIRBORNE, REQUEST VISUALLY TO (significant point, position)
- G: IDENTIFIED CLEARED VISUALLY TO/DIRECT [TO] (significant point, position), CLIMB [TO] (level)

A: FOLLOWING SID (designator), CLIMBING [TO] (level, altitude)

G: IDENTIFIED, ADVISE IF ABLE TO/DO YOU ACCEPT VISUALLY DIRECT TO/UNTIL PASSING (significant point/altitude)

A: AFFIRM/ABLE TO CONTINUE VISUALLY

G: (aircraft call sign), (clearance)

### 7.1.2 VFR departures

In addition to the ATC route clearance, departing VFR flights may be given departure instructions in order to provide separation (depending on airspace classification). These may be given in plain language or in the form of a standard instrument departure (SID).

Departing VFR flights, when handled by approach control, may be passed information on relevant known traffic in order to assist the pilot in maintaining his own separation.

A: INBOUND (significant point, position), CLIMBING [to] (level), REQUEST [CLIMB][TO] (level)

G: IDENTIFIED (radar contact) FOLLOW VFR (designated route) CLIMB [TO]/MAINTAIN (level) REPORT (next significant point/position)

Departure from uncontrolled aerodrome

A: INBOUND (significant point, position), CLIMBING [to]/MAINTAINING (level), REQUEST [CLIMB] [to] (level)

G: IDENTIFIED (position, distance from/to significant point, airfield), MAINTAIN/CLIMB [TO] (level), REPORT (next significant point/position, mission completed)

or  
G: NOT IDENTIFIED/NEGATIVE RADAR CONTACT, FOR IDENTIFICATION SQUAWK (code) IDENT/[CLIMB] [TO] (level)

Change from VFR to IFR

A: UNABLE TO MAINTAIN VMC, REQUEST IFR CLEARANCE

G: CLEARED TO (clearance limit) VIA (route) (level) (number) FEET SQUAWK (code) (other instructions), IFR [FLIGHT] STARTS AT (position/ significant point or time)/WHEN REACHING (level)/PASSING (level)/NOW [(instructions)]

A: (readback), (aircraft call sign)

G: (aircraft call sign) [CORRECT]

VFR leaving controlled airspace

G: (aircraft call sign) CLEARED [TO] LEAVE CONTROLLED AIRSPACE VIA (significant point, designated route) AT/CLIMBING/DESCENDING [TO] (level), FLIGHT INFORMATION AVAILABLE WITH (name) INFORMATION (frequency)

### 7.1.3 IFR arrivals

Approach control will normally advise, on initial contact, the type of approach to be expected.

When the transition level is published in e.g. the national AIP, information regarding transition level may be omitted.

Aircraft flying within controlled airspace will normally receive descent clearance to the clearance limit from the ACC prior to transfer to an approach control unit.

On transfer to approach control further descent instructions may be given.

#### STAR (Conventional)

#### 7.1.3.1 Vectoring to final approach

Radar vectors are given to arriving flights to position them onto a pilot interpreted approach aid, or to a point from which a radar-assisted approach or visual approach is made.

G: RADAR SERVICE TERMINATED (position/time), LEAVE CONTROLLED AIRSPACE VIA (significant point, designated route) AT/CLIMBING/DESCENDING [TO] (level), FLIGHT INFORMATION AVAILABLE WITH (name) INFORMATION (frequency)

A: INBOUND/DIRECT TO (significant point, Final Approach Fix) DESCENDING [to] (level), (INFORMATION (ATIS identification))

G: IDENTIFIED, EXPECT (type of approach) RUNWAY (number), (INFORMATION (ATIS identification) [sequence number])

G: IDENTIFIED, CLEARED/RESUME OWN NAVIGATION [DIRECT] TO (significant point, clearance limit/position), DESCEND [TO]/ MAINTAIN (level), EXPECT (type of approach) RUNWAY (number), (ATIS identification) [sequence number]

G: IDENTIFIED, CLEARED [DIRECT] TO (significant point) (clearance limit), DESCEND TO (level) EXPECT STRAIGHT IN (type of approach) RUNWAY (number), (NEW INFORMATION (ATIS identification), [sequence number])

A: (readback), (aircraft call sign)

A: INBOUND/DIRECT TO (entry point), DESCENDING [TO]/MAINTAINING (level), INFORMATION (ATIS identification)

G: IDENTIFIED, FOLLOW/CLEARED (designated STAR procedure) FOR/EXPECT (type of approach) RUNWAY (number), INFORMATION (ATIS identification) (CORRECT/NEW INFORMATION (ATIS identification))

A: (readback), (aircraft call sign)

G: DESCEND VIA (designated arrival) PROCEDURE, CLEARED FOR (STRAIGHT IN) (type of approach) RUNWAY (number), REPORT (type of approach) ESTABLISHED (on final approach track)

A: INBOUND/DIRECT TO (significant point, Initial Approach Fix) DESCENDING[to]/MAINTAINING (level), INFORMATION (ATIS identification) \*QNH (number)

Controllers shall not instruct pilots to establish on ILS, localizer, final approach track or descend on a glide path when outside the designated operational coverage (DOC).

G: IDENTIFIED, FLY/CONTINUE (present)/ MAINTAIN (present)/TURN (right/left) HEADING (three digits), DESCEND [TO]/MAINTAIN (level), VECTORING FOR (type of approach) RUNWAY (number), ((new) INFORMATION) (ATIS identification), [sequence number]

G: IDENTIFIED, AFTER PASSING (significant point, IAF, radial of/from, level) FLY/CONTINUE (present)/MAINTAIN (present)/TURN (right/left) HEADING (three digits), DESCEND [TO]/MAINTAIN (level) VECTORING/VECTORS FOR (type of approach) RUNWAY (number), [sequence number]

G: IDENTIFIED, LEAVE (significant point, IAF) [ON] HEADING (three digits), DESCEND [TO]/MAINTAIN (level) VECTORING/VECTORS FOR (type of approach) RUNWAY (number), [sequence number]

A: REQUEST VECTORING/VECTORS

G: IDENTIFIED, REPORT HEADING

A: HEADING (three digits)

G: (ROGER), FLY/CONTINUE (present)/MAINTAIN (present)/TURN (right/left) HEADING (three digits), DESCEND [TO]/MAINTAIN (level) VECTORING/VECTORS FOR (type of approach) RUNWAY (number), [new] [INFORMATION] (ATIS identification) [sequence number]

**7.1.3.2 Vectoring to final approach after initial clearance (call)**

G: TURN (right/left) HEADING (three digits), DESCEND [TO] (level)

G: TURN (right/left) HEADING (three digits), [DESCEND TO] (level) FOR (reason: spacing, sequencing, avoiding, etc.)

G: FOR TRACK ADJUSTMENT TURN (right/left) HEADING (three digits)/TURN (number) DEGREES, [DESCEND TO] (level)

G: TURN (right/left) HEADING (three digits), [DESCEND TO] (level), CLEARED FOR (type of approach) RUNWAY (number), REPORT (type of approach) ESTABLISHED

A: (readback) (aircraft call sign), (WILCO)

G: TURN (right/left) HEADING (three digits), [DESCEND TO] (level), TAKING YOU THROUGH [the] LOCALIZER (reason),

EXPECT APPROACH/YOU WILL BE  
VECTORED FROM [the] (right/left)

G: TURN (right/left)/RESUME OWN NAVIGATION  
[DIRECT] TO (significant point, fix), CLEARED  
FOR LOCATOR/VOR etc. (name), APPROACH  
RUNWAY (number), REPORT ESTABLISHED  
ON FINAL APPROACH TRACK

A: (readback) (aircraft call sign), WILCO

#### 7.1.4 Vectoring IFR traffic for visual approach

A: REQUEST VECTORING/VECTORS FOR  
VISUAL APPROACH

G: REPORT HEADING

A: HEADING (three digits)

G: [ROGER], FLY/TURN (right/left) HEADING  
(three digits), [DESCEND TO] (level),  
VECTORING/VECTORS TO (position in AD  
circuit) FOR VISUAL APPROACH RUNWAY  
(number), REPORT (field, runway, runway lights,  
preceding traffic) IN SIGHT

A: RUNWAY/FIELD IN SIGHT

G: [ROGER] CLEARED FOR VISUAL APPROACH  
RUNWAY (number), REPORT (clearance  
limit/position)

##### 7.1.4.1 Pilot requesting visual approach, without vectoring

Coordination with Tower

A: RUNWAY/FIELD IN SIGHT, REQUEST VISUAL  
APPROACH

G: [ROGER] CALL YOU BACK FOR VISUAL  
APPROACH

G: CLEARED FOR VISUAL APPROACH  
RUNWAY (number), REPORT (clearance  
limit/position)

G: UNABLE TO APPROVE VISUAL APPROACH  
DUE (reason) RESUME TO (previous clearance  
limit)

ATC offering visual approach

G: REPORT IF ABLE FOR/DO YOU ACCEPT  
VISUAL APPROACH (for) RUNWAY (number)

A: ABLE TO ACCEPT VISUAL APPROACH  
RUNWAY (number)

### 7.1.5 VFR arrivals

Depending on the procedures in use, the pilot of an arriving VFR flight may be required to establish contact with the approach control unit and request instructions before entering its area of jurisdiction e.g. before entering the controlled airspace.

- A: VISUALLY INBOUND (controlled airspace boundary, significant point, position), AT/MAINTAINING/CLIMBING [TO]/DESCENDING [TO] (level), REQUEST CLEARANCE TO ENTER CONTROLLED AIRSPACE/JOINING INSTRUCTION
- G: IDENTIFIED (radar contact) CLEARED TO ENTER CONTROLLED AIRSPACE VIA (significant point, position on boundary, route, etc.) AT/MAINTAINING (level), REPORT (controlled airspace boundary, significant point)
- G: NOT [yet] IDENTIFIED/NEGATIVE RADAR CONTACT, (clearance)
- A: OVER/OVERHEAD/AT (significant point, route, etc.)
- G: [IDENTIFIED position/distance], CLEARED/PROCEED DIRECT [TO] (airport, airfield, position in AD circuit) DESCEND [TO] (level) FOR VISUAL APPROACH RUNWAY (number), REPORT (field, runway, runway lights) IN SIGHT
- A: RUNWAY/FIELD IN SIGHT
- G: (for joining instruction) CONTACT TOWER (frequency)

### 7.2 Approach instructions – miscellaneous

- G: CLEARED TO (clearance limit) VIA (designation) ARRIVAL
- G: CLEARED VIA (details of route to be followed)
- G: COMMENCE APPROACH AT (time)
- G: CLEARED FOR (type of approach) RUNWAY (number) REPORT (significant point) INBOUND
- G: REPORT OM (Outer Marker) INBOUND
- G: REPORT PASSING OM
- G: MAINTAIN OWN SEPARATION AS NUMBER (number), FOLLOW (type of aircraft) ON (position)
- G: MAINTAIN OWN SEPARATION [FROM] PRECEDING (type of aircraft/wake turbulence category) [CAUTION WAKE TURBULENCE]

G: CONFIRM FAMILIAR WITH (type of approach procedure)

G: TURN (right/left) HEADING (three digits) TO INTERCEPT LOCALISER (call you back for approach clearance)

### 7.3 Termination of radar service

Note:

\*\*position for aircraft with no-RNAV equipment

G: RADAR SERVICE TERMINATED \*\*[position], CONTACT (name of Unit) (frequency)

### 7.4 Expected approach time (EAT)

G: NO DELAY EXPECTED

G: EXPECTED APPROACH TIME (four digits)

G: REVISED EXPECTED APPROACH TIME (four digits)

G: DELAY NOT DETERMINED (reason)

### 7.5 Amended SIDs and STARs

#### 7.5.1

Clearance to climb on a SID which has published level and/or speed restrictions, where the pilot is to climb to the cleared level and comply with published level restrictions, follow the lateral profile of the SID and comply with published speed restrictions or ATC issued speed control instructions as applicable.

G: CLIMB VIA SID TO (level)

Clearance to cancel level restriction(s) of the vertical profile of a SID during climb

G: CLIMB VIA SID TO (level), CANCEL LEVEL RESTRICTION(S)

Clearance to cancel specific level restriction(s) of the vertical profile of a SID during climb

G: CLIMB VIA SID TO (level), CANCEL LEVEL RESTRICTION(S) AT (point(s))

Clearance to cancel speed restrictions of a SID during climb

G: CLIMB VIA SID TO (level), CANCEL SPEED RESTRICTION(S)

Clearance to cancel specific speed restrictions of a SID during climb

G: CLIMB VIA SID TO (level), CANCEL SPEED RESTRICTION(S) AT (point(s))

Clearance to climb and to cancel speed and level restrictions of a SID

G: CLIMB UNRESTRICTED TO (level) (or) CLIMB TO (level), CANCEL LEVEL AND SPEED RESTRICTIONS

ATC instructions to an aircraft to rejoin a SID shall include:  
a) the designator of the SID to be rejoined unless advance notification of rejoin has been provided;  
b) the cleared level in accordance with clearances on a SID; and  
c) the position at which it is expected to rejoin the SID

G: CLEARED DIRECT (waypoint), CLIMB TO (level), EXPECT TO REJOIN SID (designator) AT (waypoint)

G: REJOIN SID (designator) [AT (waypoint)]

G: CLEARED DIRECT (waypoint), CLIMB TO (level)

### 7.5.2

Clearance to descend on a STAR which has published level and/or speed restrictions, where the pilot is to descend to the cleared level and comply with published level restrictions, follow the lateral profile of the STAR and comply with published speed restrictions or ATC issued speed control instructions.

G: DESCEND VIA STAR TO (level)

Clearance to cancel level restrictions of a STAR during descent

G: DESCEND VIA STAR TO (level), CANCEL LEVEL RESTRICTION(S)

Clearance to cancel specific level restrictions of a STAR during descent

G: DESCEND VIA STAR TO (level), CANCEL LEVEL RESTRICTION(S) AT (point(s))

Clearance to cancel speed restrictions of a STAR during descent

G: DESCEND VIA STAR TO (level), CANCEL SPEED RESTRICTION(S)

Clearance to cancel specific speed restrictions of a STAR during descent

G: DESCEND VIA STAR TO (level), CANCEL SPEED RESTRICTION(S) AT (point(s))

Clearance to descend and to cancel speed and level restrictions of a STAR

G: DESCEND UNRESTRICTED TO (level) or DESCEND TO (level), CANCEL LEVEL AND SPEED RESTRICTIONS

ATC instructions to an aircraft to rejoin a STAR shall include:  
a) the designator of the STAR to be rejoined, unless advance notification of rejoin has been provided;  
b) the cleared level on rejoining the STAR; and  
c) the position at which it is expected to rejoin the STAR.

G: CLEARED DIRECT (waypoint), DESCEND TO (level), EXPECT TO REJOIN STAR (designator) AT (waypoint)

G: REJOIN STAR (designator) AT (waypoint)

G: CLEARED DIRECT (waypoint), DESCEND TO (level)

### 7.5.3 Speed control

G: RESUME PUBLISHED SPEED

G: NO [ATC] SPEED RESTRICTIONS

**Examples:**

- G: FOLLOW/CLEARED (name) ARRIVAL, RUNWAY (number), INFORMATION
- G: DESCEND (VIA/UNRESTRICTED) [TO] (level), CLEARED FOR RNP/RNAV APPROACH RUNWAY (number), QNH (number), REPORT ON FINAL APPROACH TRACK
- G: FOLLOW/CLEARED (name) ARRIVAL, EXPECT [VECTERING/VECTORS/STRAIGHT IN] (type of approach), RUNWAY (number)
- G: TURN (right/left) HEADING (three digits) VECTERING/VECTORS TO REJOIN (name) ARRIVAL AT (waypoint, significant point) PROCEED [DIRECT] TO (waypoint, significant point), REJOIN (name) ARRIVAL
- G: CLEARED [DIRECT] TO (waypoint, significant point), JOIN (name) ARRIVAL
- G: FOLLOW/CLEARED (name) DEPARTURE, CLIMB (VIA/UNRESTRICTED) [TO] (level)
- G: PROCEED [DIRECT] TO (waypoint, significant point), REJOIN (name) DEPARTURE
- G: TURN (right/left) HEADING (three digits) VECTERING/VECTORS TO REJOIN (name) DEPARTURE AT (waypoint, significant point)

**7.6 Radar approach procedures**

**7.6.1 Provision of service**

- G: VECTERING FOR (type of pilot-interpreted aid) APPROACH RUNWAY number)
- G: VECTERING FOR/TO (positioning in the circuit, significant point, waypoint)
- G: VECTERING FOR VISUAL APPROACH RUNWAY (number)
- G: (type) APPROACH NOT AVAILABLE DUE (reason) (alternative instructions)

**7.6.2 Missed approach procedure**

- G: CONTINUE VISUALLY OR GO AROUND (missed approach instructions)
- G: GO AROUND IMMEDIATELY (missed approach instructions) (reason)
- G: ARE YOU GOING AROUND
- G: IF GOING AROUND (appropriate instructions) or IN CASE OF MISSED APPROACH (appropriate missed approach instructions)
- A: GOING AROUND (read-back of instructions)

## 7.7 Radar controlled departure

### 7.7.1 Departure instructions

- G: WHEN AIRBORNE CLIMB STRAIGHT AHEAD UNTIL PASSING (level) THEN TURN RIGHT/LEFT HEADING (three digits)/[DIRECT] TO (significant point, waypoint)
- G: CROSS RUNWAY TRACK (number)
- G: KEEP CLEAR OF RUNWAY TRACK
- G: WHEN AIRBORNE TURN RIGHT/LEFT HEADING (three digits)/[DIRECT] TO (significant point, waypoint)
- G: TURN RIGHT/LEFT HEADING (three digits)
- G: CLEARED DIRECT [TO] (significant point, waypoint) [AT] (time or significant point)
- G AFTER PASSING/WHEN AT (level or significant point) FLY HEADING (three digits) [DIRECT] TO (significant point, waypoint)
- G: AFTER PASSING/WHEN AT (level/significant point) RESUME OWN NAVIGATION [DIRECT] TO (significant point, waypoint) (track and distance, specific instructions)
- G: CLEARANCE EXPIRES AT (time)

## 8 Holding procedures (En-route)

**Note:**

*Holding procedures require both a full readback and its acknowledgement.*

Holding instructions - Visual

G: HOLD VISUALLY OVER (position)/BETWEEN (two prominent landmarks), AT (level)

Published holding procedure over a facility or fix

G: CLEARED TO (significant point, name of facility or fix) [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD [(direction)] AS PUBLISHED EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) AT (time)

When a detailed holding clearance is required

A: REQUEST HOLDING INSTRUCTIONS

G: CLEARED (or PROCEED) TO (significant point, name of facility or fix) [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD [(direction)] [(specified) RADIAL, COURSE, INBOUND TRACK (three digits) DEGREES] [RIGHT (or LEFT) HAND PATTERN] [OUTBOUND TIME (number) MINUTES] EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) AT (time) (additional instructions, if necessary)

G: CLEARED (or PROCEED) TO THE (three digits) RADIAL OF THE (name) VOR AT (distance) DME FIX [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD [(direction)] [RIGHT (or LEFT) HAND PATTERN] [OUTBOUND TIME (number) MINUTES] EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) AT (time) (additional instructions, if necessary)

G: CLEARED TO THE (three digits) RADIAL OF THE (name) VOR AT (distance) DME FIX [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD BETWEEN (distance) AND (distance) DME [RIGHT (or LEFT) HAND PATTERN] EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) AT (time) (additional instructions, if necessary)

## 9 Transfer of control and/or frequency change procedures

Transfer of control and/or frequency change

G: CONTACT (unit call sign) (frequency)  
G: AT/OVER/AFTER PASSING (time or place)  
CONTACT (unit call sign) (frequency)  
A: AT/OVER/AFTER PASSING (time or place)  
TO CONTACT (unit call sign) (frequency)  
G: IF NO CONTACT (instructions)  
A: REQUEST CHANGE TO (frequency)  
G: FREQUENCY CHANGE APPROVED  
G: REMAIN THIS FREQUENCY  
G: STANDBY FOR (unit call sign) (frequency)  
A: STANDING BY (frequency)  
G: MONITOR (unit call sign) (frequency)  
A: MONITORING (frequency)

**Note:** An aircraft may be requested to:

- "standby" on a frequency when it is intended that the ATS unit will initiate communications soon.

- "monitor" a frequency when information is being broadcast thereon

## 10 ATS surveillance service phraseologies

Identification of aircraft

- G: IDENTIFIED [position]
- G: NOT IDENTIFIED RESUME/CONTINUE OWN NAVIGATION TO (point)/CLEARED TO (point) MAINTAINING (level)
- G: REPORT HEADING/LEVEL
- G: FOR IDENTIFICATION SQUAWK IDENT
- G: \*[SQUAWK IDENT OBSERVED] IDENTIFIED, POSITION (position)(instructions)

Position information/reporting

- G: POSITION (distance) (direction) OF (significant point)
- G: POSITION OVER/ABEAM (significant point)

To omit position reports

- G: OMIT POSITION REPORTS [UNTIL (specify)]
- A: WILCO
- G: NEXT REPORT AT (significant point)
- G: REPORT(S) REQUIRED ONLY AT (significant point(s))
- G: RESUME POSITION REPORTING
- A: WILCO

Vectoring instructions

**Note:**

*All heading instructions require a full readback*

- G: LEAVE (significant point) HEADING (three digits)
- G: CONTINUE HEADING (three digits)
- G: CONTINUE PRESENT HEADING
- G: FLY HEADING (three digits)
- G: TURN LEFT/RIGHT HEADING (three digits) [reason]
- G: TURN LEFT/RIGHT (number of degrees) DEGREES REPORT NEW HEADING \*(reason)
- G: STOP TURN HEADING (three digits)
- G: MAKE A THREE SIXTY TURN LEFT/RIGHT (reason)
- G: ORBIT LEFT/RIGHT (reason)

**Note:**

When it is necessary to specify a reason for vectoring or for the above manoeuvres, the following phraseologies should be used:

- DUE TRAFFIC
- FOR SEPARATION
- FOR SPACING
- FOR SEQUENCING
- FOR AVOIDING
- FOR DELAY
- FOR DOWNWIND/BASE/FINAL
- FOR TRACK ADJUSTMENT
- FOR CONTINUOUS CLIMB/DESCENT
- FOR SHORTCUT

Termination of vectoring

G: RESUME OWN NAVIGATION (position of aircraft) (specific instructions)

A: WILCO (call sign)

G: RESUME OWN NAVIGATION [DIRECT] (significant point) [MAGNETIC TRACK (three digits) DISTANCE (number) KILOMETRES (or MILES)]

A: WILCO DIRECT TO (significant point) [MAGNETIC TRACK (three digits) DISTANCE (number) KILOMETRES (or MILES)] (call sign)

Speed control

**Note:**

All speed instructions require both a full readback and an acknowledgement of its receipt.

G: REPORT SPEED

A: SPEED MACH NUMBER (numbers)/(numbers) KNOTS/KILOMETERS PER HOUR

G: MAINTAIN MACH [number]/(numbers) KNOTS/KILOMETERS PER HOUR UNTIL PASSING (significant point)

G: MAINTAIN PRESENT SPEED

G: MAINTAIN HIGH SPEED FOR APPROACH

G: REDUCE TO MINIMUM APPROACH SPEED

G: REDUCE TO MINIMUM CLEAN SPEED

G: INCREASE/REDUCE SPEED TO (number) KNOTS/MACH [number] or [GREATER/LESS/STRICTLY]

G: INCREASE/REDUCE SPEED BY (number) KNOTS

A: MAINTAINING/REDUCING/INCREASING

A: UNABLE TO COMPLY \*WITH SPEED RESTRICTIONS INDICATED AIRSPEED WILL BE (number) KNOTS

Traffic Information To pass traffic information	<p>G: RESUME NORMAL SPEED</p> <p>G: NO *ATC SPEED RESTRICTIONS</p> <p>G: RESUME PUBLISHED SPEED</p> <p>G: TRAFFIC (number) O'CLOCK (distance) (direction of flight) (any other pertinent information)</p> <ul style="list-style-type: none"> <li>- CLOSING</li> <li>- *CONVERGING/DIVERGING</li> <li>- OPPOSITE/SAME DIRECTION</li> <li>- OVERTAKING</li> <li>- CROSSING LEFT TO RIGHT/RIGHT TO LEFT</li> <li>- CLIMBING/DESCENDING</li> <li>- (aircraft type)</li> <li>- (level)</li> </ul>
Traffic Information – unknown	<p>G: NO REPORTED TRAFFIC</p> <p>G: *UNKNOWN TRAFFIC (number) O' CLOCK (bearing by clock reference and distance) MILES (direction of flight) (information)</p> <p>G: (traffic) (significant point)</p> <ul style="list-style-type: none"> <li>- CLOSING</li> <li>- OPPOSITE/SAME DIRECTION</li> <li>- OVERTAKING</li> <li>- CROSSING LEFT TO RIGHT/RIGHT TO LEFT</li> <li>- SLOW/FAST MOVING</li> </ul>
To acknowledge traffic information	<p>If available information/if known:</p> <ul style="list-style-type: none"> <li>- TYPE (not confirmed)</li> <li>- LEVEL (relative level, numbers, not confirmed)</li> <li>- CLIMBING / DESCENDING (not confirmed)</li> </ul> <p>A: LOOKING OUT</p> <p>A: TRAFFIC IN SIGHT</p> <p>A: NEGATIVE CONTACT [reason]</p>
To request avoiding action	<p>A: REQUEST AVOIDING ACTION</p> <p>A: REQUEST VECTORS</p> <p>G: TURN LEFT/RIGHT IMMEDIATELY HEADING (three digits) TO AVOID [UNIDENTIFIED] TRAFFIC (bearing by clock-reference and distance)</p> <p>G: TURN LEFT/RIGHT (number of degrees) DEGREES IMMEDIATELY TO AVOID [UNIDENTIFIED] TRAFFIC AT (bearing by clock- reference and distance)</p>

When passing known/unknown traffic	G: CLEAR OF TRAFFIC (appropriate instructions)
Termination of radar service	G: RADAR SERVICE (or IDENTIFICATION) TERMINATED [DUE (reason)] (instructions)
	G: WILL SHORTLY LOSE IDENTIFICATION (appropriate instructions or information)
	G: IDENTIFICATION LOST (reason and if necessary instructions)
Example	G: CTN 321 RADAR SERVICE TERMINATED DUE RADAR FAILURE. RESUME OWN NAVIGATION. A: CTN 321 ROGER
Example	G: CTN321 WILL SHORTLY LOSE IDENTIFICATION DUE RADAR COVERAGE. RADAR SERVICE TERMINATED. A: CTN 321 ROGER
Radar equipment degradation	G: SECONDARY RADAR OUT OF SERVICE (appropriate information as necessary)
	G: PRIMARY RADAR OUT OF SERVICE (appropriate information as necessary)

### 10.1 Secondary surveillance radar (SSR) phraseologies

To request the capability of the SSR equipment	G: ADVISE TYPE OF TRANSPONDER /TRANSPONDER CAPABILITY A: TRANSPONDER ALFA/CHARLIE (as shown in the FPL) A: NEGATIVE TRANSPONDER
To instruct setting of transponder	G: FOR DEPARTURE SQUAWK (code) G: SQUAWK (code) A: SQUAWK (code)
To request the pilot to reselect his assigned mode and code	G: RESET SQUAWK [(mode)] (code) A: RESETTING [(mode)] (code)
To request the pilot to confirm the code selected on the aircraft's transponder	G: CONFIRM SQUAWK (code) A: SQUAWKING (code)
To request the operation of the IDENT feature	G: SQUAWK [(code)] [AND] IDENT

To request temporary suspension of transponder operation	G:	SQUAWK STANDBY
To request emergency code	G:	SQUAWK MAYDAY [CODE SEVEN-SEVEN-ZERO-ZERO]
To request termination of transponder operation	G:	STOP SQUAWK
To request transmission of pressure altitude	G:	SQUAWK CHARLIE
To request pressure setting check and confirmation of present level	G:	CHECK ALTIMETER SETTING AND CONFIRM (level)
To request termination of pressure altitude transmission because of faulty operation	G:	STOP SQUAWK CHARLIE WRONG INDICATION
To verify that 7500 has been set intentionally	G:	CONFIRM YOU ARE SQUAWKING ASSIGNED CODE
To request level check	G:	CONFIRM (level)
Controller queries a discrepancy between the displayed 'Selected Level' and cleared level.	G:	CHECK SELECTED LEVEL CLEARED LEVEL IS (correct cleared level)
<i>Note:</i> The controller will not state in radiotelephony the value of the 'Selected Level' observed on the situation display.		
To request reselection of aircraft identification	G:	RE-ENTER [MODE S] AIRCRAFT IDENTIFICATION

## 11 Coordination between ATS units

Estimates and revisions	G: ESTIMATE [direction of flight] (aircraft call sign)[SQUAWKING (code)] (type) ESTIMATED (significant point) (time) (level) (or DESCENDING FROM (level) TO (level)) [SPEED (filed TAS)] (route) [REMARKS]
Sending unit	G: ESTIMATE (significant point) ON (aircraft call sign)
Receiving unit reply (if flight plan details are not available)	G: NO DETAILS
Receiving unit reply (if flight plan details are available)	G: (aircraft type) (destination)
Sending unit reply	G: [SQUAWKING (code)] [ESTIMATED] (significant point)(time) AT (level)
<p><i>Note:</i> In the event that flight plan details are not available the receiving station shall reply 'NO DETAILS' and transmitting station shall pass full estimate.</p>	<p>G: ESTIMATE UNMANNED FREE BALLOON(S) (identification and classification) ESTIMATED OVER (place) AT (time) REPORTED FLIGHT LEVEL(S) (number or numbers)[or FLIGHT LEVEL UNKNOWN] MOVING (direction) ESTIMATED GROUND SPEED (number) (other pertinent information, if any)</p> <p>G: REVISION (aircraft call sign) (details as necessary)</p>
Transfer of control	<p>G: REQUEST RELEASE OF (aircraft call sign)</p> <p>G: (aircraft call sign) RELEASED [AT (time)] [conditions/restrictions]</p> <p>G: IS (aircraft call sign) RELEASED [FOR CLIMB (or DESCENT)]</p> <p>G: (aircraft call sign) NOT RELEASED [UNTIL (time or significant point)]</p> <p>G: UNABLE (aircraft call sign) [TRAFFIC IS (details)]</p>
Change of clearance	<p>G: MAY WE CHANGE CLEARANCE OF (aircraft call sign) TO (details of alteration proposed)</p> <p>G: AGREED TO (alteration of clearance) OF (aircraft call sign)</p> <p>G: UNABLE (aircraft call sign)</p>

	G: UNABLE (desired route, level, etc.) [FOR (aircraft call sign)] [DUE (reason)] (alternative clearance proposed)
Approval request	G: APPROVAL REQUEST (aircraft call sign) ESTIMATED DEPARTURE FROM (significant point) AT (time)
	G: (aircraft call sign) REQUEST APPROVED [(restriction if any)]
	G: (aircraft call sign) UNABLE (alternative instructions)
Inbound release	G: [INBOUND RELEASE] (aircraft call sign) [SQUAWKING (code)] (type) FROM (departure point) RELEASED AT (significant point, or time, or level) CLEARED TO AND ESTIMATING (clearance limit) (time) AT (level) [EXPECTED APPROACH TIME or NO DELAY EXPECTED] CONTACT AT (time)
Handover	G: HANDOVER (aircraft call sign) [SQUAWKING (code)] POSITION (aircraft position) (level)
Expedition of clearance	G: EXPEDITE CLEARANCE (aircraft call sign) EXPECTED DEPARTURE FROM (place) AT (time)
	G: EXPEDITE CLEARANCE (aircraft call sign) [ESTIMATED] OVER (place) AT (time) REQUESTS (level or route, etc.)
Reduced vertical separation minimum (RVSM) operations	
To verbally supplement estimate messages of aircraft non-approved for RVSM or to verbally supplement an automated estimate message exchange that does not automatically transfer information from Item 18 of the flight plan followed by supplementary information, as appropriate	G: NEGATIVE RVSM [(supplementary information, e.g. State aircraft)]
To communicate the cause of a contingency relating to an aircraft that is unable to conduct RVSM operations due to severe turbulence or other severe meteorological phenomena or equipment failure, as applicable	G: UNABLE RVSM DUE TURBULENCE (or EQUIPMENT, as applicable)

## 12 Military RT procedures

### 12.1 Security flights

Mission assignment

G: ALPHA SCRAMBLE AIRBORNE (departure aerodrome) (call sign) (number and type of aircraft) HEADING (numbers) FL (number) TARGET AREA NORTH OF (point) SQUAWK (code)

A: DIVERSION OF STATUS FROM ALPHA TO TANGO SCRAMBLE

Return phase

A: DIVERSION OF STATUS FROM TANGO TO ALPHA SCRAMBLE

Practice security flights

Interception

Identification

A1: CALL SIGN\*  
A2: CALL SIGN

Intercepting aircraft instructions

A1: FOLLOW  
A1: DESCEND  
A1: YOU LAND  
A1: PROCEED

Replies of the intercepted aircraft

A2: WILCO  
A2: CAN NOT  
A2: REPEAT

Other phrases

A2: AM LOST  
A2: MAYDAY  
A2: HIJACK  
A2: LAND  
A2: DESCEND

A1- intercepting aircraft

A2- intercepted aircraft

Note 1:

The call sign requested from the intercepted aircraft should be the one used in RT communications with ATC unit(s) and it matches the aircraft registration filed in the flight plan.

Note 2:

According to RT regulations, communication during the interception is strictly in the English language.

#### 12.1.1 Signals and Signs for Interception\*

If radio communication during the interception is not possible in the same language, the essential information shall be exchanged and the received instructions acknowledged by using the phrases and pronunciations as outlined hereunder. Each phrase shall be transmitted twice.

	Phrase	Pronunciation	Meaning
Phrases used by the intercepted aircraft	CALL SIGN	<b>KOL SAJN</b>	My call sign is...
	WILCO	<b>VIL KO</b>	I understand your message and will comply with it!
	CAN NOT	<b>KEN NOT</b>	Impossible to comply with your message!
	REPEAT	<b>RI PIT</b>	Repeat your message!
	AM LOST	<b>EM LOST</b>	Position unknown!
	MAYDAY	<b>MEJ DEJ</b>	I am in distress!
	HIJACK	<b>HAJ DŽEK</b>	I've been hijacked!
	LAND (name of aerodrome)	<b>LEND</b>	Requesting landing at (name of aerodrome)!
	DESCEND	<b>DI SEND</b>	Requesting descent!

## 12.2 Practice flights

Engine shut-down (airborne)

A: REQUEST ENGINE SHUT-DOWN  
 G: ENGINE SHUTDOWN APPROVED REPORT  
 RE-LIGHTED  
 A: (readback) WILCO  
 A: ENGINE RE-LIGHTED  
 G: ROGER, REPORT HIGH KEY  
 A: WILCO

A: REQUEST ENGINE SHUT-DOWN  
 G: ENGINE SHUTDOWN APPROVED REPORT  
 RE-LIGHTED  
 A: ENGINE NOT RE-LIGHTED  
 G: ROGER, REPORT HIGH KEY / REPORT INTENTIONS  
 A: HIGH KEY  
 G: ROGER REPORT FINAL

Forced landing pattern

A: ENTRY POINT (location) FOR IMITATION  
 G: ROGER REPORT HIGH KEY  
 A: WILCO  
 A: HIGH KEY  
 G: ROGER, \*RUNWAY (number) WIND (direction, speed) (units) CLEARED TO LAND  
 G: CLEARED TO LAND, WIND (direction, speed) (units)

*Note: For multiple runway operations \*RUNWAY (number)\* is used prior to landing clearance.*

Joining aerodrome traffic circuit via break point / at low level, single aircraft

A: ENTRY POINT (location) FOR BREAK POINT/LOW LEVEL BREAK POINT  
 G: ROGER REPORT BREAK POINT/LOW LEVEL BREAK POINT RUNWAY (number), LEFT/RIGHT-HAND TRAFFIC CIRCUIT  
 A: RUNWAY (number) WILCO, ROGER  
 A: BREAK POINT  
 G: ROGER BREAK APPROVED, REPORT LEFT/RIGHT-HAND DOWNWIND  
 A: BREAKING LEFT/RIGHT, WILCO  
 A: LEFT/RIGHT-HAND DOWNWIND LANDING GEAR DOWN AND LOCKED  
 G: ROGER CLEARED TO LAND RUNWAY (number) WIND (direction, speed) (units)  
 A: RUNWAY (number) CLEARED TO LAND

Joining aerodrome traffic circuit via break point/ at low level, formation flight

A1: ENTRY POINT (location) FOR BREAK POINT/LOW LEVEL BREAK POINT  
 G: ROGER REPORT BREAK POINT/LOW LEVEL BREAK POINT RUNWAY (number) LEFT/RIGHT HAND TRAFFIC CIRCUIT  
 A1: RUNWAY (number) WILCO

A1: BREAK POINT  
 G: ROGER BREAK APPROVED REPORT LEFT/RIGHT- HAND DOWNWIND  
 A1: BREAKING LEFT/RIGHT WILCO

A1: LEFT/RIGHT- HAND DOWNWIND LANDING GEAR DOWN AND LOCKED  
 G: ROGER RUNWAY (number) CLEARED TO LAND WIND (direction, speed) (units)  
 A1: RUNWAY (number) CLEARED TO LAND

A2: DOWNWIND LANDING GEAR DOWN AND LOCKED  
 G: ROGER RUNWAY (number) CLEARED TO LAND  
 A2: RUNWAY (number) CLEARED TO LAND

A3: DOWNWIND LANDING GEAR DOWN AND LOCKED  
 G: ROGER RUNWAY (number) CLEARED TO LAND  
 A3: RUNWAY (number) CLEARED TO LAND

A4: DOWNWIND LANDING GEAR DOWN AND LOCKED  
 G: ROGER RUNWAY (number) CLEARED TO LAND  
 A4: RUNWAY (number) CLEARED TO LAND

VFR zone phraseology

A: COMMENCING MISSION VFR ZONE (name or designator)  
 G: ROGER REPORT MISSION COMPLETED  
 A: WILCO  
 A: MISSION COMPLETED VFR ZONE (name or designator)

### 12.3 Helicopter aerodrome traffic

Training area procedures

H: MILITARY RAMP/APRON, REQUEST AIR TAXI TO HELIPAD (location)  
 G: CROSS THE RUNWAY (number) TO HELIPAD (location)  
 H: CROSSING THE RUNWAY (number) TO HELIPAD  
 H: COMMENCING MISSION AT/ON HELIPAD  
 G: ROGER REPORT MISSION COMPLETED  
 H: WILCO  
 H: MISSION COMPLETED AT HELIPAD  
 G: ROGER CROSS THE RUNWAY (number) AIR-TAXI TO THE APRON  
 H: TO CROSS THE RUNWAY (number) AND AIR-TAXI TO THE APRON

Traffic circuit for autorotation/hydraulic system failure practising

H: READY FOR DEPARTURE FOR  
AUTOROTATION  
G: CLEARED FOR TAKE-OFF FOR  
AUTOROTATION  
H: CLEARED FOR TAKE-OFF FOR  
AUTOROTATION  
H: DOWNWIND FOR AUTOROTATION  
H: DOWNWIND FOR STRAIGHT-IN  
AUTOROTATION  
H: DOWNWIND FOR ONE EIGHTY  
AUTOROTATION  
H: DOWNWIND FOR IMITATION OF HYDRAULIC  
SYSTEM FAILURE

Start-up for formation (requested by the leader only)

H: REQUEST START UP FOR FORMATION  
FLIGHT  
G: START UP APPROVED, RUNWAY  
(number), WIND (direction, speed) (units) QNH  
(number), QFE (number)  
H: STARTING UP, RUNWAY (number) QNH  
(number), QFE (number)

#### 12.4 Fire fighting flights

Start-up for fire fighting flights

H: REQUEST START UP FOR FIRE FIGHTING  
FLIGHT  
G: START UP APPROVED, RUNWAY (number),  
WIND (direction, speed) (units) QNH (number),  
QFE (number)  
H: STARTING UP, RUNWAY (number) QNH  
(number), QFE (number)

#### 12.5 Practice flight – MiG 21

Start-up for formation (requested by the leader only)

A: REQUEST START UP FOR FORMATION  
FLIGHT  
G: START UP APPROVED, RUNWAY (number),  
WIND (direction, speed) (units) QNH (number),  
QFE (number)  
A: RUNWAY (number), QNH (number), QFE  
(number)

Taxiing

A: REQUEST TAXI INSTRUCTIONS FOR  
DEPARTURE FROM RUNWAY (number)  
INTERSECTION (designator)  
G: APPROVED TAXI TO HOLDING POINT  
RUNWAY (number), INTERSECTION  
(designator)  
A: TAXIING TO HOLDING POINT RUNWAY  
(number) INTERSECTION (designator)  
G: ARE YOU READY TO COPY ATC CLEARANCE  
G: (instructions for en-route or zone or training flight  
or traffic circuit clearance)  
A: (full read back)  
G: (acknowledgement)

Clearance to enter the runway to be requested by the leader only (checks already being completed in all aircraft of the formation)

Departed (all checks following the departure completed)

En-route flight  
(ETO for the next point is not mandatory)

For MiG aircraft only (above 33.000 feet)

*Note:  
In the interception the same phraseology is used as in en-route flights or when entering the control zone. When airborne, the Aerodrome/Approach control unit shall provide transfer to an operational radio channel, and the MiG aircraft leaves the radar control frequency. Upon completion of interception, the MiG reverts to radar control and proceeds along the route or towards the zone entry point.*

Straight-in approach

G: WHEN AIRBORNE CLIMB STRAIGHT AHEAD TO (level), THEN TURN LEFT, PROCEED/CLEARED TO (position/point)

A: WHEN AIRBORNE TO CLIMB STRAIGHT AHEAD TO (level), THEN TO TURN LEFT and PROCEED TO (position/point)

G: (acknowledgement)

A: AT HOLDING POINT RUNWAY (number), REQUEST BACKTRACK/LINE UP RUNWAY (number)/BACKTRACK and LINE UP RUNWAY (number)

G: BACKTRACK APPROVED/LINE UP RUNWAY (number)/BACKTRACK and LINE UP RUNWAY (number)

A: BACKTRACK APPROVED/LINING UP RUNWAY (number)/BACKTRACK and LINE UP RUNWAY (number)

G: (acknowledgement)

A: AIRBORNE (time)

G: ROGER, CONTACT (Unit call sign) (frequency) or CHANNEL (number)

A: (readback)

G: (acknowledgement)

A: OVER/PASSING (point/position), (level), (position/point) NEXT

G: CLEARED TO (point/position), DESCEND [TO]/CLIMB [TO]/MAINTAIN (level)

A: CLEARED TO (point/position), LEAVING (level), DESCENDING [TO]/CLIMBING [TO]/MAINTAINING (level)

G: REPORT (number) MINUTES BEFORE or WHEN MISSION COMPLETED

A: WILCO

G: REPORT STARTING ACCELERATION/DECELERATION

A: (position, level) FOR STRAIGHT- IN APPROACH  
G: CLEARED STRAIGHT-IN APPROACH, RUNWAY (number), QFE (number) REPORT GEAR DOWN/LOWERED

A: CLEARED FOR STRAIGHT-IN APPROACH RUNWAY (number), QFE (number) WILCO

(Landing gear down, checks completed)

A: LANDING GEAR DOWN, THREE GREENS  
G: ROGER, REPORT FINAL  
A: WILL REPORT FINAL/ WILCO

On short final (all checks for landing completed)

A: FINAL RUNWAY (number)  
G: CLEARED TO LAND WIND (direction, speed) (units)  
A: RUNWAY (number) CLEARED TO LAND

Traffic circuit

A: (position/point) (level), REQUEST DESCENT TO (level) TO JOIN LEFT-HAND/RIGHT-HAND BASE/DOWNWIND/FOR LANDING RUNWAY (number)  
G: DESCEND TO (level), JOIN LEFT-HAND/RIGHT-HAND BASE/DOWNWIND, RUNWAY (number), WIND (direction, speed) (units) QFE (number), REPORT GEAR DOWN  
A: LEAVING (level), DESCENDING TO (level), TO JOIN LEFT-HAND BASE RUNWAY (number), QFE (number) WILCO

Turning to base (landing gear down, checks completed)

A: LEFT-HAND BASE, LANDING GEAR DOWN, THREE GREENS  
G: ROGER, WIND (direction, speed) (units), REPORT FINAL

(On the base, all checks for landing completed)

A: WILCO  
A: FINAL RUNWAY (number)  
G: CLEARED TO LAND, WIND (direction, speed) (units)  
G: RUNWAY (number) CLEARED TO LAND

## 12.6 Emergency procedures

### 12.6.1 Communication failure-MIL

Procedures to be followed in case of one-way communication failure:

- 1 click (for one second) means "YES" or serves as acknowledgement
- 2 clicks mean "NO"
- 3 clicks mean "SAY AGAIN"
- 1 long transmission (for 2 seconds) means that the pilot has completed the procedure as instructed by the controller; the controller shall read back the pilot's presumable message and obtain an acknowledgement
- 1 long, 2 short, 1 long transmission (Morse code letter "X") means that the aircraft has experienced another emergency since the procedure was commenced.

Further information can be obtained from the pilot by asking questions which permit "YES" or "NO" answers.

Assignment of specific call sign

A: (4 short transmissions)  
G: SPEECHLESS AIRCRAFT THIS IS (Unit call sign) FLY HEADING (three digits) TO (destination)

	A: (1 short transmission)
	A: (1 long transmission)
	G: SPEECHLESS AIRCRAFT ADOPT THE CALL SIGN "SPEECHLESS ONE"
Verification of the pilot's microphone failure	A: (1 short transmission) G: SPEECHLESS ONE IS THIS A PRACTICE
Verification of aircraft condition	G: SPEECHLESS ONE HAVE YOU ANY OTHER EMERGENCY
Flight conditions	G: SPEECHLESS ONE ARE YOU ABLE TO – MAINTAIN LEVEL – MAKE A NORMAL RECOVERY – MAKE A NORMAL APPROACH TO LAND  G: SPEECHLESS ONE DO YOU HAVE – CASUALTY ON BOARD – HYDRAULIC FAILURE – ELECTRICAL FAILURE – FUEL/OXYGEN FAILURE – ENGINE FAILURE
Level	G: SPEECHLESS ONE ARE YOU AT/ABOVE/BELOW (level)
Endurance	G: SPEECHLESS ONE IS YOUR ENDURANCE GREATER THAN (number) MINUTES
Intentions of pilot	G: SPEECHLESS ONE IS YOUR INTENTION: – FULL STOP – LOW APPROACH – TOUCH AND GO
Persons on board	G: SPEECHLESS ONE DO YOU HAVE OTHER PERSONS ON BOARD
Approach	G: SPEECHLESS ONE YOU WILL BE GIVEN NAVIGATION ASSISTANCE FOR RECOVERY TO (destination)
In case of expected radio communication failure	G: IF RADIO CONTACT LOST FOR ONE MINUTE, CONTACT (Unit call sign) ON CHANNEL (number)/(frequency)  G: IF NO TRANSMISSION RECEIVED WITHIN NEXT 5 SECONDS ON FINAL APPROACH/ NEXT 15 SECONDS FOR MISSED APPROACH PROCEDURE

## 13 Special procedures

Contingency transponder codes

If possible the following codes are to be selected as appropriate.

- 7700 emergency
- 7600 radio communication failure
- 7500 acts of unlawful interference

Distress and urgency communication procedures - general

The word "MAYDAY" spoken at the start identifies a distress message, and the words "PAN PAN" spoken at the start identifies an urgency message. The words "MAYDAY" or "PAN PAN", as appropriate, should preferably be spoken three times at the start of the initial distress or urgency call.

Distress messages have priority over all other transmissions, and urgency messages have priority over all transmissions except distress messages.

Distress and urgency traffic shall normally be maintained on the frequency on which such traffic was initiated until it is considered that better assistance can be provided by transferring that traffic to another frequency. The emergency frequency (121.500 MHz) may be used as appropriate.

In cases of distress and urgency communications, in general, the transmissions by radiotelephony shall be made slowly and distinctly, each word being clearly pronounced to facilitate transcription.

Radiotelephony distress communications

Action by the aircraft in distress

DISTRESS MESSAGE shall normally consist of as many as possible of the following elements spoken distinctly and, if possible, in the following order:

- (a) the name of the ATS unit addressed (time and circumstances permitting)
- (b) the identification of the aircraft
- (c) the nature of the distress/urgency condition
- (d) intention of the pilot in command
- (e) present position, level, heading.

If the ground station called by the aircraft in distress or urgency does not reply, then any other ground station or aircraft shall reply and give whatever assistance possible.

When a distress message has been intercepted which apparently receives no acknowledgement, the aircraft intercepting the distress message should, if the time and circumstances seem appropriate, acknowledge the message and then broadcast it.

Action by the ATS unit addressed or the first ATS unit acknowledging the distress message

The ATS unit addressed by an aircraft in distress, or the first ATS unit acknowledging the distress message, shall:

- (a) immediately acknowledge the distress message;
- (b) take control of the communications or specifically and clearly transfer that responsibility, advising the aircraft if a transfer has been made; and
- (c) take immediate action to ensure that all necessary information is made available, as soon as possible, to:
  - 1. the ATS unit concerned; and
  - 2. the aircraft operator concerned or its representative in accordance with preestablished arrangements;
- (d) warn other ATS units, as appropriate, in order to prevent the transfer of traffic to the frequency of the distress communication.

### 13.1 Distress messages

A: MAYDAY MAYDAY MAYDAY, (call sign), (nature of distress), (pilot intentions) (position, level, heading)

G: (call sign), ROGER, MAYDAY, (nature of distress), (instructions)

A: MAYDAY MAYDAY MAYDAY, (call sign), ENGINE ON FIRE, MAKING FORCED LANDING (position, level, heading)

G: (call sign), ROGER, MAYDAY, ENGINE ON FIRE, (instructions)

A: MAYDAY MAYDAY MAYDAY, (unit call sign), (call sign), ENGINE FAILED. WILL ATTEMPT TO LAND AT YOUR FIELD, (position, level, heading, any pertinent information)

G: (call sign, unit call sign) ROGER MAYDAY, ENGINE FAILED CLEARED (instructions)

#### 13.1.1 Imposition of silence

The aircraft in distress or the ATS unit in control of distress traffic shall be permitted to impose silence, either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. It shall address these instructions 'to all stations' or to one station only, according to the circumstances.

G: ALL STATIONS, (unit call sign), STOP TRANSMITTING, MAYDAY

The use of the signal MAYDAY shall be reserved for the aircraft in distress and for the ATS unit controlling the distress traffic.

G: (call sign) STOP TRANSMITTING, MAYDAY

**13.1.2** Action by all other ATS units/aircraft

The distress communications have absolute priority over all other communications and ATS units/aircraft aware of them shall not transmit on the frequency concerned unless:

- (a) the distress is cancelled or the distress traffic is terminated
- (b) all distress traffic has been transferred to other frequencies
- (c) the ATS unit controlling communications gives permission
- (d) it has itself to render assistance.

Any ATS unit/aircraft which has knowledge of distress traffic, and which cannot itself assist the aircraft in distress, shall nevertheless continue listening to such traffic unit it is evident that assistance is being provided.

**13.1.3** Termination of distress communications and of silence

When an aircraft is no longer in distress, it shall transmit the message cancelling the distress condition.

Termination of distress and silence by the pilot

A: (unit call sign, call sign) CANCEL DISTRESS.  
ENGINE SERVICEABLE, RUNWAY IN SIGHT, REQUEST LANDING

G: (call sign, unit call sign) CLEARED TO LAND  
RWY (number)

When the ATS unit which has controlled the distress traffic becomes aware that the distress condition is ended it shall take immediate action to ensure that this information is made available, as soon as possible, to:

- (a) the ATS units concerned
- (b) the aircraft operator concerned, or its representative, in accordance with pre-established arrangements.

Termination of silence by the ATC

G: ALL STATIONS (unit call sign) DISTRESS  
TRAFFIC ENDED

**13.2 Radiotelephony urgency communications**

**13.2.1** Action by the aircraft reporting an urgency condition

In addition to being preceded by the radiotelephony urgency signal "PAN PAN", the urgency message to be sent by an aircraft reporting an urgency condition shall be on the air-ground frequency in use at the time and consist of as many as required of the following elements spoken distinctly and, if possible, in the following order:

- (a) the name of the ATS unit addressed
- (b) the identification of the aircraft
- (c) the nature of the urgency condition

**13.2.2** Action by the ATS unit addressed or first ATS unit acknowledging the urgency message

- (d) the intention of the pilot-in-command
- (e) present position, level and heading
- (f) any other useful information.

The ATS unit addressed or first ATS unit acknowledging the urgency message shall:

- (a) acknowledge the urgency message
- (b) take immediate action to ensure that all necessary information is made available, as soon as possible, to:
  - 1. the ATS unit concerned
  - 2. the aircraft operator concerned, or its representative, in accordance with pre-established arrangements
- (c) if necessary, exercise control of communications.

**13.2.3** Action by all other ATS units/aircraft

The urgency communications have priority over all other communications except distress communications and all ATS units/aircraft shall take care not to interfere with the transmission of urgency traffic.

Urgency messages

A: PAN PAN, PAN PAN, PAN PAN, SPLIT TOWER, 9ABPW, ABOVE CLOUD UNSURE OF MY POSITION REQUEST HEADING/BEARING TO SPL C172 4000 FEET, HDG 170

G: 9ABPW SPLIT TOWER TRANSMIT FOR DF

A: PAN PAN, PAN PAN, PAN PAN, ZAGREB RADAR, CTN 661, POSITION RUDIK AT FL 140. PASSENGER WITH SUSPECTED HEART ATTACK. REQUEST PRIORITY LANDING

G: CTN 661 ZAGREB RADAR NUMBER 1, STRAIGHT-IN RUNWAY 05, AMBULANCE REQUESTED

Interception of urgency message

A: PAN PAN, PAN PAN, PAN PAN, ZAGREB RADAR, 9ABPW, INTERCEPTED URGENCY CALL FROM CTN 661, PASSENGER WITH SUSPECTED HEART ATTACK REQUEST PRIORITY LANDING AT ZAGREB. HIS POSITION RUDIK AT FL 140

G: 9ABPW ROGER

G: CTN 661 ZAGREB RADAR, STRAIGHT-IN RUNWAY 05 TRAFFIC NIL

*(if CTN 661 does not acknowledge this message, 9ABPW will relay it)*

#### 13.2.4 Procedures related to weather deviation

When the pilot initiates communications with ATC, a rapid response may be obtained by stating 'WEATHER DEVIATION REQUIRED' to indicate that priority is desired on the frequency and for ATC response. When necessary, the pilot shall initiate communications using the urgency call 'PAN PAN' (preferably spoken three times).

A: ZAGREB RADAR, 9ABPW, WEATHER DEVIATION REQUIRED

A: PAN PAN, PAN PAN, PAN PAN, ZAGREB RADAR, 9ABPW, WEATHER DEVIATION REQUIRED

### 13.3 Procedures by aircraft used for medical transport

For the purpose of announcing and identifying aircraft used for medical transports, a transmission of the RT urgency signal "PAN PAN" preferably spoken three times, shall be followed by the RT signal for medical transports "MAY-DEE-CAL".

The use of the signals described above indicates that the message which follows concerns a protected medical transport.

The message shall convey the following data:

- (a) the call sign or other recognized means of identification of medical transports
- (b) position of the medical transports
- (c) number and type of medical transports
- (d) intended route
- (e) estimated time en route and time of departure and arrival, as appropriate
- (f) any other information such as level, radio frequency guarded, language used and SSR modes and codes.

### 13.4 Communication failure - CIV

*Note:*

*General rules which are applicable in the event of communication failure are contained in ICAO, Annex 10, Volume II*

ATC contingencies related to communications, i.e. circumstances preventing a controller from communicating with aircraft under control, may be caused by either a failure of ground radio equipment, a failure of airborne equipment, or by the control frequency being inadvertently blocked by an aircraft transmitter. The duration of such events may be for prolonged periods and appropriate action to ensure that the safety of aircraft is not affected should therefore be taken immediately.

Air-to-ground communication failure

13.4.1 When an aircraft station fails to establish contact with the aeronautical station on the designated frequency, it shall attempt to establish contact on last frequency, and/or another frequency appropriate to the route. If this attempt fails, the aircraft shall attempt to establish communications on 121.5 MHz and or with other aeronautical station on frequencies appropriate to the route.

13.4.2 If the attempts specified under 13.4.1 fail, the aircraft shall transmit its messages twice on the designated frequency/(ies), preceded by the phrase "TRANSMITTING BLIND" and, if necessary, include the address(es) for which the message is intended.

Use of blind transmission

13.4.3 When an aircraft is unable to establish communication due to receiver failure, it shall transmit reports at the scheduled times, or positions, on the frequency in use, preceded by the phrase "TRANSMITTING BLIND DUE TO RECEIVER FAILURE". The aircraft shall transmit the intended message, following this by a complete repetition. During this procedure, the aircraft shall also advise the time of its next intended transmission.

13.4.4 An aircraft which is provided with air traffic control or advisory service shall, in addition to complying with 13.4.3, transmit information regarding the intention of the pilot-in-command with respect to the continuation of the flight of the aircraft.

13.4.5 When an aircraft is unable to establish communication due to airborne equipment failure it shall, if so equipped, select the appropriate SSR code (7600) to indicate radio failure.

Example

G: TRANSMITTING BLIND (instructions/information)

Use of relay communication technique

13.4.6 When an aeronautical station has been unable to establish contact with an aircraft after calls on the frequencies on which the aircraft is believed to be listening, it shall:  
a) request other aeronautical station to render assistance by calling the aircraft and relaying traffic, if necessary  
b) request aircraft on the route to attempt to establish communication with the aircraft and relay messages, if necessary.

13.4.7 If the attempts specified in 13.4.6 fail, the aeronautical station should transmit messages addressed to the aircraft, other than messages containing air traffic clearances, by blind transmission on the frequency/(ies) on which the aircraft is believed to be listening, 121.5 MHz (VHF) and 243.0 MHz (UHF).

13.4.8 Blind transmission of air traffic control clearances shall not be made to aircraft except at the specific request of ATC.

## Communications and loss of communications

- G: IF YOU READ (unit call sign) ACKNOWLEDGE BY ROCKING THE WINGS/SHOWING LANDING LIGHTS
- G: IF YOU READ (unit call sign) TURN LEFT/RIGHT HEADING (figures) FOR (maximum time 2 minutes) MINUTE(S)/SECONDS
- G: TURN OBSERVED \*POSITION WILL CONTINUE TO PASS INSTRUCTIONS (or instructions)
- G: IF RADIO CONTACT LOST (instructions)
- G: IF NO TRANSMISSIONS RECEIVED FOR (number) MINUTES/SECONDS (instructions)
- G: REPLY NOT RECEIVED (instructions)
- G: IF YOU READ (unit call sign) TURN RIGHT/LEFT, HEADING (three figures)/ SQUAWK IDENT
- G: TURN/IDENT OBSERVED WILL CONTINUE TO PASS INSTRUCTIONS (or instructions)

## 13.5 Emergency descent

When an aircraft announces that it is making an emergency descent, the controller will take every possible action to safeguard other aircraft. Appropriate actions may include the following, in the order appropriate for the circumstance:

- (a) broadcasting an emergency message;
- (b) issuing traffic information and/or instructions to aircraft affected by the descent;
- (c) advising the minimum flight altitude and altimeter setting for the area of operation; and
- (d) informing any other ATS units which may be affected by the emergency descent.

- A: DUE engine NO. 2 failure, PERFORMING EMERGENCY DESCENT TO (level), STAND BY
- G: ROGER, engine NO. 2 failure, EMERGENCY DESCENT TO (level), STANDING BY
- G: ALL STATIONS (unit call sign) EMERGENCY DESCENT (position, level, heading) (instructions)
- G: ATTENTION ALL AIRCRAFT IN THE VICINITY OF/AT (significant point or location) EMERGENCY DESCENT IN PROGRESS FROM (level) (instructions, clearances and traffic information)
- A: DECOMPRESSION, EMERGENCY DESCENT TO (level) (intentions)

G: ROGER, DECOMPRESSION, \*ADVISE

Specific instructions should follow, if necessary, the general call in order to warn aircraft of an emergency descent.

### 13.6 Non-gyro procedures

G: THIS WILL BE A NON-GYRO VECTORING FOR (type of approach) TO (runway or other limit) EXECUTE INSTRUCTIONS IMMEDIATELY UPON RECEIPT OF THE WORD NOW, MAKE ALL TURNS RATE ONE/HALF/(number) DEGREES PER SECOND

G: TURN LEFT/RIGHT NOW

G: STOP TURN NOW

When established on final

G: MAKE ALL TURNS RATE HALF

### 13.7 Fuel dumping

G: ALL STATIONS (Unit call sign), BE ADVISED OF FUEL DUMPING BY (type of aircraft) (position, level, heading) (instructions)

### 13.8 Radar equipment degradation

G: PRIMARY / SECONDARY RADAR OUT OF SERVICE (appropriate information as necessary)

### 13.9 Low altitude warning

G: LOW ALTITUDE WARNING, CHECK YOUR ALTITUDE IMMEDIATELY, QNH (numbers) [MINIMUM SAFE ALTITUDE IS (number)]

### 13.10 Minimum fuel and fuel emergency

(a) When a pilot reports a state of minimum fuel, the controller shall inform the pilot as soon as practicable of any anticipated delays or that no delays are expected.

(b) When the level of fuel renders declaring a situation of distress necessary, the pilot, in accordance with SERA.14095, shall indicate this by using the radiotelephony distress signal (MAYDAY), preferably spoken three times, followed by the nature of the distress condition (FUEL).

A: MINIMUM FUEL

G: ROGER NO DELAY EXPECTED/EXPECT (delay information)

## 14 FIS / RAFIS / VFR phrases

### 14.1 Position reports of VFR flights

Position report of VFR flights contains:

- call sign
- position
- estimated time overhead (if not overhead reported position)
- level or altitude
- estimated time over next point

- A: (call sign) (position, time, level), [ETO next point]
- A: 9ADDA OVERHEAD OTOČAC AT 4000 FEET ESTIMATING TOUNJ AT 1225
- G: ROGER, CONTINUE VISUALLY \*QNH (numbers)

### 14.2 Essential traffic information

The following information shall be provided as appropriate

- (a) direction of flight of aircraft concerned
- (b) type and wake turbulence category of aircraft concerned (if heavier than traffic receiving the essential traffic information)
- (c) level of aircraft concerned including:
  - estimated time over reporting point closest to the passing level or
  - relative bearing of the aircraft concerned in terms of the 12-hour clock as well as distance from the traffic; or
  - actual or estimated position of the aircraft concerned.

- G: TRAFFIC INFORMATION (aircraft type) VFR (reported position report elements)
- G: NORTHBOUND PA 34 VFR ALTITUDE 5500 FEET ESTIMATING CRE 1225
- G: NORTHBOUND C 210 VFR DESCENDING FROM ALTITUDE 8500 TO ALTITUDE 4000 FEET ESTIMATING LOS 1731
- A: LOOKING OUT
- A: TRAFFIC IN SIGHT
- A: NEGATIVE CONTACT – REQUEST AVOIDANCE ADVICE/VECTORS
- G: SUGGEST TURN (left/right)/FLY HEADING (three digits)
- G: CLEAR OF TRAFFIC
- G: NO REPORTED TRAFFIC

### 14.3 Radar flight information service

Examples:

G: THIS IS RADAR FLIGHT INFORMATION SERVICE, CONTINUE VISUALLY/MAINTAIN VFR

G: RADAR FLIGHT INFORMATION SERVICE TERMINATED

G: FOR IDENTIFICATION SQUAWK (code) QNH

G: IDENTIFIED \*(position) THIS IS RADAR FLIGHT INFORMATION SERVICE, CONTINUE VISUALLY

G: IDENTIFICATION LOST ONLY FLIGHT INFORMATION SERVICE NOW

### 14.4 Traffic information

Traffic information contains:

- relative bearing of the aircraft concerned in terms of the 12-hour clock
- distance of conflicting traffic in NM
- direction of flight of conflicting traffic
- level and type of aircraft, or if not known, relative speed of conflicting traffic (e.g. slow or fast moving)

G: TRAFFIC (numbers) O'CLOCK (numbers) MILES (direction of flight) [level, aircraft type, speed]

G: UNKNOWN TRAFFIC, 2 O'CLOCK, 5 MILES, RIGHT TO LEFT, FAST MOVING

G: VFR TRAFFIC, 1 O'CLOCK, 3 MILES, OPPOSITE, ALTITUDE 5500 FEET, PIPER 28

A: REQUEST AVOIDANCE ADVICE/VECTORS

G: SUGGEST TURN (left/right)/FLY HEADING (three digits)

G: CLEAR OF TRAFFIC

### 14.5 Weather information based on radar observations

Example:

G: 9A-DDD, ZAGREB INFORMATION, RADAR SHOWS HEAVY PRECIPITATION AREA TWELVE O'CLOCK, 15 MILES, AREA 10 MILES DEEP, EXTENDING 30 MILES FROM NORTHWEST TO SOUTHEAST

## 14.6 Assistance to VFR flights encountering navigational difficulties

Examples:

A: UNSURE OF MY POSITION, REQUEST NAVIGATION ASSISTANCE

G: REPORT ENDURANCE/FLYING TIME/REMAINING FUEL

G: ARE YOU ABLE TO CONTINUE VISUALLY/ REPORT GROUND CONTACT

G: YOU MAY DESCEND VISUALLY/WITH GROUND CONTACT TO (number) FEET/ FLIGHT LEVEL (number)

G: SUGGEST HEADING (three digits) MAINTAIN VMC /MAINTAIN GROUND CONTACT

G: SUGGEST TURN (numbers) DEGREES TO THE LEFT/RIGHT/MAINTAIN VMC/GROUND CONTACT

G: SQUAWK (code)

A: SQUAWK (code)

G: YOU HAVE BEEN IDENTIFIED BY (name of RADAR unit) AT (significant point/position), PROCEED AS FILED (details)

G: MAINTAIN VMC/MAINTAIN GROUND CONTACT

G: OBSERVE MINIMUM SAFE ALTITUDE/ HEIGHT/OBSTACLE CLEARANCE

G: NAVIGATION ASSISTANCE TERMINATED

G: RESUME OWN NAVIGATION TO (point), POSITION (position or navigation information)

## 14.7 Cancellation/Closing of flight plan

Cancellation of flight plan

A: CANCELLING FLIGHT PLAN/REQUEST TO CANCEL FLIGHT PLAN

G: FLIGHT PLAN CANCELLED AT (time)

Change of FPL/Filing of AFIL

A: CHANGE OF FLIGHT PLAN (details)

A: REQUEST TO FILE AIR FILED FLIGHT PLAN [AFIL]

G: FLIGHT PLAN RECEIVED

Closing of flight plan

A: [\*LANDING TIME (numbers)\*] REQUEST TO  
CLOSE FLIGHT PLAN

G: FLIGHT PLAN CLOSED AT (time four digits)

#### 14.8 General call

Example (large fires):

G: ALL STATIONS, ZAGREB INFORMATION,  
DUE LARGE FIRES, ALL FLIGHTS WITHIN  
RADIUS OF 10 NM AROUND UDBINA UP TO  
ALTITUDE 5000 FEET ARE PROHIBITED

SIGMET and AIRMET (Example)

G: ALL STATIONS ZAGREB INFORMATION  
SIGMET VALID BETWEEN 1600 AND 1800  
O'CLOCK THUNDERSTORM FORECAST  
FOR ZAGREB FIR MOVING EAST

SIGMET Volcanic Ash Existence (Example)

G: DLH323, ACCORDING TO THE LAST SIGMET  
REPORT, YOU ARE ENTERING  
POTENTIALLY CONTAMINATED AREA

#### 14.9 ATIS

Example:

ZAGREB INFORMATION DELTA TIME  
1027 EXPECT ILS APPROACH RUNWAY 05  
FOR ARRIVALS AND DEPARTURES  
BRAKING ACTION POOR SURFACE  
CONDITION 5 MILLIMETERS OF ICE ILS  
RUNWAY 05 DOWNGRADED TO CATEGORY  
1. TRANSITION LEVEL 100. WIND 200  
DEGREES, 9 KNOTS. VISIBILITY 10  
KILOMETERS OR MORE. LIGHT RAIN. CLOUD  
SCATTERED TOWERING CUMULUS 2  
THOUSAND 1 HUNDRED FEET.  
TEMPERATURE 24 DEWPOINT 7 QNH 1010.  
ON FIRST CONTACT WITH ATC  
ACKNOWLEDGE INFORMATION DELTA AND  
QNH

Example:

DUE RAPID CHANGES WEATHER  
INFORMATION AVAILABLE ON CONTROL  
FREQUENCY

#### 14.10 State telegrams

G: STATE YOUR MESSAGE

A: (message)

G: THE MESSAGE HAS BEEN RECEIVED,  
THANK YOU

## H5. Hrvatska frazeologija i postupci

### H5.1 Fraze za aerodromski promet - nekontrolirani aerodromi

#### H5.1.1

Postupci pilota na i u okolici nekontroliranih aerodroma – bez operatera zemaljske radiopostaje

Predaja se obavlja u slijepo na objavljenoj frekvenciji, a pozivni znak je RADIO.

Ulazak u zonu aerodromskog prometa	Z:	(naziv odnosnog aerodroma) (registracijska oznaka i tip zrakoplova) (pozicija i visina) (namjera)
Izveštaj o poziciji	Z:	(naziv odnosnog aerodroma) (registracijska oznaka) (pozicija niz vjetar/završni krak) STAZA (oznaka)
Voženje (nakon slijetanja)	Z:	(naziv odnosnog aerodroma) (registracijska oznaka) NAPUŠTA STAZU (oznaka)
Voženje prije polijetanja	Z:	(naziv odnosnog aerodroma) (registracijska oznaka i tip zrakoplova) VOZI/VOZI ZRAKOM/ PRELAZI JEDRILIČARSKU STAZU PREKO (pozicija/staza za voženje) (namjera, odredište)
Polijetanje	Z:	(naziv odnosnog aerodroma) (registracijska oznaka i tip zrakoplova) IZLAZI NA STAZU (oznaka), POLIJEĆE

#### H5.1.2

Fraze za letove sa i prema nekontroliranim aerodromima - s operaterom zemaljske radiopostaje

Voženje između dvije pozicije na aerodromu	Z:	VOZI OD (pozicija) DO (pozicija)
	Z:	VOZI PREKO (pozicija/staza za voženje) DO (pozicija)
	Z:	VOZI/VOZI ZRAKOM DO UZLETNO-SLETNE POZICIJE/POZICIJE ZA PARKIRANJE (pozicija)
	Z:	PRELAZI STAZU (oznaka staze)
	Z:	PRELAZI STAZU (oznaka staze) IZA (tip zrakoplova) U DOLASKU/ODLASKU
Informacije za voženje za zrakoplove u odlasku	Z:	(tip zrakoplova) ZA (aerodrom odredišta) TRAŽI INFORMACIJU ZA VOŽENJE
	T:	UZLETNA STAZA (oznaka) PREKO (staza za voženje) *VJETAR (smjer, brzina) QNH (brojke) *(informacije o prometu)

Odlazak	T: JAVITE KADA STE SPREMNI *[ZA ODLAZAK] Z: SPREMAN *[ZA ODLAZAK]
Informacija o vremenu odlaska	T: VJETAR (smjer, brzina) ČVOROVA (informacija o prometu) Z: TRAŽI DESNI ZAOKRET *[NAKON POLIJETANJA] T: ODOBREN DESNI ZAOKRET *[NAKON POLIJETANJA] Z: POLIJEĆE IZA (tip zrakoplova) U DOLASKU/ODLASKU
Prilaženje	Z: TRAŽI VRIJEME POLIJETANJA T: VRIJEME POLIJETANJA (vrijeme) Z: (tip zrakoplova) (izveštaj o poziciji) ZA SLIJETANJE/NISKO PRILAŽENJE/SLIJETANJE S PRODUŽAVANJEM Z: INFORMACIJE ZA SLIJETANJE PRIMLJENE *[OD (jedinica KZP)] T: SLETNA STAZA (oznaka) VJETAR (smjer, brzina) QNH (brojke) *(informacije o prometu) Z: TRAŽI DESNI *PROMETNI KRUG/DESNI KRAK NIZ VJETAR/DESNI OSNOVNI KRAK/PRILAŽENJE IZ PRAVCA T: DESNI *PROMETNI KRUG/DESNI KRAK NIZ VJETAR/DESNI OSNOVNI KRAK ODOBREN
Informacija o vremenu slijetanja	T: VRIJEME SLIJETANJA (vrijeme)/SLETJELI U (vrijeme)/NA ZEMLJI U (vrijeme)
<p><i>Napomena 1:</i> Operater zemaljske radiopostaje (koji nije ovlašten za pružanje usluga kontrole zračnog prometa) može dozvoliti, u pojedinim slučajevima, korištenje drugog aerodromskog kruga od propisanog.</p> <p><i>Napomena 2:</i> Određene fraze iz ove točke zrakoplovna radiopostaja može koristiti i u provedbi postupaka u slučajevima opisanim u točki H5.1.1</p>	
Posebne namjere pilota	Z: PRODUŽAVA Z: U NISKOM PRILAŽENJU Z: U KRATKOM/DUGOM SLIJETANJU Z: U SLIJETANJU SA ZAUSTAVLJANJEM Z: PRILAŽI ZA UZIMANJE REKLAME Z: PRILAŽI ZA ODBACIVANJE REKLAME/UŽETA Z: LETI AERODROMSKI(E) KRUG(OVE) Z: SLIJEĆE S PRODUŽAVANJEM Z: NAPUŠTA VAŠU FREKVENCIJU

Upute za sprečavanje opasnosti

T: ZADRŽITE POZICIJU \*(razlog)  
Z: ZADRŽAVA  
T: NAPUSTITE ODMAH UZLETNU/SLETNU STAZU \*(razlog)  
Z: NAPUŠTAM STAZU ODMAH  
T: UBRZAJTE VOŽENJE \*(razlog)  
Z: UBRZAVA VOŽENJE  
T: POLIJETANJE/SLIJETANJE NIJE ODOBRENO \*(razlog)  
T: ZAUSTAVITE SE SMJESTA (ponavljanje pozivnog znaka zrakoplova) ZAUSTAVITE SE SMJESTA  
Z: SE ZAUSTAVLJA  
T: PRODUŽITE \*(razlog)  
Z: PRODUŽAVA

## H5.2 Fraze za letove s i prema kontroliranim aerodromima

Postupci za pokretanje motora

Z: (pozicija) TRAŽI POKRETANJE MOTORA  
Z: (pozicija) TRAŽI POKRETANJE MOTORA \*[INFORMACIJA (ATIS oznaka) PRIMLJENA]  
T: POKRETANJE MOTORA ODOBRENO  
T: OČEKUJTE POKRETANJE MOTORA U (vrijeme)  
T: POKRETANJE MOTORA PREMA VLASTITOJ PROSUDBI  
T: OČEKUJTE POLIJETANJE U (vrijeme) POKRETANJE MOTORA PREMA VLASTITOJ PROSUDBI  
Z: TRAŽI TOČNO VRIJEME  
T: VRIJEME (četiri brojke)  
Z: TRAŽI INFORMACIJE ZA POLIJETANJE  
T: UZLETNA STAZA (oznaka) VJETAR (smjer, brzina) QNH (brojke) TEMPERATURA (brojke) ROSIŠTE (brojke) \*[VIDLJIVOST (brojke) METARA/KILOMETARA, VIDLJIVOST UZDUŽ STAZE (brojke) METARA]

*Napomena 1.*

*Zemaljsko osoblje je dužno komunicirati putem interkoma ili davanjem jasnih signala kako bi pokazalo da je sve odobreno za nastavak pokretanja motora.*

*Napomena 2.*

*Bitno je izvršiti jasnu identifikaciju sudionika u komunikaciji između zemaljskog osoblja i posade zrakoplova.*

Postupci za pokretanje motora - zemaljska posada / pilotska kabina

*Napomena.*

*Ovu komunikaciju prate vizualni signali pilotu koji pokazuju da je odvajanje završeno i da je sve odobreno za voženje.*

Izguravanje

Vuča

T: \*JESTE LI SPREMNI ZA POKRETANJE MOTORA

Z: POKREĆE BROJ (broj(evi) motora)

Z: (pozicija) TRAŽI IZGURAVANJE

T: ODOBRENO IZGURAVANJE, STAZA U UPORABI

T: PRIČEKAJTE

T: IZGURAVANJE PREMA VLASTITOM NAHOĐENJU

T: OČEKUJTE (broj) MINUTA KAŠNJENJA \*ZBOG (razlog)

T: JESTE LI SPREMNI ZA IZGURAVANJE

Z: SPREMNI ZA IZGURAVANJE

T: POTVRDITE OTPUŠTENE KOČNICE

Z: KOČNICE OTPUŠTENE

T: POTVRDITE NAMJEŠTENE KOČNICE

Z: KOČNICE NAMJEŠTENE

T: POČINJEMO S IZGURAVANJEM

T: IZGURAVANJE ZAVRŠENO

Z: PREKINITE IZGURAVANJE

Z: ODVOJITE

T: ODVAJA, PRIČEKAJTE VIZUALNO VAMA JE S LIJEVA/DESNA

Z: TRAŽI VUČU (ime kompanije), (tip zrakoplova) OD (pozicija) DO (pozicija)

T: VUČA ODOBRENA PUTEM (ruta)

Točno vrijeme i aerodromski podaci za zrakoplov u odlasku

T: ZADRŽITE POZICIJU  
T: PRIČEKAJTE  
Z: TRAŽI TOČNO VRIJEME  
T: VRIJEME (četiri brojke)  
Z: TRAŽI INFORMACIJE ZA POLIJETANJE  
T: UZLETNA STAZA (oznaka) VJETAR (smjer, brzina) QNH (brojke) TEMPERATURA (brojke) ROSIŠTE (brojke) VIDLJIVOST (brojke) METARA/KILOMETARA, VIDLJIVOST UZDUŽ STAZE (brojke) METARA

### H5.3 Postupci u voženju

Odlazak s podacima za polijetanje

Z: (pozicija) TRAŽI VOŽENJE \*[INFORMACIJA (ATIS oznaka) PRIMLJENA]

Odlazak bez podataka za polijetanje

Z: (tip zrakoplova) (pozicija) VFR ZA (odredište) \*[INFORMACIJA (ATIS oznaka) PRIMLJENA] TRAŽI VOŽENJE \*(namjere)

Voženje

T: VOZITE DO POZICIJE ZA ČEKANJE UZLETNA STAZA (oznaka) PO (stazi za voženje) \*VJETAR (smjer, brzina) \*QNH (brojke)

T: VOZITE/SKRENITE U PRVU/DRUGU STAZU LIJEVO/DESNO

T: VOZITE PO (staze za voženje)

T: VOZITE PO UZLETNOJ /SLETNOJ STAZI (oznaka)

T: VOZITE PREMA STAJANCI/TERMINALU/ PARKING POZICIJI (oznaka)

Z: TRAŽI POVRATNO VOŽENJE PO UZLETNOJ/SLETNOJ STAZI \*(oznaka)

T: POVRATNO VOŽENJE \*ODOBRENO \*(oznaka uzletno/sletne staze)

T: VOZITE POVRATNO PO UZLETNOJ/SLETNOJ STAZI (oznaka)

Z: (pozicija) TRAŽI VOŽENJE (prema mjestu na aerodromu)

T: VOZITE RAVNO NAPRIJED

	T:	VOZITE/SKRENITE DESNO/SLJEDEĆA LIJEVO/ NA KRAJU UZLETNO/SLETNE STAZE
	T:	VOZITE OPREZNO *(razlog)
	T:	DAJTE PREDNOST (opis i pozicija drugog zrakoplova)
	Z:	DAJE PREDNOST *(prometu)
	Z:	PROMET *(ili tip zrakoplova) UOČEN
	T:	VOZITE U UGIBALIŠTE ZA ČEKANJE
	T:	SLIJEDITE (opis drugog zrakoplova ili vozila)
	T:	NAPUSTITE UZLETNO SLETNU STAZU
	Z:	NAPUSTIO UZLETNO SLETNU STAZU
	T:	UBRZAJTE VOŽENJE *(razlog)
	Z:	UBRZAVA
	T:	*OPREZ VOZITE SPORIJE *(razlog)
	Z:	USPORAVA
	T:	VOZITE/VOZITE ZRAKOM DO STAJANKE/ VRATNICE/MJESTA ZA PARKIRANJE (pozicija)
	Z:	VOZI/VOZI ZRAKOM DO STAJANKE/ VRATNICE/MJESTA ZA PARKIRANJE (pozicija)
Čekanje	T:	ZADRŽITE POZICIJU
	Z:	ZADRŽAVA POZICIJU
Zadržavanje uz USS ne bliže nego što je određeno	T:	ZADRŽITE (smjer) OD (pozicija/uzletno/sletna staza)
	T:	ZADRŽITE (udaljenost) OD (pozicija)
	Z:	ZADRŽAVA (pozicija)
	T:	ZADRŽITE POZICIJU UZ (oznaka)
	Z:	ZADRŽAVA UZ (oznaka)
Zadržavanje uz uzletno/sletnu stazu ne bliže od pozicije za čekanje (ako postoji), ili najmanje 50 m od ruba USS	T:	ZADRŽITE POZICIJU NA *CAT II/III POZICIJI ZA ČEKANJE
	Z:	ZADRŽAVA NA *CAT II/III POZICIJI ZA ČEKANJE

Prelazak uzletno-sletne staze	Z: TRAŽI PRELAŽENJE UZLETNO SLETNE STAZE (oznaka)
	T: PRIJEDITE UZLETNU/SLETNU STAZU (oznaka) JAVITE NAPUŠTANJE
	Z: PRELAZI STAZU (oznaka) POSTUPIT ĆU
	T: UBRZAJTE PRELAŽENJE UZLETNO/SLETNE STAZE *(oznaka) *[PROMET (tip zrakoplova) (udaljenost) MILJA U ZAVRŠNOM PRILAŽENJU]
	Z: NAPUSTIO/LA STAZU
<b>Napomena.</b> <i>Ako kontrola nije drukčije odredila, uputa koja zahtijeva prelaženje uzletno/sletne staze NE uključuje dozvolu za prelaženje iste, dozvola za prelazak staze mora se posebno izdati.</i>	
Postupci za helikoptere	T: VOZITE ZRAKOM DO STAJANKE/PARKINGA (oznaka)
	T: VOZITE ZRAKOM DO/PREKO (mjesto ili ruta) OPREZ (razlog)
<b>H5.3.1 Uputa za odlazak</b>	
Upute za odlazak	Z: TRAŽI UPUTE ZA ODLAZAK *(pojedivosti)
	T: NAPUSTITE KONTROLIRANU ZONU (ruta) NA (brojke) STOPA/ILI *IZNAD/ISPOD
	T: NAPUSTITE KONTROLIRANU ZONU POSEBNI VFR (ruta) NA (brojke) STOPA ILI *ISPOD
Ako odobrenje za polijetanje nije moguće dodijeliti	T: ODLAZAK PREKO (ruta) NIJE MOGUĆ *(razlog)
	T: JAVITE SPREMNI *ZA ODLAZAK
	T: JESTE LI SPREMNI *ZA ODLAZAK
	Z: SPREMAN *ZA ODLAZAK
	T: JESTE LI SPREMNI ZA ŽURNI ODLAZAK
	Z: SPREMAN ZA ŽURNI ODLAZAK
	T: PRIČEKAJTE/ČEKAJTE
	T: KAD POLETITE (upute)
Odobrenje za izlazak na uzletno/sletnu stazu i čekanje odobrenja za polijetanje	T: VOZITE NA TOČKU POLIJETANJA
	T: VOZITE NA TOČKU POLIJETANJA UZLETNO/SLETNE STAZE (oznaka)
	T: VOZITE NA TOČKU POLIJETANJA SPREMNI ZA ŽURNI ODLAZAK

Uvjetno odobrenje	T: (uvjet) VOZITE NA TOČKU POLIJETANJA Z: (uvjet) VOZI NA TOČKU POLIJETANJA
Polijetanje Polijetanje pri slaboj vidljivosti	T: ODOBRENO POLIJETANJE T: ODOBRENO POLIJETANJE, JAVITE SE U ZRAKU/KAD POLETITE
Ako postoji mogućnost zabune ili više staza	T: ODOBRENO POLIJETANJE UZLETNA/SLETNA STAZA (oznaka)
Ako se nije postupalo u skladu s odobrenjem za polijetanje	T: POLETITE SMJESTA ILI NAPUSTITE UZLETNU/SLETNU STAZU T: POLETITE SMJESTA ILI SE ZADRŽITE NA POZICIJI ZA ČEKANJE Z: POLIJEĆE/NAPUŠTA STAZU Z: POLIJEĆE/ČEKA BLIZU
Poništenje odobrenja za polijetanje	T: (pozivni znak) ZADRŽITE POZICIJU POLIJETANJE PONIŠTENO (ponavljanje pozivnog znaka zrakoplova) PONAVALJAM POLIJETANJE PONIŠTENO (razlog) Z: ZADRŽAVA POZICIJU
Prekid polijetanja u uvjetima nužde	T: (pozivni znak) ZAUSTAVITE SE SMJESTA (ponavljanje pozivnog znaka zrakoplova) ZAUSTAVITE SE SMJESTA Z: ZAUSTAVLJA
Nakon odlaska	Z: TRAŽI LIJEVI/DESNI ZAOKRET T: ODOBREN/NIJE ODOBREN LIJEVI/DESNI ZAOKRET T: PRIČEKAJTE UPUTU ZA DESNI/LIJEVI ZAOKRET T: NAKON PROLASKA (visina) (pozicija) (uputa) Z: POLETIO
Smjer koji se mora slijediti	T: PENJITE U PRAVCU (uputa) T: LETITE U SMJERU (brojke)

**Napomena.**

*Uvjetna odobrenja moraju se ponoviti zajedno s uvjetima.*

### H5.3.2 Slijetanje – aerodromski prometni krug

Ulaženje u kontroliranu zonu / aerodromski prometni krug	Z: (tip zrakoplova) VFR (izvještaj o poziciji) ZA SLIJETANJE/NISKO PRILAŽENJE/SLIJETANJE S PRODUŽAVANJEM
	T: UĐITE U KONTROLIRANU ZONU PREKO (ruta) (visina leta po potrebi) UZLETNO/SLETNA STAZA (oznaka) VJETAR (smjer, brzina) QNH (brojke)
	T: UĐITE U KONTROLIRANU ZONU POSEBNI VFR PREKO (ruta) (visina leta po potrebi) UZLETNO/SLETNA STAZA (oznaka) VJETAR (smjer, brzina) QNH (brojke)
	Z: TRAŽI DESNI PROMETNI KRUG
	T: UKLJUČITE SE U LIJEVI/ DESNI PROMETNI KRUG UZLETNO/SLETNA STAZA (oznaka) VJETAR (smjer, brzina) QNH (brojke) *[INFORMACIJA O PROMETU (pojednosti)]
Skraćivanje prometnog kruga	Z: TRAŽI IZRAVNI ULAZ U DESNI/LIJEVI OSNOVNI KRAK/DESNI OSNOVNI KRAK
	T: UĐITE IZRAVNO U DESNI/LIJEVI OSNOVNI KRAK
	Z: TRAŽI PRILAŽENJE IZ PRAVCA
	T: ODOBRENO PRILAŽENJE IZ PRAVCA
Traženje izvještaja o poziciji	T: JAVITE KAD UOČITE AERODROM/UZLETNO/SLETNU STAZU/PRILAZNA SVJETLA
	T: JAVITE (poziciju u prometnom krugu)
Upute za slijed slijetanja	T: BROJ (brojka) ZA SLIJETANJE SLIJEDITE (tip zrakoplova, poziciju)
	T: IZVRŠITE KRATKO/DUGO PRILAŽENJE
	T: PRODULJITE KRAK NIZ VJETAR (pojednosti)
	T: NASTAVITE PRILAŽENJE
Slijetanje	T: ODOBRENO SLIJETANJE VJETAR (smjer, brzina)
	T: IZVRŠITE KRATKO/DUGO SLIJETANJE

Posebni postupci	T: ODOBRENO SLIJETANJE S PRODUŽAVANJEM
	T: IZVRŠITE SLIJETANJE SA ZAUSTAVLJANJEM
Prilaženje duž uzletno/sletne staze u sniženju do određene minimalne visine	Z: TRAŽI NISKO PRILAŽENJE (razlog)
	T: ODOBRENO NISKO PRILAŽENJE ZA STAZU (oznaka) (ograničenja visine leta) QNH (brojke) (uputa za produžavanje)
	Z: TRAŽI NISKI PRELET (razlog)
	T: ODOBRENO NISKI PRELET (oznaka) (ograničenja visine leta) QNH (brojke) (uputa za produžavanje)
	Z: (izvješće o stanju podvozja) (H5.3.4)
Čekanje zrakoplova	T: ČEKAJTE IZNAD (pozicija) DO (vrijeme)
	T: NAPRAVITE JOŠ JEDAN PROMETNI KRUG
	T: KRUŽITE LIJEVO/DESNO/NA TRENUTNOJ POZICIJI
	T: NAPRAVITE ZAOKRET OD 360 UDESNO/ULIJEVO
Neuspjelo prilaženje	T: PRODUŽITE (uputa)
	Z: PRODUŽAVA
Napuštanje staze	T: NAPUSTITE STAZU (smjer) PREKO STAZE ZA VOŽENJE (ime) NASTAVITE VOŽENJE PREMA (pozicija)
	T: POŽURITE S NAPUŠTANJEM STAZE
<b>H5.3.3 Promjena frekvencije</b>	
Promjena frekvencije	Z: TRAŽI NAPUŠTANJE FREKVENCIJE
	Z: TRAŽI NAPUŠTANJE FREKVENCIJE ZA (brojke) MINUTU(E)(A)
	T: ODOBRENO NAPUŠTANJE FREKVENCIJE
	T: OSTANITE (NA) OVOJ FREKVENCIJI DO (pozicija)/JOŠ (brojke) MINUTU(E)(A)
Napomena.	T: POZOVITE (jedinica KZP) NA (frekvencija)

Od zrakoplova se može zatražiti da:

- "pričeka", na frekvenciji, kada se očekuje da nadležna kontrola zračnog prometa inicira komunikaciju

- "sluša" drugu postaju/frekvenciju od tog trenutka ili nakon danog uvjeta

#### H5.3.4 Uobičajene fraze za aerodromski promet

Poteškoće s podvozjem

T: PRIČEKAJTE (NA) (jedinica KZP) (frekvencija)

T: SLUŠAJTE (jedinica KZP) NA (frekvencija)  
\*[NAKON POLIJETANJA]

Z: IMA POTEŠKOĆE S PODVOZJEM

T: PODVOZJE SE ČINI IZVUČENO/UVUČENO

T: PODVOZJE SE NE ČINI IZVUČENO/UVUČENO

T: (dio podvozja) SE ČINI IZVUČEN/UVUČEN

T: (dio podvozja) SE NE ČINI IZVUČEN/UVUČEN

Ostale poteškoće koje nisu situacija nužde

T: VJEROJATNO ISPUŠTATE GORIVO/ULJE

T: ZA VAŠIM ZRAKOPLOVOM OSTAJE DIMNI TRAG

T: VAŠE UŽE/REKLAMA SE NIJE OTKVAČILO(A)

Zrakoplov s neispravnim radio-predajnikom

T: POTVRDITE POKRETANJEM KRILACA/KORMILA

T: POTVRDITE LJULJANJEM KRILA

T: POTVRDITE SVJETLIMA ZA SLIJETANJE

Informacija o prometu

T: LETENJE JEDRILICA/MODELA/SKAKANJE PADOBRANACA/AKROBATSKO LETENJE (pozicija)

T: PROMET (tip zrakoplova) (pozicija u prometnom krugu) IZVODI SLIJETANJE SA ZAUSTAVLJANJEM/SLIJETANJEM S PRODUŽAVANJEM/NISKIM PRILAŽENJEM/CILJNO SLIJETANJE

T: DODATNI PROMET (tip zrakoplova) (pozicija u prometnom krugu)

T: VUČA REKLAMA/JEDRILICA (pozicija)

T: INFORMACIJA O PROMETU (pojedinsti)

T: NEMA PRIJAVLJENOG PROMETA

T: (tip zrakoplova/vozilo/osobe) (pozicija) DOLAZI VAM U ČELO/ZDESNA/SLIJEVA/IZ ISTOG SMJERA

	T:	(tip zrakoplova) POLIJEĆE/SLIJEĆE NA UZLETNU/SLETNU STAZU (oznaka)
	T:	(tip zrakoplova) PRILAZI IZ/ODLAZI PREMA (smjer)
	T:	NEPOZNATI PROMET (smjer, udaljenost i druge informacije)
	Z:	GLEDA
	Z:	VIDI PROMET
	Z:	NE VIDI PROMET
	T:	PROŠLI STE SE
Vrtložna turbulencija	T:	OPREZ VRTLOŽNA TURBULENCIJA
	T:	BROJ 2 IZA (tip zrakoplova) (pozicija) *(visina leta) OPREZ VRTLOŽNA TURBULENCIJA
Ispušni mlaz	T:	OPREZ ISPUŠNI MLAZ
<b>H5.3.5 Stanje manevarskih površina</b>		
Stanje manevarskih površina	T:	GRAĐEVINSKI RADOVI S OBJE STRANE/LIJEVO/DESNO OD (dio manevarske površine)
	T:	(dio manevarske površine) JE VLAŽAN/MOKAR/SUH
	T:	VODA NA (dio manevarske površine)
	T:	(dio manevarske površine) JE SUH/DJELOMIČNO POKRIVEN SNIJEGOM/POKRIVEN LEDOM/KLIZAV/KEMIJSKI TRETIRAN
	T:	(dio manevarske površine) SNIJEG/LED UKLONJEN/POSUT
	T:	SNJEŽNI NANOSI/ZAPUSI (dio manevarske površine)
	T:	(dio manevarske površine) ZATVOREN/RASKVAŠEN /NERAVAN
Kočenje	T:	KOČENJE DOBRO/ SREDNJE DO DOBRO/SREDNJE/SREDNJE DO LOŠE/LOŠE
	T:	NEMA PODATAKA O KOČENJU
	T:	KOČENJE JAVLJENO OD STRANE (tip zrakoplova) U (vrijeme) DOBRO/ SREDNJE DO DOBRO/SREDNJE/SREDNJE DO LOŠE/LOŠE

Operativno stanje vizualnih i ne-vizualnih prilaznih sredstava

T: (dio svjetlosnog sustava) IZVAN UPORABE

T: (opis vizualnog ili ne-vizualnog prilaznog sredstva) UZLETNO/SLETNA STAZA (oznaka) (opis nedostatka)

T: (vrsta) OSVJETLJENJE (operativno stanje)

### H5.3.6 Meteorološki uvjeti

Meteorološki uvjeti

T: VJETAR (smjer, brzina) ČVOROVA

T: VIDLJIVOST (brojke) METARA/KILOMETARA

Vrijednost tlaka zraka za postavljanje visinomjera

T: QNH/QFE (brojke)

**Napomena.** QFE vrijednost tlaka zraka koriste, u pravilu, zrakoplovi tipa MiG 21 u prilaženju na kontrolirani aerodrom.

### H5.4 Izvešća iz zraka (AIREP)

H5.4.1 Izvešća iz zraka (AIREP) treba prihvatiti i poslati ih lokalnom MET uredu te, ako je potrebno, proslijediti i drugim pilotima kao i radnim pozicijama kontrole zračnog prometa.

H5.4.2 Također treba prihvatiti i ostala izvješća pilota zrakoplova koja utječu na sigurnost zračnog prometa ili javnu sigurnost i red (npr. izvješća o šumskim požarima, zagađenju voda naftom, prometnim nesrećama) i proslijediti ih nadzorniku smjene kontrole zračnog prometa, a i drugim zrakoplovima na koje se to odnosi.

## H12. Vojni RT postupci

### H12.1 Obrambeni letovi

Zadavanje zadaće

T: ALPHA SCRAMBLE POLETIO (polazni aerodrom) (pozivni znak) (broj i tip zrakoplova) SMJER (brojke) RAZINA LETA (brojke) CILJANO PODRUČJE SJEVERNO OD (mjesto) SQUAWK (kod)

Z: PROMJENA STATUSA ALPHA U TANGO SCRAMBLE

Faza povratka

Z: PROMJENA STATUSA TANGO U ALPHA SCRAMBLE

Vježba obrambenog leta

Presretanje

Identifikacija

A1: CALL SIGN\*  
A2: CALL SIGN

Upute presretača

A1: FOLLOW  
A1: DESCEND  
A1: YOU LAND  
A1: PROCEED

Odgovori zrakoplova kojeg se presreće

A2: WILCO  
A2: CAN NOT  
A2: REPEAT

Ostale fraze

A2: AM LOST  
A2: MAYDAY  
A2: HIJACK  
A2: LAND  
A2: DESCEND

A1 – presretač

A2 – zrakoplov kojega se presreće

Napomena 1:

Pozivni znak koji se traži od presretnutog zrakoplova treba biti onaj koji se koristi u RT komunikaciji s centrima kontrole zračnog prometa i koji se podudara s registracijskom oznakom zrakoplova iz plana leta.

Napomena 2:

Sukladno propisima o RT u slučaju presretanja, komunikacija se obavlja isključivo na engleskom jeziku.

#### H12.1.1 Signali i znakovi za presretanje\*

Ako tijekom radiokomunikacije u presretanju ne postoji mogućnost sporazumijevanja na istom jeziku, moraju se pokušati razmijeniti bitne informacije i potvrditi primljene upute primjenjujući dolje navedene fraze s izgovorom. Svaka se fraza mora emitirati dva puta.

	Fraza	Izgovor	Značenje
Izrazi koje koristi presretač:	CALL SIGN FOLLOW DESCEND YOU LAND PROCEED	<b>KOL SAJN</b> <b>FOL OU</b> <b>DI SEND</b> <b>JU LEND</b> <b>PRO SID</b>	Koji je Vaš pozivni znak? Slijedite me! Počnite snižavanje za slijetanje! Sletite na ovaj aerodrom! Možete nastaviti let!

	Fraza	Izgovor	Značenje
Izrazi koje koristi presretnuti zrakoplov:	CALL SIGN WILCO CAN NOT REPEAT AM LOST MAYDAY HIJACK LAND (ime aerodroma) DESCEND	<b>KOL SAJN</b> <b>VIL KO</b> <b>KEN NOT</b> <b>RI PIT</b> <b>EM LOST</b> <b>MEJ DEJ</b> <b>HAJ DŽEK</b> <b>LEND</b> <b>DI SEND</b>	Moj pozivni znak je ... Razumio, postupam prema uputi! Nemoguće slijediti uputu! Ponovite Vašu uputu! Pozicija nepoznata! U nuždi sam! Otet sam! Tražim slijetanje na (ime aerodroma)! Tražim snižavanje!

Naglašavaju se dijelovi fraza tiskani masnim slovima. Obzirom na okolnosti, korištenje izraza "HIJACK/OTET" može biti neprovedivo, te stoga nije ni preporučljivo. Pilot zrakoplova mora navesti pozivni znak zrakoplova koji koristi u radiokomunikaciji s kontrolom zračnog prometa, a koji odgovara registracijskoj oznaci zrakoplova navedenoj u planu leta.\*

## H12.2 Vježbovni letovi

Zaustavljanje motora (u zraku)

Z: TRAŽI ZAUSTAVLJANJE MOTORA  
T: ZAUSTAVLJANJE MOTORA ODOBRENO  
JAVITE PONOVRNO POKRETANJE  
Z: MOTOR PONOVRNO POKRENUT  
T: PRIMIO/LA JAVITE GORNJU KLJUČNU TOČKU  
Z: JAVIT ĆU

Z: TRAŽI ZAUSTAVLJANJE MOTORA  
T: ZAUSTAVLJANJE MOTORA ODOBRENO  
JAVITE PONOVRNO POKRETANJE  
Z: MOTOR NIJE PONOVRNO POKRENUT  
T: PRIMIO/LA JAVITE GORNJU KLJUČNU TOČKU  
JAVITE NAMJERE  
Z: GORNJA KLJUČNA TOČKA  
T: PRIMIO/LA JAVITE ZAVRŠNI KRAK

Imitacija prisilnog slijetanja

Z: ULAZNA TOČKA (lokacija) ZA IMITACIJU  
T: PRIMIO/LA, JAVITE GORNJU KLJUČNU TOČKU  
Z: JAVIT ĆU

Napomena: Za operacije s više staza \*STAZA (oznaka)\* dolazi ispred odobrenja za slijetanje.

Z: GORNJA KLJUČNA TOČKA  
T: PRIMIO/LA, \*STAZA (oznaka)\* ODOBRENO  
SLIJETANJE  
T: ODOBRENO SLIJETANJE

Ulazak u aerodromski prometni krug preko točke razlaza/u  
brišućem letu - pojedinačni zrakoplov

Z: ULAZNA TOČKA (lokacija) ZA TOČKU  
RAZLAZA/ TOČKU RAZLAZA NA MALOJ VISINI  
T: PRIMIO/LA JAVITE TOČKU RAZLAZA/TOČKU  
RAZLAZA NA MALOJ VISINI STAZA (oznaka)  
LIJEVI/DESNI AERODROMSKI KRUG  
Z: STAZA (oznaka) JAVIT ĆU PRIMIO/LA  
Z: TOČKA RAZLAZA  
T: PRIMIO/LA RAZLAZ ODOBREN JAVITE  
LIJEVI/DESNI KRAK NIZ VJETAR  
Z: RAZLAZ LIJEVO/DESNO JAVIT ĆU  
Z: KRAK NIZ VJETAR TRAP IZVUČEN I  
ZABRAVLJEN  
T: PRIMIO/LA ODOBRENO SLIJETANJE STAZA  
(oznaka)  
Z: ODOBRENO SLIJETANJE STAZA (oznaka)  
PRIMIO/LA

Ulazak u aerodromski prometni krug preko točke razlaza/u  
brišućem letu - grupa zrakoplova/formacija

Z1: ULAZNA TOČKA (lokacija) ZA TOČKU  
RAZLAZA/TOČKU RAZLAZA NA MALOJ VISINI  
T: PRIMIO/LA JAVITE TOČKU RAZLAZA/TOČKU  
RAZLAZA NA MALOJ VISINI STAZA (oznaka)  
LIJEVI/DESNI ŠKOLSKI KRUG  
Z1: STAZA (oznaka) JAVIT ĆU  
  
Z1: TOČKA RAZLAZA  
T: PRIMIO/LA RAZLAZ ODOBREN JAVITE  
LIJEVI/DESNI KRAK NIZ VJETAR STAZA  
(oznaka)  
Z1: RAZLAZ LIJEVO/DESNO JAVIT ĆU  
  
Z1: KRAK NIZ VJETAR TRAP IZVUČEN I  
ZABRAVLJEN  
T: PRIMIO/LA ODOBRENO SLIJETANJE STAZA  
(oznaka) VJETAR (vrijednost)  
Z1: ODOBRENO SLIJETANJE STAZA (oznaka)  
  
Z2: KRAK NIZ VJETAR TRAP IZVUČEN I  
ZABRAVLJEN  
T: PRIMIO/LA ODOBRENO SLIJETANJE STAZA  
(oznaka) VJETAR (vrijednost)  
Z2: ODOBRENO SLIJETANJE STAZA (oznaka)  
  
Z3: KRAK NIZ VJETAR TRAP IZVUČEN I  
ZABRAVLJEN  
T: PRIMIO/LA ODOBRENO SLIJETANJE STAZA  
(oznaka) VJETAR (vrijednost)  
Z3: ODOBRENO SLIJETANJE STAZA (oznaka)  
  
Z4: KRAK NIZ VJETAR TRAP IZVUČEN I  
ZABRAVLJEN  
T: PRIMIO/LA STAZA (oznaka), VJETAR  
(vrijednost) ODOBRENO SLIJETANJE  
Z4: STAZA (oznaka) ODOBRENO SLIJETANJE

VFR pilotažne zone

Z: POČINJE RAD U VFR ZONI (naziv ili oznaka)  
T: PRIMIO/LA JAVITE ZAVRŠETAK RADA  
Z: JAVIT ĆU  
Z: ZAVRŠIO/LA RAD VFR ZONA (naziv ili oznaka)

### H12.3 Helikopterski aerodromski promet

Rad na niskoletećim površinama	H: POZICIJA ZA ČEKANJE TRAJIM PRELET DO VRATNICA (pozicija) T: PRIJEĐITE UZLETNO-SLETNU STAZU (oznaka) ODOBREN PRELET DO VRATNICA H: PRELAZI UZLETNO-SLETNU STAZU (oznaka) ZA PRELET DO VRATNICA H: POČINJE SA RADOM NA VRATNICAMA T: PRIMIO/LA JAVITE ZAVRŠETAK RADA H: JAVIT ĆU H: ZAVRŠIO/LA RAD NA VRATNICAMA T: PRIMIO/LA PRIJEĐITE UZLETNO-SLETNU STAZU (oznaka) VOZITE ZRAKOM NA STAJANKU H: PRELAZI UZLETNO-SLETNU STAZU (oznaka) ZA VOŽENJE NA STAJANKU
Aerodromski prometni krugovi za uvježbavanje autorotacije/otkaza hidrauličnog sustava	H: SPREMAN/NA ZA ODLAZAK ZA AUTOROTACIJU T: POLIJETANJE ODOBRENO H: POLIJETANJE ODOBRENO PRIMIO/LA H: KRAK NIZ VJETAR ZA AUTOROTACIJU/ ZA IMITACIJU OTKAZA HIDRAULIČNOG SUSTAVA
Pokretanje za grupu (traži samo vođa)	Z: POKRETANJE ZA PAR/ RUPU T: ODOBRENO POKRETANJE, STAZA (oznaka), QNH/QFE (brojka) Z: STAZA (oznaka), QNH/QFE (brojka)

### H12.4 Protupožarni letovi

Protupožarni letovi	Z: LET ZA GAŠENJE POŽARA
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### H12.5 Vježbovni letovi - MiG – 21

Pokretanje za grupu (traži samo vođa)	Z: POKRETANJE ZA PAR/GRUPU T: ODOBRENO POKRETANJE, STAZA (oznaka), QNH/QFE (brojka) Z: STAZA (oznaka), QNH/QFE (brojka)
Voženje	Z: VOŽENJE ZA PAR/GRUPU T: ODOBRENO VOŽENJE U SPOJNICU (oznaka), STAZA (oznaka)
Izlazak na stazu traži samo vođa, (provjere izvršene u svim zrakoplovima)	Z: SPOJNICA (oznaka), STAZA (oznaka) T: NAKON POLIJETANJA (visina) U PRAVCU, ONDA OKRENITE U LIJEVO PREMA (pozicija/točka) (početnoj točki rute/zoni) Z: NAKON POLIJETANJA (visina) U PRAVCU, ONDA OKRENITE U LIJEVO PREMA (pozicija/točka) (početnoj točki rute/zoni)

	Z:	KABINA, DOZVOLITE POVRATAK STAZOM DO IZVRŠNOG STARTA (oznaka)/NA IZVRŠNI START/NA STAZU (oznaka)
	T:	ODOBRENO STAZOM (oznaka)/NA STAZU (oznaka)
	Z:	ODOBRENO STAZOM (oznaka)/NA STAZU (oznaka)
Polijetanje	Z:	DOZVOLITE POLIJETANJE
	T:	ODOBRENO POLIJETANJE
	Z:	ODOBRENO POLIJETANJE
(Poletio, izvršene sve provjere nakon polijetanja)	Z:	UVUČENO, NEUTRALNO, KONUS RADI
	T:	U REDU, PRIJEĐITE NA (jedinica KZP) FREKVENCIJA/KANAL
	Z:	FREKVENCIJA/KANAL
Rutno letenje (Predviđanje vremena za sljedeću točku nije obavezno)	Z:	(pozicija/točka), (visina), PREMA (pozicija/točka)
	T:	ODOBRENO PREMA (pozicija/točka), SNIŽAVAJTE/PENJITE NA (visina)/ZADRŽITE (visina)
	Z:	ODOBRENO PREMA (pozicija/točka) SNIŽAVA/PENJE DO (visina)/ZADRŽAVA (visina)
Samo za MiG-ove	T:	JAVITE POČETAK UBRZANJA/USPORAVANJA
<i>Napomena: Kod presretanja koristi se ista frazeologija kao i kod letenja po ruti ili prilikom odlaska u zonu. Nakon polijetanja Aerodromska/Prilazna kontrola zračnog prometa je dužna osigurati pilotu prelazak na radni kanal, te se MiG odjavljuje od radarske kontrole i prelazi na radni kanal. Po završetku presretanja MiG se javlja radarskoj kontroli i slijedi normalan povratak rutom ili ka ulaznoj točki.</i>		
Slijetanje iz pravca	Z:	(pozicija, visina) ZA SLIJETANJE IZ PRAVCA
	T:	ODOBREN PRILAZ ZA SLIJETANJE IZ PRAVCA, STAZA (oznaka), QFE (brojka), JAVITE TRAP ZA SLIJETANJE
	Z:	ODOBREN PRILAZ, STAZA (oznaka), QFE (brojka), POSTUPIT ĆU
	Z:	TRAP ZA SLIJETANJE, ZRAK
Podvozje - trap izvučen, (izvršene provjere)	T:	PRIMLJENO, JAVITE FLAPS, POLUGU
	Z:	JAVIT ĆU
	Z:	FLAPS, POLUGA, 3 ZELENE
U kratkom finalu, (izvršene sve provjere za slijetanje)	T:	ODOBRENO SLIJETANJE STAZA (oznaka)
	Z:	ODOBRENO SLIJETANJE STAZA (oznaka)
Aerodromski prometni krug	Z:	(pozicija/točka) (visina), DOZVOLITE SNIŽAVANJE NA (visina) PREMA TREĆEM ZAOKRETU ZA SLIJETANJE ZA STAZU (oznaka)
	T:	ODOBRENO (visina) PREMA TREĆEM, STAZA (oznaka), QFE (brojka), JAVITE TRAP ZA SLIJETANJE

(Pred trećim zaokretom, trap izvučen, izvršene provjere

Z: ODOBRENO (visina) PREMA TREĆEM, STAZA (oznaka), QFE (brojka), POSTUPIT ČU

(U osnovnom kraku, izvršene sve provjere za slijetanje)

Z: TRAP ZA SLIJETANJE, ZRAK  
T: PRIMLJENO, JAVITE FLAPS, POLUGU  
Z: JAVIT ČU  
Z: FLAPS, POLUGA, 3 ZELENE  
T: ODOBRENO SLIJETANJE, STAZA (oznaka)  
VJETAR (smjer, brzina)  
Z: ODOBRENO SLIJETANJE STAZA (oznaka)

## H12.6 Postupci u nuždi

### H12.6.1 Otkaz radio veze

Postupci koji se primjenjuju nakon što je ustanovljen jednostrani otkaz radioveze

- 1 „klik“ (jedna sekunda) znači „DA“ ili služi kao potvrda
- 2 „klika“ znači „NE“
- 3 „klika“ znači „PONOVI“
- 1 dugi znak (dvije sekunde) znači da je pilot završio postupak kao što mu je; rečeno; kontrolor mora ponoviti pretpostavljenu poruku pilota, te dobiti potvrdu ispravnosti
- 1 dugi, 2 kratka, 1 dugi (Morzeovo slovo „X“) znači da je zrakoplov pretrpio novi kvar od kad je postupak u nuždi započeo

Sljedeće informacije mogu se dobiti od pilota tražeći odgovore samo sa „DA“ i „NE“.

Davanje posebnog pozivnog znaka

Z: (4 kratka signala)  
T: TIHI ZRAKOPLOV OVO JE (jedinica KZP)  
LETITE U SMJERU (brojke) PREMA (odredište)  
Z: (1 kratki signal)  
Z: (1 dugi signal)  
T: TIHI ZRAKOPLOV PRIHVAĆA POZIVNI ZNAK  
“TIHI JEDAN”

Potvrda kvara pilotovog mikrofona

Z: (1 kratki signal)  
T: TIHI JEDAN JE LI OVO VJEŽBA

Potvrda stanja zrakoplova

T: TIHI JEDAN IMATE LI DRUGE KVAROVE

Uvjeti za let

T: TIHI JEDAN JESTE LI SPOSOBNI ZA  
– ODRŽAVANJE RAZINE LETA  
– SAMOSTALNI OPORAVAK  
– SAMOSTALNO PRILAŽENJE I SLIJETANJE

T: TIHI JEDAN IMATE LI  
– RANJENIH U ZRAKOPLOVU  
– KVAR HIDRAULIKE  
– KVAR ELEKTRIKE  
– KVAR NA SUSTAVU ZA GORIVO/KISIK  
– KVAR MOTORA

T: TIHI JEDAN JESTE LI U VIZUALNIM UVJETIMA

Razina leta	T:	TIHI JEDAN JESTE LI NA/IZNAD/ISPOD (razine leta)
Trajanje leta	T:	MOŽETE LI LETJETI DUŽE OD (brojka) MINUTA
Namjere pilota	T:	TIHI JEDAN DA LI NAMJERAVATE – SLETJETI SA ZAUSTAVLJANJEM – NAPRAVITI NISKO PRILAŽENJE – SLETJETI S PRODUŽAVANJEM
Broj ljudi u zrakoplovu	T:	TIHI JEDAN DA LI IMATE JOŠ OSOBA U ZRAKOPLOVU
Prilaženje	T:	TIHI JEDAN DOBIT ĆETE NAVIGACIJSKU POMOĆ ZA ODLAZAK DO (odredište)
U slučaju očekivanog gubitka radio veze	T:	AKO DOĐE DO GUBITKA RADIO VEZE DUŽE OD 1 MINUTE POZOVITE (jedinicu KZP) NA (brojke) KANAL/NA FREKVENCIJU
	T:	AKO NEMA PRIJAMA UNUTAR 5 SEKUNDI U ZAVRŠNOM PRILAŽENJU/15 SEKUNDI U POSTUPKU NEUSPJELOG PRILAŽENJA POZOVITE (jedinica KZP)

## H13. Posebni postupci

Postavke transpondera u slučaju izvanredne situacije

Kodovi koji se koriste su:

- 7700 postojanje opasnosti
- 7600 otkaz radio veze
- 7500 nezakonito ometanje

Postupci radiotelefonske komunikacije u nevolji i hitnosti - općenito

Riječ "MAYDAY", kojom počinje poruka, označuje poruku o nevolji, dok riječi "PAN PAN" označuju početak poruke hitnosti. Riječi "MAYDAY" ili "PAN PAN" preporučuje se izgovarati tri puta na početku predaje.

Poruke o nevolji imaju prednost pred svim drugim predajama, a poruke hitnosti pred svim predajama osim poruka o nevolji.

Promet poruka o nevolji i hitnosti obično se mora odvijati na frekvenciji na kojoj je takav promet započet sve dok se ne zaključi da će se bolja pomoć pružiti ako se taj promet prebaci na drugu frekvenciju. Frekvencija za hitne slučajeve 121.500 MHz može se koristiti po potrebi.

U slučaju poruka o nevolji i hitnosti, općenito, prijenosi radiotelefonijom moraju se provoditi polagano i razgovijetno, a svaka se riječ izgovara jasno kako bi se olakšalo zapisivanje.

Radiotelefonske komunikacije u nevolji

Radnje zrakoplova u nevolji

Poruka o nevolji mora se sastojati od što više sljedećih elemenata izgovorenih razgovijetno i, ako je moguće, ovim redoslijedom:

- (a) naziv jedinice ATS kojoj se obraća (ako vrijeme i okolnosti to dopuštaju)
- (b) pozivni znak zrakoplova,
- (c) vrsta stanja nevolje,
- (d) namjere zapovjednika zrakoplova,
- (e) pozicija, razina, smjer.

Ukoliko pozvana zemaljska postaja ne odgovara na poziv zrakoplova u nevolji ili na poruku hitnosti, sve ostale zemaljske postaje ili zrakoplovi moraju odgovoriti i pružiti svu moguću pomoć.

Kada pilot uhvati poruku u nevolji na koju očitito nitko ne odgovara, ona/on mora, ukoliko to dozvoljavaju vrijeme i okolnosti, potvrditi prijam te poruke i odaslati je putem radija.

Radnje jedinice ATS kojoj se zrakoplov obratio ili prve jedinice ATS koja je potvrdila primitak poruke o nevolji

Jedinica ATS kojoj se obratio zrakoplov u nevolji ili prva jedinica ATS koja je potvrdila primitak poruke o nevolji mora:

- (a) odmah potvrditi primitak poruke o nevolji
- (b) preuzeti kontrolu nad komunikacijama ili posebno i jasno prenijeti tu odgovornost te obavijestiti zrakoplov ako je prenese i
- (c) odmah preuzeti mjere za osiguranje dostupnosti svih potrebnih informacija što je prije moguće prema:
  1. relevantnoj jedinici ATS
  2. relevantnom operatoru zrakoplova ili njegovu predstavniku, u skladu s prethodnim sporazumima;
- (d) upozoriti ostale jedinice ATS, prema potrebi, kako bi se spriječilo prebacivanje prometa na frekvenciju komunikacije u nevolji.

### H13.1 Poruke o nevolji

Z: MAYDAY MAYDAY MAYDAY (pozivni znak), (vrsta nevolje), (namjera pilota), (pozicija, razina leta, smjer leta)

T: (pozivni znak), PRIMIO, MAYDAY, (vrsta nevolje), (upute)

Poruke nevolje - primjer

Z: MAYDAY MAYDAY MAYDAY (pozivni znak), POŽAR NA LIJEVOM/DESNOM MOTORU IZVODI PRINUDNO SLIJETANJE, (pozicija, razina leta, smjer leta)

T: (pozivni znak), PRIMIO, MAYDAY, POŽAR NA LIJEVOM/DESNOM MOTORU

Z: MAYDAY MAYDAY MAYDAY, (pozivni znak, pozivni znak jedinice ATS) OTKAZAO MOTOR, POKUŠAT ĆE SLETJETI NA VAŠ AERODROM, (pozicija, razina leta, smjer leta)

T: (pozivni znak, pozivni znak jedinice ATS) PRIMIO MAYDAY, OTKAZAO MOTOR, ODOBRENO (instrukcije)

#### H13.1.1 Nametanje radio-tišine

Zrakoplovu u nevolji ili jedinici ATS koja obavlja kontrolu nad prometom u nevolji mora biti dopušteno nametanje radio-tišine svim postajama pokretne usluge u dotičnom području ili bilo kojoj postaji koja ometa promet u nevolji. Ovisno o okolnostima, te se upute moraju poslati 'svim postajama' ili samo jednoj postaji.

Primjer

T: SVE POSTAJE, (jedinica ATS), PRESTANITE S PREDAJOM, MAYDAY

T: (pozivni znak) PRESTANITE S PREDAJOM, MAYDAY

Upotreba signala MAYDAY mora biti rezervirana za zrakoplov u nevolji i za jedinicu ATS koja kontrolira promet u nevolji.

### H13.1.2. Radnje svih ostalih jedinica ATS/zrakoplova

Komuniciranje u nevolji ima apsolutnu prednost pred svim ostalim porukama, a jedinice ATS / zrakoplovi koji znaju za njega ne smiju emitirati na dotičnoj frekvenciji osim:

- (a) ako se stanje nevolje poništi ili ako završi komunikacijski promet u nevolji
- (b) ako se sav komunikacijski promet u nevolji prebaci na druge frekvencije
- (c) kada to odobri jedinica ATS koja kontrolira komunikacije
- (d) ako i sami pružaju pomoć.

Svaka jedinica ATS/zrakoplov koji znaju za komunikacijski promet u nevolji, a ne mogu sami pomoći zrakoplovu u nevolji, moraju nastaviti slušati takav promet sve dok ne postane jasno da je pomoć pružena.

### H13.1.3 Završetak komunikacija u nevolji i radio-tišine

Kada zrakoplov više nije u nevolji, mora poslati poruku kojom se poništava stanje nevolje.

Završetak prometa u nevolji (objavljuje pilot)

Z: (jedinica ATS, pozivni znak zrakoplova),  
PONIŠTAVAM STANJE NEVOLJE, MOTOR  
PRORADIO, VIDIM STAZU, TRAŽIM  
ODOBRENJE ZA SLIJETANJE

T: (pozivni znak, jedinica ATS) ODOBRENO  
SLIJETANJE STAZA (broj)

Kada zemaljska postaja, koja kontrolira promet u nevolji, sazna da je stanje nevolje završeno, ona odmah mora poduzeti mjere kako bi osigurala da ta informacija što je prije moguće postane dostupna:

- (a) relevantnim jedinicama ATS
- (b) dotičnom operatoru zrakoplova ili njegovu predstavniku, u skladu s prethodnim sporazumima.

Prestanak održavanja radio-tišine (objavljuje KZP)

T: SVE POSTAJE (jedinica ATS), PROMET U  
NEVOLJI ZAVRŠEN

## H13.2 Radiotelefonske komunikacije u hitnosti

### H13.2.1 Radnje zrakoplova koji prijavi stanje hitnosti

Osim što poruci o hitnosti prethodi radiotelefonski signal hitnosti 'PAN PAN', poruka o hitnosti koju šalje zrakoplov koji prijavljuje stanje hitnosti mora biti poslana na frekvenciji zrak-zemlja koja se u tom trenutku upotrebljava, te se sastojati od onoliko sljedećih elemenata koliko je potrebno, izgovorenih razgovijetno i, ako je moguće, ovim redoslijedom:

- (a) naziv jedinice ATS kojoj se obraća
- (b) identifikacija zrakoplova
- (c) vrsta stanja hitnosti
- (d) namjera zapovjednika zrakoplova

- (e) trenutačna pozicija, razina i smjer
- (f) druge korisne informacije.

### H13.2.2 Radnje jedinice ATS kojoj se zrakoplov obratio ili prve jedinice ATS koja je potvrdila primitak poruke o hitnosti

Jedinica ATS kojoj se obratio zrakoplov koji prijavljuje stanje hitnosti ili prva jedinica ATS koja je potvrdila primitak poruke o hitnosti mora:

- (a) potvrditi primitak poruke o hitnosti
- (b) odmah poduzeti mjere za osiguravanje da sve potrebne informacije postanu dostupne što je prije moguće:
  1. relevantnoj jedinici ATS
  2. relevantnom operatoru zrakoplova ili njegovu predstavniku, u skladu s prethodno sklopljenim sporazumima.
- (c) ako je potrebno, preuzeti kontrolu komunikacija.

### H13.2.3 Radnje svih ostalih jedinica ATS/zrakoplova

Komunikacije u hitnosti imaju prednost pred svim drugim komunikacijama osim onih u nevolji i sve jedinice ATS/zrakoplovi moraju se pobrinuti da ne ometaju prijenos komunikacijskog prometa u hitnosti.

Poruke hitnosti - primjer

Z: PAN PAN, PAN PAN, PAN PAN, SPLIT TORANJ, 9ABPW, IZNAD OBLAKA, NESIGURAN U SVOJU POZICIJU, TRAŽIM SMJER LETA PREMA SPLITU C172, 4000 STOPA, SMJER LETA 170

T: 9ABPW, SPLIT TORANJ LETITE SMJER LETA 190

Z: SMJER LETA 190, 9ABPW

T: 9ABPW, TOČNO

Z: PAN PAN, PAN PAN, PAN PAN, ZAGREB RADAR, CTN 661 POZICIJA RUDIK, NA RAZINI LETA 140. PUTNIK S MOGUĆIM SRČANIM UDAROM, TRAŽI PRIORITYETNO SLIJETANJE

T: CTN 661, ZAGREB RADAR, BROJ 1, IZRAVNO ZA STAZU 05, VOZILO PRVE POMOĆI VEĆ ZATRAŽENO

Z: BROJ 1, IZRAVNO ZA STAZU 05, CTN 661

T: CTN 661, TOČNO

Hvatanje poruke hitnosti - primjer

Z: PAN PAN, PAN PAN, PAN PAN, ZAGREB RADAR, 9ABPW UHVATILI POZIV HITNOSTI OD CTN 661, PUTNIK S MOGUĆIM SRČANIM UDAROM, TRAŽI PRIORITYETNO SLIJETANJE U ZAGREB. NJEGOVA POZICIJA JE RUDIK NA RAZINI LETA 140

#### H13.2.4 Postupci u vezi s odstupanjem zbog vremenskih uvjeta

Kada pilot počne komunicirati s ATC-om, brzi odgovor može dobiti ako upotrijebi frazu 'WEATHER DEVIATION REQUIRED' ('molim odstupanje zbog vremenskih uvjeta') kojom javlja želju za prvenstvom na toj frekvenciji i za odgovor ATC-a. Kada je potrebno, pilot mora početi komunikaciju pozivom hitnosti 'PAN PAN' (najbolje izgovoriti triput).

T: 9ABPW PRIMIO

T: CTN 661, ZAGREB RADAR, STAZA 05, NEMA PROMETA

*(Ukoliko CTN 661 ne potvrdi prijam ove poruke, 9ABPW će prenijeti poruku.)*

A: ZAGREB RADAR, 9ABPW, TRAŽIM OBILAŽENJE ZBOG VREMENA

A: PAN PAN, PAN PAN, PAN PAN, ZAGREB RADAR, 9ABPW, TRAŽIM OBILAŽENJE ZBOG VREMENA

#### H13.3 Postupci zrakoplova za medicinski prijevoz

U svrhu objave i identifikacije zrakoplova za medicinski prijevoz, odašiljanje RT hitnog signala "PAN PAN", koji se po mogućnosti izgovara tri puta, mora prethoditi RT signalu medicinski prijevoz "MAY-DEE-CAL".

Uporaba signala opisanih u prethodnom stavku, znak je da se poruka koja slijedi odnosi na zaštićeni medicinski prijevoz.

Poruka mora sadržavati sljedeće informacije:

- (a) pozivni broj ili neki drugi oblik identifikacije zrakoplova za medicinski prijevoz
- (b) poziciju zrakoplova za medicinski prijevoz
- (c) broj i tip zrakoplova za medicinski prijevoz
- (d) namjeravana ruta
- (e) predviđeno vrijeme na ruti i vrijeme odlaska i dolaska
- (f) sve ostale informacije kao što su razina leta, apsolutna visina, praćena radio frekvencija, jezik u uporabi i SSR modovi i kodovi.

#### H13.4 Otkaz radio veze

*Napomena:*

*Opća pravila koja se primjenjuju u slučaju otkaza radio veze nalaze se u ICAO, Annex 10, Volume II.*

Izvanredne situacije koje onemogućavaju komunikaciju kontrolora sa zrakoplovom pod njegovim nadzorom, mogu biti izazvane neispravnnošću opreme zemaljske radiopostaje ili opreme zrakoplova ili nenamjernim blokiranjem aktivne frekvencije od strane zrakoplova. Kako te izvanredne situacije mogu potrajati kroz duži period potrebno je odmah poduzeti odgovarajuće radnje kako se ne bi ugrozila sigurnost zrakoplova.

#### Otkaz radiokomunikacije zrak-zemlja

- H13.4.1 Kada pilot zrakoplova ne uspije uspostaviti radio-komunikaciju sa zemaljskom postajom na dodijeljenoj radio-frekvenciji, mora pokušati uspostaviti radio-komunikaciju na drugim frekvencijama utvrđenim za tu rutu leta. Ako ti pokušaji ostanu bez uspjeha, pilot zrakoplova mora pokušati uspostaviti komunikaciju s drugim zemaljskim radiopostajama (ili radiopostajama zrakoplova) utvrđenim za tu rutu leta ili na 121.5 MHz.
- H13.4.2 Ako pokušaji navedeni u stavku H13.4.1 ne uspiju, pilot zrakoplova mora emitirati svoje poruke dva puta na utvrđenoj frekvenciji/(ijama), započinjući poruku frazom "PREDAJA U SLIJEPO", te, ako je potrebno, navesti i kome je poruka namijenjena.

#### Upotreba prijenosa u slijepo

- H13.4.3 Kada ne može uspostaviti komunikaciju uslijed otkaza prijarnika, pilot zrakoplova mora odaslati izvješća u utvrđenim vremenima ili na utvrđenim pozicijama, na frekvenciji u upotrebi, započinjući poruku frazom "PREDAJA U SLIJEPO ZBOG OTKAZA PRIJAMNIKA". Pilot zrakoplova mora odaslati namjeravanu poruku, koju u cijelosti ponavlja. Tijekom ovog postupka pilot zrakoplova također obavještava o vremenu svojeg sljedećeg javljanja, a ako namjerava promijeniti frkvenciju, mora navesti tu frekvenciju i naziv zemaljske postaje koju namjerava zvati.
- H13.4.4 Osim što se mora pridržavati odredbi iz točke H13.4.3, zrakoplov koji prima usluge kontrole zračnog prometa ili savjetodavne usluge, dužan je emitirati informacije o namjeri zapovjednika zrakoplova u vezi s nastavkom leta.
- H13.4.5 Kada zrakoplov ne može uspostaviti komunikaciju uslijed otkaza opreme na zrakoplovu, mora, ako za to ima odgovarajuću opremu, odabrati odgovarajući SSR kod (7600) kojim ukazuje na otkaz radio veze.

#### Upotreba komunikacijske tehnike prosljeđivanja

- H13.4.6 Kada zemaljska postaja ne može uspostaviti kontakt sa zrakoplovom niti nakon poziva na frekvencijama za koje se vjeruje da ih pilot sluša, zemaljska postaja mora:
- ako je potrebno zatražiti pomoć drugih zemaljskih postaja zbog pozivanja zrakoplova ili prosljeđivanja prometnih poruka,
  - zatražiti od zrakoplova koji se nalaze u blizini da pokušaju uspostaviti komunikaciju sa zrakoplovom i da prenesu njegove poruke, ako je to potrebno.

H13.4.7 Ako pokušaji iz stavka H13.4.6 nisu uspješni, zemaljska postaja treba u slijepo prenositi poruke zrakoplovu, osim poruka koje sadrže odobrenja kontrole zračne plovidbe, na frekvencijama za koje se vjeruje da ih pilot zrakoplova sluša 121.5 MHz (VHF) i 243.0 MHz (UHF).

H13.4.8 Emitiranje odobrenja kontrole zračnog prometa predajom u slijepo nije dozvoljeno, osim na izričit zahtjev kontrole zračnog prometa.

Otkaz radio veze - primjer

T: AKO ČUJETE (jedinica ATS) POTVRDITE TO LJULJANJEM KRILA/PALJENJEM SVJETALA ZA SLIJETANJE

T: AKO ČUJETE (jedinica ATS) OKRENITE U LIJEVO/DESNO SMJER (tri znamenke) SLJEDEĆU (najviše 2 minute) MINUTU/SEKUNDE

T: ZAOKRET UOČEN \*POZICIJA (pozicija) NASTAVIT ĆU S DAVANJEM UPUTA

T: AKO IZGUBITE RADIO VEZU (upute)

T: AKO NEMATE PRIJAM U SLJEDEĆIH (broj) MINUTA /SEKUNDI (upute)

T: ODGOVOR NIJE PRIMLJEN (upute)

T: AKO ČUJETE (jedinica ATS ) OKRENITE DESNO/LIJEVO SMJER (tri znamenke)/ UKLJUČITE SQUAWK IDENT

T: ZAOKRET/IDENT UOČEN NASTAVIT ĆU S DAVANJEM UPUTA

Predaja u slijepo

T: PREDAJA U SLIJEPO (upute/informacije)

## H14. FIS / RAFIS / VFR frazeologija

### H14.1 Izvještaj o poziciji kod VFR letova

Izvještaj o poziciji sadrži sljedeće podatke:

- pozivni znak zrakoplova,
- pozicija,
- vrijeme preleta,
- razina i
- predviđeno vrijeme sljedeće pozicije.

Z: (pozivni znak) (pozicija i vrijeme, visina)  
[predviđeno vrijeme sljedeće pozicije]

Z: 9ADDA IZNAD OTOČCA NA 4000 STOPA  
PREDVIĐAM TOUNJ U1225

T: PRIMIO, NASTAVITE VIZUALNO \*QNH (brojke)

### H14.2 Informacije o prometu na temelju izvješća o poziciji

Informacija o bitnom prometu mora sadržavati sljedeće podatke:

- (a) smjer leta odnosnog zrakoplova,
- (b) tip odnosnog zrakoplova i kategoriju vrtložne turbulencije (kada je odnosni zrakoplov teže kategorije od zrakoplova kome je informacija o bitnom prometu upućena)
- (c) putnu razinu odnosnog zrakoplova i:
  - predviđeno vrijeme iznad točke javljanja najbliže mjestu prolaska razine; ili
  - relativan smjer (*bearing*) odnosnog zrakoplova izražen prema smjeru kazaljki na satu kao i udaljenost od zrakoplova kome je informacija o bitnom prometu upućena; ili
  - stvarnu ili predviđenu poziciju odnosnog zrakoplova.

T: INFORMACIJE O PROMETU, (tip zrakoplova)  
VFR (javljeni elementi izvješća o poziciji)

T: U SMJERU SJEVERA PA 34 VFR VISINA  
5500 STOPA PREDVIĐENO VRIJEME  
CRE 1225

T: U SMJERU SJEVERA C210 VFR SNIŽAVA S  
8500 STOPA NA 4000 STOPA PREDVIĐENO  
VRIJEME LOS 1731

Z: GLEDA  
Z: VIDI GA  
Z: NE VIDI GA TRAŽI SAVJET ZA  
IZBJEGAVANJE/VEKTORIRANJE

T: PREDLAŽEM ZAOKRET/LETENJE U SMJERU

T: ČISTI OD PROMETA

Z: NEMA JAVLJENOG PROMETA

### H14.3 Radarska služba letnih informacija

Primjeri

- T: OVO JE RADARSKA SLUŽBA LETNIH INFORMACIJA, NASTAVITE VIZUALNO
- T: RADARSKA SLUŽBA LETNIH INFORMACIJA PRESTAJE
- T: ZA IDENTIFIKACIJU POSTAVITE SQUAWK (kod) QNH (brojke)
- T: IDENTIFICIRANI STE \*(pozicija) RADARSKA SLUŽBA LETNIH INFORMACIJA, NASTAVITE VIZUALNO
- T: IDENTIFIKACIJA IZGUBLJENA, OD SADA SAMO SLUŽBA LETNIH INFORMACIJA

### H14.4 Predaja informacija o prometu

Informaciju o prometu na konfliktnoj letnoj putanji treba proslijediti kao:

- relativni smjer konfliktnog prometa u odnosu na kazaljke sata,
- udaljenost konfliktnog prometa u NM,
- smjer u kojem se konfliktni promet kreće,
- razina i tip zrakoplova ili, ako su nepoznati, relativna brzina konfliktnog prometa (npr. spor ili brz).

- T: PROMET (brojke) SATI/IZ SMJERA UDALJENOST (broj) MILJA (smjer leta) [visina, tip zrakoplova, brzina]
- T: NEPOZNATI PROMET U DVA SATA PET MILJA IZ SMJERA DESNO PREMA LIJEVO VELIKA BRZINA
- T: VFR PROMET U JEDAN SAT TRI MILJE IZ SUPROTNOG SMJERA, POSLJEDNJA JAVLJENA VISINA 5500 STOPA PA28
- Z: TRAŽI SAVJET ZA IZBJEGAVANJE/VEKTORIRANJE
- T: PREDLAŽEM ZAOKRET/LETENJE U SMJERU
- T: ČISTI OD PROMETA

### H14.5 Informacije o vremenu na temelju radarskog promatranja

Primjer

- T: 9A-DDD, ZAGREB INFORMACIJE, RADAR POKAZUJE PODRUČJE JAKIH OBORINA NA 12 SATI, UDALJENOST 15 MILJA, PODRUČJE DUBINE 10 MILJA I PROTEŽE SE OD SJEVERO-ZAPADA PREMA JUGO-ISTOKU U DUŽINI OD 30 MILJA

## H14.6 Pomoć VFR letovima koji imaju navigacijske poteškoće

Z:	NESIGURAN U SVOJU POZICIJU, TRAŽIM POMOC
T:	JAVITE KOLIČINU GORIVA U MINUTAMA LETA/PREOSTALO VRIJEME LETA
T:	MOŽETE LI NASTAVITI LET VIZUALNO/POTVRDITE VIDLJIVOST ZEMLJE
T:	MOŽETE SPUŠTATI VIZUALNO/S VIDLJIVOŠĆU ZEMLJE DO (znamenke) STOPA/RAZINA LETA (znamenke)
T:	PREDLAŽEM/PREPORUČAM SMJER (tri znamenke) ZADRŽITE VMC/VIDLJIVOST ZEMLJE
T:	PREDLAŽEM/PREPORUČAM OKRETANJE (znamenke) STUPNJEVA U LIJEVO/DESNO/ZADRŽITE VMC/VIDLJIVOST ZEMLJE
G:	POSTAVITE SQUAWK (kod)
A:	SQUAWK (kod)
G:	IDENTIFICIRANI STE, ZAGREB RAFIS POZICIJA, NASTAVITE PREMA PLANU
G:	NASTAVITE LET VIZUALNO/S VIDLJIVOŠĆU ZEMLJE
G:	PRIPAZITE NA MINIMALNE SIGURNOSNE VISINE/NADVISIVANJE PREPREKA
G:	RADARSKA SLUŽBA LETNIH INFORMACIJA PRESTAJE
G:	PREUZMITE VLASTITU NAVIGACIJU PREMA (pozicija), TRENUTNA POZICIJA (pozicija ili navigacijske informacije)

## H14.7 Poništavanje/Zatvaranje plana leta (VFR)

Poništavanje plana leta

Z:	PONIŠTAVAM PLAN LETA/TRAŽIM PONIŠTAVANJE PLANA LETA
T:	PLAN LETA PONIŠTEN (vrijeme)

Promjena FPL/Predaja FPL iz zraka

Z:	MOLIM PROMJENU PLANA LETA (detalji)
Z:	ŽELIM PREDATI PLAN LETA IZ ZRAKA
T:	PLAN LETA PRIMLJEN

Zatvaranje plana leta

Z: [\*VRIJEME SLIJETANJA \*(četiri znamenke)]  
MOLIM ZATVARANJE PLANA LETA

T: PLAN LETA ZATVOREN (vrijeme četiri  
znamenke)

#### H14.8 Opći poziv

Primjer (požar)

T: SVIM POSTAJAMA, ZAGREB INFORMACIJE,  
ZBOG VELIKIH POŽARA ZABRANJENI SU SVI  
LETOVI U RADIJUSU OD 10 MILJA OKO  
UDBINE DO VISINE 5000 STOPA

SIGMET i AIRMET  
(primjer)

T: SVIM POSTAJAMA, ZAGREB SLUŽBA  
LETNIH INFORMACIJA, SIGMET ZA PERIOD  
OD 1600 DO 1800 SATI PROGNOZA OLUJNO  
NEVRIJEME ZA PODRUČJE LETNIH  
INFORMACIJA ZAGREB, POMIČE SE NA  
ISTOK

SIGMET (vulkanska prašina)  
(primjer)

T: DLH 323, PREMA ZADNJEM SIGMET  
IZVJEŠTAJU ULAZITE U POTENCIJALNO  
ZAGAĐENO PODRUČJE

#### H14.9 ATIS

Primjer

ZAGREB INFORMACIJE DELTA OD 1027  
OČEKUJTE ILS PRILAZ STAZA U UPOTREBI  
05 ZA DOLASKE I ODLASKE KOČENJE  
SLABO STANJE POVRŠINA 5mm LEDA,  
KATEGORIJA 1 ZA STAZU 05, PRIJELAZNA  
VISINA 100, VJETAR IZ SMJERA 200 JAČINE  
9 ČVOROVA VIDLJIVOST PREKO 10 km  
SLABA KIŠA, 4/8 OBLAČNOST, CUMULUS NA  
2100 STOPA TEMPERATURA 24, TOČKA  
ROSE 7, TLAK 1010. U PRVOM KONTAKTU S  
KONTRLOM ZRAČNE PLOVIDBE JAVITE  
INFORMACIJE DELTA I TLAK

Primjer

USLIJED NAGLIH PROMJENA INFORMACIJE  
O VREMENU DOSTUPNE SU NA RADNOJ  
FREKVENCiji

Primjer

ZATRAŽITE ATIS INFORMACIJE NA RADNOJ  
FREKVENCiji

#### H14.10 Državni telegram

T: PROSLIJEDITE PORUKU  
Z: (PORUKA)  
T: PORUKA JE PRIMLJENA, HVALA

## APPENDIX 1 - Glossary

**Advisory route** A designated route along which air traffic advisory service is available.

**Aerodrome** A defined area (including any buildings, installations and equipment) on land or water or on a fixed, fixed off-shore or floating structure intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

**Aerodrome control service** Air traffic control service for aerodrome traffic.

**Aerodrome flight information service (AFIS)** A flight information service provided to aerodrome traffic.

**Aerodrome traffic** All traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome. An aircraft operating in the vicinity of an aerodrome includes but is not limited to aircraft entering or leaving an aerodrome traffic circuit.

**Aerodrome traffic circuit** The specified path to be flown by aircraft operating in the vicinity of an aerodrome.

**Aerodrome traffic zone** An airspace of defined dimensions established around an aerodrome for the protection of aerodrome traffic.

**Aeronautical mobile service** A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radio beacon stations may also participate in this service on designated distress and emergency frequencies.

**Aeronautical station** A land station in the aeronautical mobile service. In certain instances, an aeronautical station may be located, for example, on board ship or on a platform at sea.

**Airborne collision avoidance system (ACAS)** An aircraft system based on SSR transponder signals which operates independently of ground-based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders.

**Aircraft station** A mobile station in the aeronautical mobile service on board an aircraft.

**Air-ground communication** Two-way communication between aircraft and stations or locations on the surface of the earth.

**Air/ground communication service** A service that permits information to be passed from an aeronautical station to an aircraft station on or in the vicinity of an aerodrome.

**Air traffic** All aircraft in flight or operating on the manoeuvring area of an aerodrome.

**Air traffic control clearance** Authorisation for an aircraft to proceed under conditions specified by an air traffic control unit.

**Air traffic control instruction** Directives issued by air traffic control for the purpose of requiring a pilot to take a specific action.

**Air traffic control unit** A generic term meaning variously, area control centre, approach control unit or aerodrome control tower.

**Air traffic flow management (ATFM)** A service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible, and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority.

**Air traffic management (ATM)** The dynamic, integrated management of air traffic and airspace including air traffic services, airspace management and air traffic flow management — safely, economically and efficiently through the provision of facilities and seamless services in collaboration with all parties and involving airborne and ground-based functions.

**Air traffic management system** A system that provides ATM through the collaborative integration of humans, information, technology, facilities and services, supported by air and ground- and/or space-based communications, navigation and surveillance.

**Air traffic service (ATS)** A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).

**Air traffic services airspaces** Airspaces of defined dimensions alphabetically designated, within which specific types of flights may operate and for which air traffic services and rules of operation are specified.

**Air traffic services reporting office** A unit established for the purpose of receiving reports concerning air traffic services and flight plans submitted before departure.

**Air traffic services unit** A generic term meaning variously, air traffic control unit, flight information centre, aerodrome flight information service unit or air traffic services reporting office.

**Airway** A control area or portion thereof established in the form of a corridor .

**Altitude** The vertical distance of a level, a point or an object considered as a point, measured from mean sea level.

**Area control centre (ACC)** A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.

**ATS route** A specified route designed for channelling the flow of traffic as necessary for the provision of air traffic services.

**Automatic terminal information service (ATIS)** The automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours or a specified portion thereof.

**Base turn** A turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track. The tracks are not reciprocal.

**Blind transmission** A transmission from one station to another station in circumstances where two-way communication cannot be established but where it is believed that the called station is able to receive the transmission.

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

**Broadcast** A transmission of information relating to air navigation that is not addressed to a specific station or stations.

**Ceiling** The height above the ground or water of the base of the lowest layer of cloud below 6 000 m (20 000 ft) covering more than half the sky.

**Clearance limit** The point to which an aircraft is granted an air traffic control clearance.

**Control area** A controlled airspace extending upwards from a specified limit above the earth.

**Controlled aerodrome** An aerodrome at which air traffic control service is provided to aerodrome traffic regardless whether or not a control zone exists.

**Controlled airspace** An airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification.

**Control zone** A controlled airspace extending upwards from the surface of the earth to a specified upper limit.

**CPDLC message** Information exchanged between an airborne system and its ground counterpart. A CPDLC message consists of a single message element or a combination of message elements conveyed in a single transmission by the initiator.

**CPDLC message set.** A list of standard message elements and free text message elements.

**Cruising level** A level maintained during a significant portion of a flight.

**Decision altitude/height** In relation to the operation of an aircraft at an aerodrome means a specified altitude/height in a precision approach at which a missed approach must be initiated if the required visual reference to continue the approach to land has not been established.

**Elevation** The vertical distance of a point or level on, or affixed to, the surface of the earth measured from mean sea level.

**Estimated time of arrival** For IFR flights, the time at which it is estimated that the aircraft will arrive over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced, or, if no navigation aid is associated with the aerodrome, the time at which the aircraft will arrive over the aerodrome. For VFR flights, the time at which it is estimated that the aircraft will arrive over the aerodrome.

**Flight information service (FIS)** A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

**Flight level (FL)** A surface of constant atmospheric pressure, which is related to a specific pressure datum, 1013.2 hectopascals (hPa) and is separated from other such surfaces by specific pressure intervals.

**Flight plan** Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

**General air traffic** Flights operating in accordance with civil air traffic procedures.

**Heading** The direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass or grid).

**Height** The vertical distance of a level, a point, or an object considered as a point, measured from a specified datum.

**Holding point** In radiotelephony phraseologies, the expression "holding point" is used to designate the runway-holding position.

**IFR flight** A flight conducted in accordance with the instrument flight rules.

**Instrument meteorological conditions (IMC)** Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions.

**Intersection** The junction/point on the runway where the runway centreline intercepts the taxiway centreline. (the departure point in Runway Intersection Take off)

**Known traffic** Traffic, the current flight details and intentions of which are known to the controller concerned through direct communication or co-ordination.

**Level** A generic term relating to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level.

**Level bust** Any deviation from assigned altitude, height or flight level in excess of 300 feet.

**Minimum descent altitude/height** In relation to the operation of an aircraft at an aerodrome means the altitude/height in a non-precision approach below which descent may not be made without the required visual reference.

**Missed approach point (MAPt)** The 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 procedure** The procedure to be followed if the approach cannot be continued.

**Performance-based communication (PBC).** Communication based on performance specifications applied to the provision of air traffic services.

*Note.— An RCP specification includes communication performance requirements that are allocated to system components in terms of the communication to be provided and associated transaction time, continuity, availability, integrity, safety and functionality needed for the proposed operation in the context of a particular airspace concept.*

**Performance-based navigation (PBN).** Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace.

*Note.— Performance requirements are expressed in navigation specifications (RNAV specification, RNP specification) in terms of accuracy, integrity, continuity, availability and functionality needed for the proposed operation in the context of a particular airspace concept.*

**Performance-based surveillance (PBS).** Surveillance based on performance specifications applied to the provision of air traffic services.

*Note.— An RSP specification includes surveillance performance requirements that are allocated to system components in terms of the surveillance to be provided and associated data delivery time, continuity, availability, integrity, accuracy of the surveillance data, safety and functionality needed for the proposed operation in the context of a particular airspace concept.*

**Procedure turn** A manoeuvre 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.

**Radar approach** An approach in which the final approach phase is executed under the direction of a radar controller.

**Radar contact** The situation which exists when the radar position of a particular aircraft is seen and identified on a situation display.

**Radar identification** The situation which exists when the radar position of a particular aircraft is seen on a radar display and positively identified by the air traffic controller.

**Radar vectoring provision** of navigational guidance to aircraft in the form of specific headings, based on the use of radar.

**Radiotelephony** A form of radiocommunication primarily intended for the exchange of information in the form of speech.

**Reporting point** A specified geographical location in relation to which the position of an aircraft can be reported.

**Required communication performance (RCP) specification.** A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based communication.

**Required navigation performance (RNP)** A statement of the navigation performance necessary for operation within a defined airspace.

*Note.— Navigation performance and requirements are defined for a particular RNP type and/or application.*

**Required surveillance performance (RSP) specification.** A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based surveillance.

**RNP type** A containment value expressed as a distance in nautical miles from the intended position within which flights would be for at least 95 per cent of the total flying time.

*Example.— RNP 5 represents a navigation accuracy of plus or minus 5 NM on a 95 per cent containment basis.*

**Runway A** defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.

**Runway holding position** A designated position intended to protect a runway, an obstacle limitation surface, or an ILS/MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the aerodrome control tower.

*Note.— In radiotelephony phraseologies, the expression “holding point” is used to designate the runway-holding position.*

**Runway incursion** Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.

**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.

**Signal area** An area on an aerodrome used for the display of ground signals.

**SIGMET information.** Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather and other phenomena in the atmosphere that may affect the safety of aircraft operations.

**Significant point** A specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes.

*Note.— There are three categories of significant points: ground-based navigation aid, intersection and waypoint. In the context of this definition, intersection is a significant point expressed as radials, bearings and/or distances from ground-based navigation aids.*

**Special VFR flight** A VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC.

**Standard instrument arrival (STAR)** A designated instrument flight rule (IFR) arrival route linking a significant point, normally on an ATS route, with a point from which a published instrument approach procedure can be commenced.

**Standard instrument departure (SID)** A designated instrument flight rule (IFR) departure route linking the aerodrome or a specified runway of the aerodrome with a specified significant point, normally on a designated ATS route, at which the en-route phase of a flight commences.

**Straight ahead** When used in departure clearances means: ‘Track extended runway centre-line’. When given in Missed Approach Procedures means: ‘Continue on Final Approach Track’.

**Terminal control area** A control area normally established at the confluence of airways in the vicinity of one or more major aerodromes.

**Threshold** The beginning of that portion of the runway useable for landing.

**Track** The projection on the earth’s surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid).

**Traffic alert and collision avoidance system (TCAS)** See ACAS.

**VFR flight** A flight conducted in accordance with the visual flight rules.

**Visual meteorological conditions (VMC)** Meteorological conditions expressed in terms of visibility, horizontal and vertical distance from cloud, and ceiling, equal to or better than specified minima.

**Visual approach** 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.

**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.

## Abbreviations

The following abbreviations are those in common use in ICAO documents. If RTF transmission of an abbreviation is required, and the format is not specified in this document, the format specified by ICAO (see ICAO PANS-ABC Doc. 8400) should be used. If no format is defined, the abbreviation should be described using the phonetic alphabet.

The abbreviations annotated with an asterisk are normally spoken as complete words. The remainder are normally spoken using the constituent letters rather than the spelling alphabet.

### A

AAL	Above Aerodrome Level
ACAS	Airborne Collision Avoidance System (see TCAS)
ACC	Area Control Centre
ADF	Automatic Direction-Finding Equipment
ADT	Approved Departure Time
AFTN	Aeronautical Fixed Telecommunication Network
AFIS	Aerodrome Flight Information Service
AGCS	Air/Ground Communication Service
AGL	Above Ground Level
AIC	Aeronautical Information Circular
AIP	Aeronautical Information Publication
AIRPROX	Aircraft Proximity
AIS	Aeronautical Information Services
AMSL	Above Mean Sea Level
ATA	Actual Time of Arrival
ATC	Air Traffic Control (in general)
ATD	Actual Time of Departure
ATIS	Automatic Terminal Information Service
ATS	Air Traffic Service
ATSU	Air Traffic Service Unit
ATZ	Aerodrome Traffic Zone

### C

CAA	Civil Aviation Authority
CAVOK	Visibility, cloud and present weather better than prescribed values or conditions
CIV	Civil, civilian
CPDLC	Controller Pilot Data Link Communication
CTA	Control Area
CTR	Control Zone

### D

DF	Direction Finding
DME	Distance Measuring Equipment

### E

EAT	Expected Approach Time
ETA	Estimated Time of Arrival
ETD	Estimated Time of Departure

### F

FAF	Final Approach Fix
FIR	Flight Information Region
FIS	Flight Information Service
FISO	Flight Information Service Officer
FL	Flight Level
Ft	Foot (feet)

### G

GAT	General Air Traffic
GPS	Global Positioning System

<b>H</b>	
H24	Continuous day and night service
HF	High Frequency
HJ	Sunrise to Sunset
HN	Sunset to Sunrise
<b>I</b>	
IAF	Initial Approach Fix
ICAO	International Civil Aviation Organisation
IF	Intermediate Approach Fix
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
IRVR	Instrumented Runway Visual Range
<b>K</b>	
Kg	Kilogramme(s)
kHz	Kilohertz
Km	Kilometre(s)
Kt	Knot(s)
<b>M</b>	
MAPt	Missed Approach Point
MDA/H	Minimum Descent Altitude/Height
MET	Meteorological or Meteorology
METAR	Routine aviation aerodrome weather report
MHz	Megahertz
MIL	Military
<b>N</b>	
NDB	Non-Directional Radio Beacon
<b>O</b>	
OCA/H	Obstacle Clearance Altitude/Height
<b>P</b>	
PAPI	Precision Approach Path Indicator (pronounced PAPI)
PBC	Performance-based communication
PBN	Performance-based navigation
PBS	Performance-based surveillance
<b>Q</b>	
QDM	Magnetic heading (zero wind) (sometimes employed to indicate magnetic heading of a runway)
QDR	Magnetic bearing
QFE	Altimeter subscale setting to indicate height above either aerodrome elevation, or threshold elevation, or helideck elevation
QNE	Landing altimeter reading when subscale set 1013 millibars
QNH	Altimeter subscale setting to indicate elevation (AMSL) when on the ground and altitude in the air
QTE	True bearing
<b>R</b>	
RA	Resolution Advisory (see TCAS)
RAFIS	Radar-Assisted Flight Information Service
RAIM	Receiver Autonomous Integrity Monitoring
RCP	Required Communication Performance
RNAV	Area Navigation
RSP	Required Surveillance Performance
RT/RTF	Radiotelephone/Radiotelephony

RVR	Runway Visual Range
RVSM	Reduced Vertical Separation Minima
<b>S</b>	
SAR	Search and Rescue
SID	Standard Instrument Departure
SIGMET	Significant information concerning en-route weather phenomena which may affect the safety of aircraft operations.
SRA	Surveillance Radar Approach
SSR	Secondary Surveillance Radar
STAR	Standard Instrument Arrival
<b>T</b>	
TA	Traffic Advisory (see TCAS)
TAF	Terminal Aerodrome Forecast
TCAS	Traffic Alert and Collision Avoidance System
TMA	Terminal Control Area
<b>U</b>	
UAS	Upper Airspace
UHF	Ultra-High Frequency
UIR	Upper Flight Information Region
UTC	Co-ordinated Universal Time
<b>V</b>	
VASIS	Visual Approach Slope Indicator System (pronounced VASIS)
VDF	Very High Frequency Direction-Finding Station
VFR	Visual Flight Rules
VHF	Very High Frequency (30 to 300 MHz)
VMC	Visual Meteorological Conditions
VOLMET	Meteorological information for aircraft in flight
VOR	Omnidirectional Radio Range

## APPENDIX 2 - Differences to ICAO Radiotelephony Procedures

Differences between Implementing Regulation (EU) No 2016/1185 (SERA Part C) and the International Standards contained in Annex 10 to the Convention on International Civil Aviation, as amended in this document.

Difference A10-01	
<p>ICAO Annex 10 Volume II Chapter 5 5.2.1.4.1</p>	<p>ICAO Annex 10, Volume II, Chapter 5.2.1.4.1 is transposed in point SERA.14035 of Implementing Regulation (EU) No 923/2012 with some differences. The differences between that ICAO Standard and that Union Regulation are as follows:</p> <p>SERA.14035 Transmission of numbers in radiotelephony</p> <p>(a) Transmission of numbers</p> <p>(1) All numbers used in the transmission of aircraft call sign, headings, runway, wind direction and speed shall be transmitted by pronouncing each digit separately.</p> <p>(i) Flight levels shall be transmitted by pronouncing each digit separately <u>except for the case of flight levels in whole hundreds.</u></p> <p>(ii) The altimeter setting shall be transmitted by pronouncing each digit separately <u>except for the case of a setting of 1 000 hPa which shall be transmitted as 'ONE THOUSAND'.</u></p> <p>(iii) All numbers used in the transmission of transponder codes shall be transmitted by pronouncing each digit separately <u>except that, when the transponder codes contain whole thousands only, the information shall be transmitted by pronouncing the digit in the number of thousands followed by the word 'THOUSAND'.</u></p> <p>(2) All numbers used in transmission of other information than those described in point (a)(1) shall be transmitted by pronouncing each digit separately, except that all numbers containing whole hundreds and whole thousands shall be transmitted by pronouncing each digit in the number of hundreds or thousands followed by the word 'HUNDRED' or 'THOUSAND', as appropriate. Combinations of thousands and whole hundreds shall be transmitted by pronouncing each digit in the number of thousands followed by the word 'THOUSAND', followed by the number of hundreds, followed by the word 'HUNDRED'.</p> <p>(3) In cases where there is a need to clarify the number transmitted as whole thousands and/or whole hundreds, the number shall be transmitted by pronouncing each digit separately.</p> <p>(4) When providing information regarding relative bearing to an object or to conflicting traffic in terms of the 12-hour clock, the information shall be given pronouncing the digits together such as 'TEN O'CLOCK' or 'ELEVEN O'CLOCK'.</p> <p>(5) Numbers containing a decimal point shall be transmitted as prescribed in point (a)(1) with the decimal point in appropriate sequence indicated by the word 'DECIMAL'.</p> <p>(6) All six digits of the numerical designator shall be used to identify the transmitting channel in Very High Frequency (VHF) radiotelephony communications except in the case of both the fifth and sixth digits being zeros, in which case only the first four digits shall be used.</p>

Difference A10-02	
ICAO Annex 10 Volume II Chapter 5 5.2.1.7.3.2.3	<p>ICAO Annex 10, Volume II, Chapter 5.2.1.7.3.2.3 is transposed in point SERA.14055 of Implementing Regulation (EU) No 923/2012 with a difference. The difference between that ICAO Standard and that EU Regulation is as follows:</p> <p>SERA.14055 Radiotelephony procedures</p> <p>(b) (2) The reply to the above calls shall use the call sign of the station calling, followed by the call sign of the station answering, which shall be considered an invitation to proceed with transmission by the station calling. <u>For transfers of communication within one ATS unit, the call sign of the ATS unit may be omitted, when so authorised by the competent authority.</u></p>

Differences between the ICAO standard phraseology and that specified for use in this document are described in the table below.

Phrase / Additional information	Difference details
FLIGHT LEVELS – changing of	... for level changes the preposition <b>TO may be omitted</b> unless flight level confusion is likely to result.

## 15 Završne odredbe

Postupci za obavljanje govorne komunikacije primjenjuju se najkasnije od **5. studenog 2020.**

## 15 Final provisions

Voice Communication Procedures are effective as of **5 November 2020** at the latest.