



# Instructions for use standard VFR communications



Croatian Civil Aviation Agency

INSTRUCTIONS FOR USE STANDARD VFR COMMUNICATIONS, 2025.

## i

Croatian  
Phraseology

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## Standard Phraseology

It enables clear and unambiguous communication.

# 1. Introduction

This guide is written to aid the pilots and other aviation staff to use the radiotelephony in the right manner. It covers the basics of radiotelephony as well as VFR communications in the traffic pattern, airwork area, departure, en-route and arrival phraseology.

Additionally, it explains how to use phraseology at uncontrolled airports and during sports activities such as gliding and skydiving operations.

This document serves the purpose of increasing situational awareness in general aviation in Croatia and neighboring countries through promoting the use of standard phraseology.

The key goals are:

- Standardization of English phraseology
- Avoiding misunderstandings during communication
- Creating a mental picture about traffic situation
- Increasing the level of safety in aviation.



Usage of standard phraseology in radiotelephony is an important factor of safe and efficient operation of aircraft.

Thus, every part will include examples on how to use a certain phrase. Standard phraseology should be used in all situations for which it has been specified. If it cannot serve the intended transmission, plain language may be used.

This guide is based on:

- Commission Implementing Regulation (EU) No. 923/2012, AIC A 004/2025,
- VFR Manual
- AIP
- ICAO Document 4444,
- EGAST
- Guide to Phraseology for General Aviation Pilots in Europe and
- Best practices.

This guide was jointly created by Maja Pađen (flight instructor) and Mario Petrin (ATC instructor) on behalf of the Croatian Civil Aviation Agency.





## The most common call sign

The most common radiotelephony call sign of a general aviation aircraft is its registration, i.e. 9A-BCD. Its abbreviated call sign will be 9CD – the first and the last two characters of the call sign.

## 2. General

### 2.1. Aircraft call signs

The most common radiotelephony call sign of a general aviation aircraft is its registration, i.e. 9A-BCD. Its abbreviated call sign will be 9CD – the first and the last two characters of the call sign.

The aircraft type or aircraft manufacturer may be used as a prefix to this type of call sign, i.e. Cessna 9ABCD, and the abbreviated form will then be Cessna CD or Cessna BCD.

For aircraft used in commercial line operations, the call sign is usually the designator of the operator and the flight identification, i.e. Croatia 4AJ.

There is no abbreviated form for this type of call sign.

Abbreviated call signs may be used by the aircraft only when ATC has addressed the aircraft with the abbreviated call sign.

An aircraft shall not change the call sign on its own, except when instructed by the ATC.



### 2.2. Aeronautical station call signs

Call signs of aeronautical stations consist of the name of the location followed by a suffix indicating the type of unit or the service which the unit provides. Examples of call signs of units existing in Croatia are described in the table below.

| Unit                       | Call sign suffix |
|----------------------------|------------------|
| Surface movement control   | GROUND           |
| Aerodrome control          | TOWER            |
| Approach control           | APPROACH         |
| Radar                      | RADAR            |
| Area control centre        | CONTROL          |
| Flight information service | INFORMATION      |
| Aeronautical station       | RADIO            |

Once satisfactory communication has been established, the name of the location or the call sign suffix may be omitted, i.e. “Tower” or “Zagreb”.



## Pronunciation of letters

The table provides the standard pronunciation of letters used in aircraft call signs, VFR reporting points, taxiway codes, ATIS codes and parking positions.

## 2.3. Transmission of letters

The table below provides the standard pronunciation of letters used in aircraft call signs, VFR reporting points, taxiway codes, ATIS codes and parking positions.

| Letter | Word     | Approximate pronunciation |
|--------|----------|---------------------------|
| A      | Alpha    | [ˈʌlfʌ]                   |
| B      | Bravo    | [ˈbravou]                 |
| C      | Charlie  | [ˈtʃɑːli]                 |
| D      | Delta    | [ˈdeltə]                  |
| E      | Echo     | [ˈekou]                   |
| F      | Foxtrot  | [ˈfɒkstrɒt]               |
| G      | Golf     | [ˈgɒlf]                   |
| H      | Hotel    | [houˈtel]                 |
| I      | India    | [ˈindiə]                  |
| J      | Juliet   | [ˈdʒuːliət]               |
| K      | Kilo     | [ˈkilou]                  |
| L      | Lima     | [ˈlimə]                   |
| M      | Mike     | [ˈmaik]                   |
| N      | November | [nouˈvembə]               |
| O      | Oscar    | [ˈɒskə]                   |
| P      | Papa     | [pʌpɑː]                   |
| Q      | Quebec   | [kwiˈbek]                 |
| R      | Romeo    | [ˈroumiou]                |
| S      | Sierra   | [ˈsiːərə]                 |
| T      | Tango    | [ˈtæŋɡou]                 |
| U      | Uniform  | [ˈjuːnifoːm]              |
| V      | Victor   | [ˈviktə]                  |
| W      | Whiskey  | [ˈwiski]                  |
| X      | X-ray    | [ˈeksrei]                 |
| Y      | Yankee   | [ˈjæŋki]                  |
| Z      | Zulu     | [ˈzulu]                   |



## Pronunciation of numbers

When transmitting numbers, they shall be pronounced as stated here.

| Example     | Transmitted as                  |
|-------------|---------------------------------|
| 9A-BCD      | Niner Alpha Bravo Charlie Delta |
| Croatia 4AJ | Croatia Fower Alpha Juliet      |
| ZAG         | Zulu Alpha Golf                 |
| N3          | November Three                  |
| TWY F       | Taxiway Foxtrot                 |
| ATIS P      | Information Papa                |

## 2.4. Pronunciation of numbers

When transmitting numbers, they shall be pronounced as in the table below.

| Number or element | English     |
|-------------------|-------------|
| 0                 | ZE RO       |
| 1                 | WUN         |
| 2                 | T00         |
| 3                 | TREE        |
| 4                 | FOW-er      |
| 5                 | FIFE        |
| 6                 | SIX         |
| 7                 | SEV-en      |
| 8                 | AIT         |
| 9                 | NIN-er      |
| Decimal           | DAY-SEE-MAL |
| Hundred           | HUN-DRED    |
| Thousand          | TOU-SAND    |

## 2.5. Transmission of numbers

When transmitting numbers, there are a few rules to follow.

- Call signs, headings, runway, wind direction and speed – transmit each digit separately
- Flight levels – transmit each digit separately, except for flight levels expressed in whole hundreds
- QNH and squawk – transmit each digit separately, except when stating whole thousands
- Other numbers – transmit each digit separately, unless the number is a whole hundred or thousand



## Pronunciation of numbers during maneuvers

When receiving an instruction to perform 360° or 180°, those numbers are transmitted as “three sixty” and “one eighty”.

| Examples         | Transmitted as                               |
|------------------|----------------------------------------------|
| Croatia 127      | Croatia one two seven                        |
| RWY 28L          | Runway two eight left                        |
| Heading 300      | Heading three zero zero                      |
| FL 200           | Flight level two hundred                     |
| FL 120           | Flight level one two zero                    |
| QNH 1015         | QNH one zero one five                        |
| QNH 1000         | QNH one thousand                             |
| SQUAWK 2000      | Squawk two thousand                          |
| SQUAWK 0007      | Squawk zero zero zero seven                  |
| Altitude 4500 ft | Altitude fower thousand five hundred feet    |
| Visibility 500 m | Visibility five hundred meters               |
| Distance 32.5 NM | Distance three two point five nautical miles |

## 2.6. Exceptions from rules

Some numbers are transmitted in an “ordinary” way. This will be the case when receiving traffic information and when instructed to perform 360° or 180° turn as described below.

- When traffic information is received, it is usually given in 12 o’ clock terms regarding relative bearing from your aircraft where 12 position is aligned with your heading. More about traffic information will be given later in this guide
- When receiving an instruction to perform 360° or 180° turns, those numbers are transmitted as “three sixty” and “one eighty”.



## 2.7. Transmission and use of frequencies

Frequencies shall be transmitted by pronouncing each digit separately. The decimal point shall be transmitted using the word “DECIMAL”. Each digit must be pronounced except if the last two digits are zero in which case they can be omitted.



## Readback

When critical messages are transmitted, the ATC must have confirmation that the aircraft understood the instructions. This is accomplished via readback – the aircraft must repeat all the instructions that must be read back exactly as received.

| Frequency | Transmitted as                        |
|-----------|---------------------------------------|
| 118.075   | One one eight decimal zero seven five |
| 135.050   | One three five decimal zero five zero |
| 120.700   | One two zero decimal seven            |
| 119.000   | One one niner decimal zero            |

When instructing to change the frequency, ATC will use one of the following phrases which have meanings as described in the table below.

| Phrase       | Meaning                                                                       |
|--------------|-------------------------------------------------------------------------------|
| Contact      | Establish communications with...                                              |
| Monitor      | Listen out on (frequency)<br>(for unattended frequencies, i.e. Čakovec Radio) |
| Stand by for | Change the frequency and wait for<br>ATC to initiate contact                  |

## 2.8. Transmission of time

When transmitting time, only the minutes are transmitted, unless there is potential for confusion, in which case both the hour and minutes are stated. The day begins at 0000 and ends at 2359. UTC time is used.

| Time  | Transmitted as                    |
|-------|-----------------------------------|
| 06:04 | Zero fower or zero six zero fower |
| 07:00 | Zero zero or zero seven zero zero |

## 2.9. Readback

When critical messages are transmitted, the ATC must have confirmation that the aircraft understood the instructions. This is accomplished via readback – the aircraft must repeat all the instructions that must be read back exactly as received. During readback, the aircraft callsign is transmitted at the end of the message instead of the beginning. The items that must be read back are:

- ATC route clearance
- clearances/instructions to enter, land on, take-off from, hold short of, cross or backtrack any runway including conditional clearance
- runway in use
- altimeter settings
- SSR codes
- level or heading instructions
- speed instructions
- transition level
- ATIS information
- frequency





## Standard phraseology

Standard phraseology must be used for all situations for which it is specified.

| ATC                                                                                                             | Pilot                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 9ABCD, runway 04, cleared for take-off, wind 050/10.                                                            |                                                                                                                    |
|                                                                                                                 | Runway 04, cleared for take-off, 9ABCD.                                                                            |
| 9ABCD, cleared local flight via flight planned route, when airborne turn left inbound N2, 2000 ft, squawk 5214. |                                                                                                                    |
|                                                                                                                 | Cleared local flight via flight planned route, when airborne to turn left inbound N2, 2000 ft, squawk 5214, 9ABCD. |

Note: Probably the most frequent error in communications is placing the callsign at the end of a transmission which is not subject to readback. Examples are: Wilco, 9AABC; Roger, 9AABC.

## 2.10. Standard phrases

As already mentioned, standard phraseology must be used for all situations for which it is specified. The list and meanings of standards phrases is given below.

| Phrase          | Meaning                                                                                                        |
|-----------------|----------------------------------------------------------------------------------------------------------------|
| ACKNOWLEDGE     | Let me know that you have received and understood this message                                                 |
| AFFIRM          | Yes                                                                                                            |
| APPROVED        | Permission for proposed action granted                                                                         |
| BREAK           | I hereby indicate the separation between portions of the message                                               |
| BREAK BREAK     | I hereby indicate the separation between messages transmitted to different aircraft in a very busy environment |
| CANCEL          | Annul the previously transmitted clearance                                                                     |
| CHECK           | Examine a system or procedure                                                                                  |
| CLEARED         | Authorized to proceed under the conditions specified                                                           |
| CONFIRM         | I request verification of...clearance, action, information...                                                  |
| CONTACT         | Establish communications with                                                                                  |
| CORRECT         | True, accurate                                                                                                 |
| CORRECTION      | An error has been made in transmission, correct version is...                                                  |
| DISREGARD       | Ignore                                                                                                         |
| HOW DO YOU READ | What is the readability of my transmission                                                                     |



## Remark

The expression 'TAKE-OFF' shall only be used in radiotelephony when an aircraft is cleared for take-off or when cancelling a take-off clearance.

The phrase "GO AHEAD" shall not be used in radiotelephony communications.

| Phrase       | Meaning                                                                                                      |
|--------------|--------------------------------------------------------------------------------------------------------------|
| I SAY AGAIN  | I repeat for clarity or emphasis                                                                             |
| MAINTAIN     | Continue in accordance with the condition(s) specified" or in its literal sense, e.g. "Maintain 1000 ft AGL" |
| MONITOR      | Listen out on frequency                                                                                      |
| NEGATIVE     | No or Permission not granted or That is not correct or Not capable                                           |
| OVER         | My transmission is ended and I expect a response from you                                                    |
| OUT          | This exchange of transmission is ended and no response is expected                                           |
| READ BACK    | Repeat all, or the specified part, of this message back to me exactly as received                            |
| RECLEARED    | A change has been made to your last clearance and this new one supersedes the last                           |
| REPORT       | Pass me the following information                                                                            |
| REQUEST      | I should like to know or wish to obtain                                                                      |
| ROGER        | I have received all of your last transmission (when readback is not required)                                |
| SAY AGAIN    | Repeat your last transmission                                                                                |
| SPEAK SLOWER | Reduce your rate of speech                                                                                   |
| STANDBY      | Wait and I will call you                                                                                     |
| UNABLE       | I cannot comply with your request, instruction or clearance                                                  |
| WILCO        | I understand you message and will comply with it (not to be used instead of readback)                        |
| WORDS TWICE  | Communication is difficult, please say/ I will say every word twice                                          |

## 2.11. Radio check

When in need of confirming readability of transmitted message, an aircraft or ATC may request radio check. The message should comprise of the identification of the aeronautical station being called, radio station calling, the word "radio check" and the frequency on which the check is performed.



## Traffic phrases

The aircraft which is given the traffic information will use the following phrases when answering **LOOKING OUT**, **TRAFFIC IN SIGHT** and **NEGATIVE CONTACT**.

The answer should include the identification of the station requesting the test, the identification of the station replying and the information on readability according to the table below.

| Information on readability | Meaning                        |
|----------------------------|--------------------------------|
| 1                          | Unreadable                     |
| 2                          | Readable now and then          |
| 3                          | Readable but with difficulties |
| 4                          | Readable                       |
| 5                          | Perfectly readable             |

| ATC                                | Pilot                                    |
|------------------------------------|------------------------------------------|
|                                    | Lučko Tower, 9ABCD, radio check 118.075. |
| 9ABCD, Lučko Tower, read you five. |                                          |



## 2.12. Traffic informations

If there is conflicting traffic en-route or in any other phase of flight, the ATC will provide traffic information consisting of the following details to help the pilot identify and avoid the traffic:

- Relative bearing of conflicting traffic given in 12 o'clock terms
- Distance of conflicting traffic
- Direction in which the conflicting traffic is moving
- Altitude and the aircraft type of conflicting traffic or relative speed (e.g. slow or fast moving if the type is not known)

The aircraft which is given the traffic information will use the following phrases when answering:

- **LOOKING OUT** – meaning the pilot is searching the surrounding for traffic
- **TRAFFIC IN SIGHT** – meaning the pilot has visual on the mentioned traffic
- **NEGATIVE CONTACT** – meaning the pilot cannot see the mentioned traffic





## Radar controlled airspace

If the pilot cannot see the traffic, avoiding action can be requested.

In the following example, the situation is as pictured below.

| ATC                                                                   | Pilot                                              |
|-----------------------------------------------------------------------|----------------------------------------------------|
| 9ABCD, traffic is Cessna 150, same level, crossing from right to left |                                                    |
|                                                                       | 9ABCD, looking out.                                |
|                                                                       | 9ABCD, traffic in sight / 9ABCD, negative contact. |

In radar controlled area, relative position in term of “o’clock” and distance.



If the pilot cannot see the traffic, avoiding action can be requested.





## Establishing communications

For VFR traffic the first message should include only the initial call.

## 3. Use of Phraseology

### 3.1. Establishing communications

When establishing communications, it should be made sure that the existing communications are not interrupted. Just like saying “hello” when meeting someone, we use initial call on the frequency to ensure that the following messages will be transmitted without problems. The initial call and the reply have the form “who is being called – who is calling” as described in the table below. Keep in mind that for VFR traffic the first message should include only the initial call.

| ATC                 | Pilot                      |
|---------------------|----------------------------|
|                     | <b>Lučko Tower, 9ABCD.</b> |
| 9ABCD, Lučko Tower. |                            |

After the initial call, the rest of the message may be transmitted, keeping in mind that mandatory items regarding the type of ATC service are included. The items apply whether the aircraft is on the ground or in the air. If the ATC unit is a tower, the following items must be transmitted (including initial call):

- Callsign of the unit being addressed
- Callsign of the aircraft calling
- Position

If the ATC has radar service, the following items must be transmitted (including initial call):

- Callsign of the unit being addressed
- Callsign of the aircraft calling
- Altitude/flight level including cleared and passing altitude if in climb/descent
- Speed and heading (only if assigned by the ATC)

### 3.2. Multiple and general call

If there is need for ATC to transmit to more than one aircraft or if it is more convenient, the ATC may use general or multiple call. The multiple call calls for multiple aircraft in one message and the readback is performed in the order in which the ATC called the aircraft.

| ATC                            | Pilot(s)                |
|--------------------------------|-------------------------|
| 9ABCD, 9AEFG, 9AHIJ, QNH 1009. |                         |
|                                | <b>QNH 1009, 9ABCD.</b> |
|                                | <b>QNH 1009, 9AEFG.</b> |
|                                | <b>QNH 1009, 9AHIJ.</b> |





## ATC route clearance

It is advisable to state intentions during start-up request so the ATC may plan in advance.

In general call, all the stations currently on the frequency are addressed. The nature of the message must not require a readback.

### ATC

All stations, Lučko Tower, wind 200 / 30.

## 3.3. Procedures related to weather deviation

When weather deviation is required, the pilot shall initiate communications with the ATC via voice stating “WEATHER DEVIATION REQUIRED” to indicate that priority is desired on the frequency and for ATC response.



## 3.4. Communication on the ground prior to departure

The following is an example of communications at the controlled aerodrome after the initial call described above. First, the start-up approval is requested and obtained. Note that runway in use and QNH may also be obtained from ATIS if the aerodrome has one, in which case the pilot would state the received information (e.g. “information M”) along with start-up request, otherwise the ATC will give departure information prior to departure. It is advisable to state intentions during start-up request so the ATC may plan in advance.

| ATC                                 | Pilot                                               |
|-------------------------------------|-----------------------------------------------------|
|                                     | 9ABCD, main apron, request start-up (for VFR route) |
| 9ABCD, start-up approved, QNH 1009. |                                                     |
|                                     | Start-up approved, QNH 1009, 9ABCD.                 |

After start-up, the taxi instruction is requested. Note that if the flight plan is filed, it is not mandatory to transmit the information about the aircraft type. On an uncontrolled aerodrome, the information about the aircraft type should always be transmitted.

| ATC                                         | Pilot                                                      |
|---------------------------------------------|------------------------------------------------------------|
|                                             | 9ABCD, Cessna 172, main apron, request taxi for VFR route. |
| 9ABCD, taxi to holding point E, runway 28L. |                                                            |
|                                             | Taxiing to holding point E, runway 28L, 9ABCD.             |



## Take-off clearance

The word “take-off” shall only be used when ATC is issuing and the pilot is readbacking the take-off clearance.

If the taxiway to be used is currently occupied, the following communication may take place.

| ATC                                                                                         | Pilot                                                                                                   |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
|                                                                                             | <b>9ABCD, Cessna 172, main apron, request taxi for VFR route.</b>                                       |
| 9ABCD, give way to in-taxiing Cessna 150 on taxiway A, taxi to holding point E, runway 28L. |                                                                                                         |
|                                                                                             | <b>Giving way to in-taxiing Cessna 150 on taxiway A, taxiing to holding point E, runway 28L, 9ABCD.</b> |

On a controlled aerodrome, the ATC route clearance shall be received before the departure itself. It has the layout as described below and full callsign must be used.

| ATC                                                                                                        | Pilot                                                                                                                |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|                                                                                                            | <b>9ABCD, Ready to copy ATC clearance.</b>                                                                           |
| 9ABCD, cleared to Sinj via flight planned route, when airborne turn left inbound W1, 2000 ft, squawk 3651. |                                                                                                                      |
|                                                                                                            | <b>Cleared to Sinj via flight planned route, when airborne to turn left inbound W1, 2000 ft, squawk 3651, 9ABCD.</b> |
| 9ABCD, correct.                                                                                            |                                                                                                                      |

Once all preparations for take-off are completed, the pilot shall ask for take-off clearance. Note that the word “take-off” shall only be used when ATC is issuing and the pilot is readbacking the take-off clearance.

This is to avoid any misunderstandings which can arise for critical phase of flight. When requesting the clearance, the word “departure” is used.

| ATC                                                   | Pilot                                           |
|-------------------------------------------------------|-------------------------------------------------|
|                                                       | <b>9ABCD, ready for departure.</b>              |
| 9ABCD, runway 28L, cleared for take-off, wind 300/10. |                                                 |
|                                                       | <b>Runway 28L, cleared for take-off, 9ABCD.</b> |

If take-off clearance cannot be issued, the ATC may issue line-up clearance. In such case, the aircraft is obliged to enter and line-up on the runway and await the take-off clearance.



## Conditional clearance

To expedite the flow of traffic, ATC may issue a conditional clearance requiring one aircraft to adjust its actions according to the position of another aircraft.

| ATC                        | Pilot                               |
|----------------------------|-------------------------------------|
|                            | <b>9ABCD, ready for departure.</b>  |
| 9ABCD, line-up runway 28L. |                                     |
|                            | <b>Lining-up runway 28L, 9ABCD.</b> |

To expedite the flow of traffic, ATC may issue a conditional clearance requiring one aircraft to adjust its actions according to the position of another aircraft.

For this, ATC must have confirmation that the aircraft receiving the clearance (e.g., holding at the holding point) has the other aircraft in sight (e.g., on final for runway 28L).

| ATC                                                            | Pilot                                                                 |
|----------------------------------------------------------------|-----------------------------------------------------------------------|
| 9ABCD, traffic is Cessna 172 on final runway 28L.              |                                                                       |
|                                                                | <b>9ABCD, traffic in sight.</b>                                       |
| 9ABCD, behind Cessna 172 on final, runway 28L, line up behind. |                                                                       |
|                                                                | <b>Behind Cessna 172 on final, runway 28L, line up behind, 9ABCD.</b> |
| 9ABCD, correct.                                                |                                                                       |





## Change of frequency

When approaching the destination aerodrome CTR, the ATC will instruct the aircraft to contact the tower, or the frequency change may be requested by the pilot.

### 3.5. Communication en-route

When crossing the border of different ATC jurisdictions, the ATC will instruct the aircraft to change frequency and contact the next ATC unit.

| ATC                                 | Pilot                  |
|-------------------------------------|------------------------|
| 9ABCD, contact Zadar Radar 128.525. |                        |
|                                     | <b>128.525, 9ABCD.</b> |

As previously described, the initial contact with the ATC unit providing radar service must include prescribed mandatory items.

An example of the contact is given below.

Further position reports in radar-controlled airspace are not required unless requested by the ATC. The call should include heading and speed as well if they were assigned by the ATC.

| ATC                 | Pilot                                            |
|---------------------|--------------------------------------------------|
|                     | <b>Split Radar, 9ABCD.</b>                       |
| 9ABCD, Split Radar. |                                                  |
|                     | <b>9ABCD, climbing 2000 ft, passing 1500 ft.</b> |

When reporting position in non-radar-controlled airspace, the pilot shall pass the following information:

- Aircraft callsign
- Position
- Time of crossing of reporting point (may be omitted if overflying was in the time of reporting)
- Altitude
- Expected time overhead next position

| ATC           | Pilot                                                |
|---------------|------------------------------------------------------|
|               | <b>9ABCD, W1, (0943), 2000 ft, Karlovac at 0951.</b> |
| 9ABCD, roger. |                                                      |



## Altitude change

Every change from altitude and/or route approved, shall be requested and is subject to approval by the ATC.

Every change from altitude and/or route approved, shall be requested and is subject to approval by the ATC.

| ATC                   | Pilot                    |
|-----------------------|--------------------------|
|                       | 9ABCD, request 4000 ft.  |
| 9ABCD, climb 4000 ft. |                          |
|                       | Climbing 4000 ft, 9ABCD. |

| ATC                   | Pilot                     |
|-----------------------|---------------------------|
|                       | 9ABCD, request direct S1. |
| 9ABCD, cleared to S1. |                           |
|                       | Cleared to S1, 9ABCD.     |

When approaching the destination aerodrome CTR, the ATC will instruct the aircraft to contact the tower, or the frequency change may be requested by the pilot (only for uncontrolled airspace, "9ABCD, request frequency change").

The initial contact with the tower unit will follow the standard format as previously described.

| ATC                                                             | Pilot                                                                 |
|-----------------------------------------------------------------|-----------------------------------------------------------------------|
|                                                                 | Lučko Tower, 9ABCD.                                                   |
| 9ABCD, Lučko Tower.                                             |                                                                       |
|                                                                 | 9ABCD, W1, 3000 ft.                                                   |
| 9ABCD, descend 1000 ft AGL, join left-hand downwind runway 28L. |                                                                       |
|                                                                 | Descending 1000 ft AGL, to join left-hand downwind runway 28L, 9ABCD. |





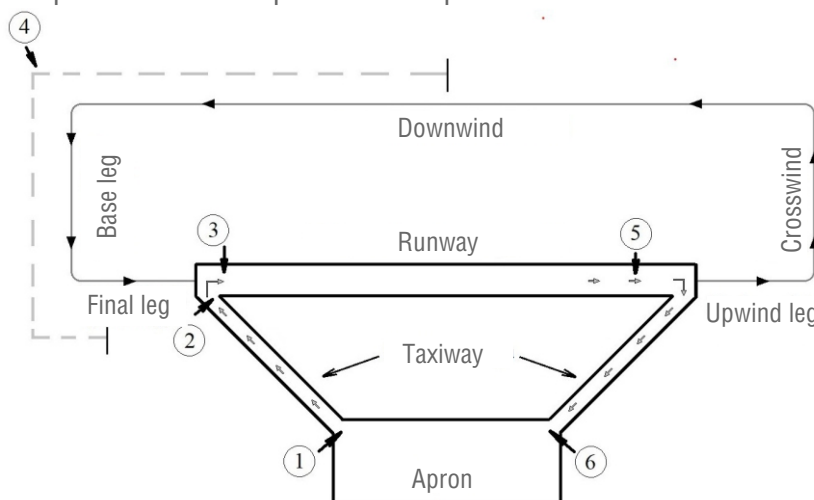


## Landing clearance

The landing clearance may be issued in downwind or base, in which case it is not mandatory to report final leg.

### 3.6. Communication for traffic patterns and airwork

Downwind and final are mandatory report positions in the traffic pattern. Other positions have to be reported on ATC request. When reporting any other leg than upwind or final, the direction of the traffic pattern must be reported (left or right). The parts of the traffic pattern are as pictured below.



| ATC                                              | Pilot                                        |
|--------------------------------------------------|----------------------------------------------|
|                                                  | <b>9ABCD, left-hand downwind runway 28L.</b> |
| 9ABCD, report final.                             |                                              |
|                                                  | <b>9ABCD wilco.</b>                          |
|                                                  | <b>9ABCD, final 28L.</b>                     |
| 9ABCD, runway 28L, cleared to land, wind 300/12. |                                              |
|                                                  | <b>Runway 28L, cleared to land, 9ABCD.</b>   |

The landing clearance may be issued in downwind or base, in which case it is not mandatory to report final leg. For separation purposes, the ATC may instruct the aircraft to extend downwind in which case the aircraft shall not turn base leg until the condition is met. The condition could be: by distance (i.e. “extend downwind by half mile”), timing (i.e. “extend downwind by 30 seconds”) or by ATC (i.e. “extend downwind, stand-by for base”).

| ATC                                        | Pilot                             |
|--------------------------------------------|-----------------------------------|
| 9ABCD, extend downwind, stand-by for base. |                                   |
|                                            | <b>Extending downwind, 9ABCD.</b> |
| 9ABCD, turn base.                          |                                   |
|                                            | <b>Turning base, 9ABCD.</b>       |



## Continue approach

When instructed to orbit, the aircraft shall perform turns until instructed to stop using the phrase „continue approach“ or "stop orbiting".

As downwind can be extended, it can also be shortened.

| ATC                         | Pilot                                |
|-----------------------------|--------------------------------------|
| 9ABCD, make short approach. |                                      |
|                             | <b>Making short approach, 9ABCD.</b> |

Another method to ensure separation is to instruct an aircraft to “orbit” or “perform 360”.

The main difference between the two is that the latter consists of only one 360° turn. Once the 360 is completed, it must be reported.

| ATC                           | Pilot                                  |
|-------------------------------|----------------------------------------|
| 9ABCD, make 360 to the right. |                                        |
|                               | <b>Making 360 to the right, 9ABCD.</b> |
|                               | <b>9ABCD, 360 completed.</b>           |

When instructed to orbit, the aircraft shall perform turns until instructed to stop using the phrase „continue approach“ or "stop orbiting".

When giving instruction either to orbit or 360, the ATC will include side of the orbit/360 (“orbit to the left”) and it is usually to the side away from the runway.

| ATC                        | Pilot                                |
|----------------------------|--------------------------------------|
| 9ABCD, orbit to the right. |                                      |
|                            | <b>Orbiting to the right, 9ABCD.</b> |
| 9ABCD, continue approach.  |                                      |
|                            | <b>Continuing approach, 9ABCD.</b>   |

When an aircraft requests a touch-and-go or low approach, it shall denote so during the downwind position report.





## Go-Around maneuver

The go-around maneuver in case of missed approach is the right and obligation of every pilot. Moreover, it can also be given as an instruction by the ATC in which case the pilot shall perform the maneuver.

| ATC                                                   | Pilot                                                       |
|-------------------------------------------------------|-------------------------------------------------------------|
|                                                       | <b>9ABCD, left-hand downwind runway 28L, touch- and-go.</b> |
| 9ABCD, runway 28L, cleared touch-and-go, wind 300/12. |                                                             |
|                                                       | <b>Runway 28L, cleared touch-and-go, 9ABCD.</b>             |

The go-around maneuver in case of missed approach is the right and obligation of every pilot. Moreover, it can also be given as an instruction by the ATC in which case the pilot shall perform the maneuver.

| ATC               | Pilot                       |
|-------------------|-----------------------------|
| 9ABCD, go-around. |                             |
|                   | <b>Going around, 9ABCD.</b> |

When performing airwork at a certain position for training or other purposes, the following phraseology should be used for requesting, starting and completing airwork. If the airwork is requested in an area which is not a predefined zone for airwork then the lateral and vertical boundaries shall be included in the request.

| ATC                                      | Pilot                                                                  |
|------------------------------------------|------------------------------------------------------------------------|
|                                          | <b>9ABCD, request airwork in zone Samobor.</b>                         |
| 9ABCD, airwork in zone Samobor approved. |                                                                        |
|                                          | <b>Airwork in zone Samobor approved, 9ABCD.</b>                        |
|                                          | <b>9ABCD, zone Samobor, commencing airwork.</b>                        |
| 9ABCD, report completed.                 |                                                                        |
|                                          | <b>9ABCD, wilco.</b>                                                   |
|                                          | <b>9ABCD, zone Samobor, airwork completed, ...(further intentions)</b> |

When performing engine failure imitations, the following phraseology should be used.

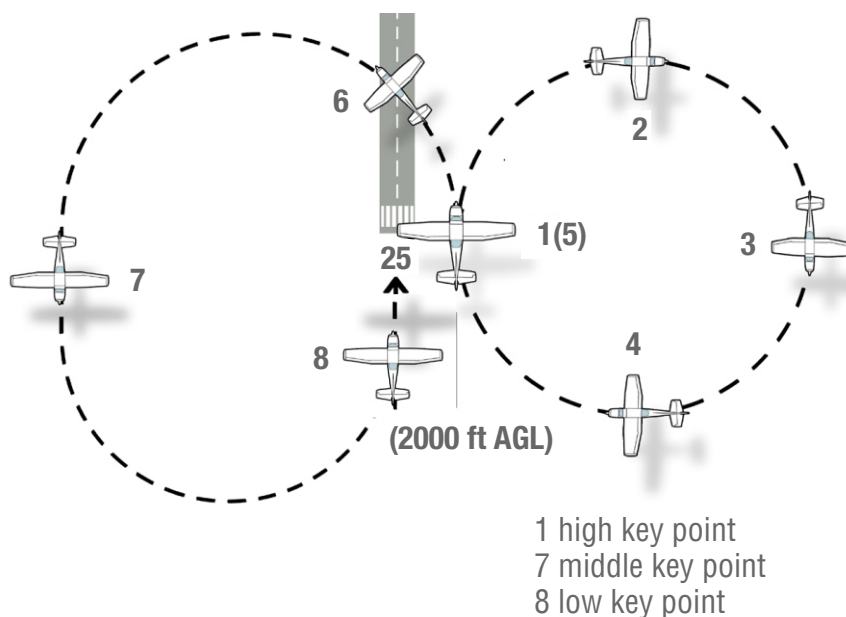
Position for commencing engine failure imitation should be included.



## Communications on the ground after arrival

It is not mandatory to report engine shutdown on all airports.

| ATC                                                       | Pilot                                                            |
|-----------------------------------------------------------|------------------------------------------------------------------|
|                                                           | <b>9ABCD, request engine failure imitation from [position].</b>  |
| 9ABCD, engine failure imitation from [position] approved. |                                                                  |
|                                                           | <b>Engine failure imitation from [position] approved, 9ABCD.</b> |



### 3.7. Communications on the ground after arrival

After landing, the ATC will issue taxi instructions. At certain aerodromes, it is mandatory to report engine shutdown.

| ATC                                                   | Pilot                                                             |
|-------------------------------------------------------|-------------------------------------------------------------------|
| 9ABCD, vacate runway via D, taxi via A to main apron. |                                                                   |
|                                                       | <b>Vacating runway via D, taxiing via A to main apron, 9ABCD.</b> |
|                                                       | <b>9ABCD, engine shutdown.</b>                                    |



## Predeparture and departure by air-tow

Prior to the departure itself the preparations must be made, which involves connecting the glider and the airplane.

### 3.8. Communication related to gliding activities

#### Predeparture and departure by air-tow

Prior to departure, communication between the glider and the towing aircraft must be established.

| Glider pilot 9AGBA               | Airplane Pilot 9ABCD           |
|----------------------------------|--------------------------------|
|                                  | 9ABCD, Blanik BA, radio check. |
| Blanik BA, read you five, 9ABCD. |                                |

After radio communication has been established, actions must be taken to ensure that the glider and the towing aircraft are properly connected. The glider pilot should then instruct the tow aircraft pilot to taxi forward slowly to remove any slack from the tow line, using the following phraseology:

| Glider pilot 9AGBA        | Airplane Pilot 9ABCD |
|---------------------------|----------------------|
| 9ABCD, pick-up the slack. |                      |
|                           | Picking up, 9ABCD.   |
| Slack removed.            |                      |

Once the procedure has been completed and the glider pilot is ready, they should signal the wing runner by hand and confirm this on the radio. The transmission may include the intended sailplane flight plan if it has not been agreed upon earlier. This information is intended for the tow aircraft pilot.

| Glider pilot 9AGBA                                | Airplane Pilot 9ABCD       |
|---------------------------------------------------|----------------------------|
| Blanik BA, request tow for gliding to 600 meters. |                            |
|                                                   | Gliding 600 meters, 9ABCD. |
| 9AGBA, ready for departure.                       |                            |

Further communication during air-tow shall be made only with the towing aircraft.

| ATC                                                  | Airplane Pilot 9ABCD                     |
|------------------------------------------------------|------------------------------------------|
|                                                      | 9ABCD, ready for departure.              |
| 9ABCD, runway 28R, cleared for take-off, wind 300/5. |                                          |
|                                                      | Runway 28R, cleared for take-off, 9ABCD. |

When satisfactory position is reached the glider pilot shall disconnect from the airplane and report doing so.

| Glider pilot 9AGBA       | Airplane Pilot 9ABCD |
|--------------------------|----------------------|
| Blanik BA, disconnected. |                      |
|                          | 9ABCD, roger.        |



## Predeparture and departure by winch

Same as by air-tow, the slack needs to be removed from the tow line, and the winch operator must be notified when the glider pilot is ready for launch.

After the glider is disconnected, the glider will proceed as planned and the towing aircraft will perform towing rope drop at a designated area (if needed).

| ATC                                              | Airplane Pilot 9ABCD                       |
|--------------------------------------------------|--------------------------------------------|
|                                                  | <b>9ABCD, for dropping (rope).</b>         |
| 9ABCD, continue inbound runway 28R for dropping. |                                            |
|                                                  | <b>9ABCD, rope dropped.</b>                |
| 9ABCD, roger, report final 28L.                  |                                            |
|                                                  | <b>9ABCD, final 28L.</b>                   |
| 9ABCD, runway 28L, cleared to land, wind 300/5.  |                                            |
|                                                  | <b>Runway 28L, cleared to land, 9ABCD.</b> |

### Predeparture and departure by winch

As with air-tow, before a winch launch the communication between the glider and the winch must be established.

| Glider Pilot 9AGBA               | Winch operator                        |
|----------------------------------|---------------------------------------|
|                                  | <b>Winch, Blanik BA, radio check.</b> |
| Blanik BA, read you five, Winch. |                                       |

As with an air tow, the slack must be removed from the tow line, and the winch operator must be informed when the glider pilot is ready for launch.

This will be done using the following phraseology:

| Glider Pilot 9AGBA                   | Winch operator                     |
|--------------------------------------|------------------------------------|
| Winch, Blanik BA, pick-up the slack. |                                    |
|                                      | <b>Winch picking-up the slack.</b> |
| Blanik BA, tow-line checked.         |                                    |

Once the procedure has been completed and the glider pilot is ready, they signal the wing runner by hand and confirm readiness on the radio.

| ATC                                                  | Glider Pilot 9AGBA                              |
|------------------------------------------------------|-------------------------------------------------|
|                                                      | <b>9AGBA, ready for departure.</b>              |
| 9AGBA, runway 28R, cleared for take-off, wind 300/5. |                                                 |
|                                                      | <b>Runway 28R, cleared for take-off, 9AGBA.</b> |

After receiving clearance from the ATC, the glider pilot instructs the winch operator to launch using the phrase “Winch, Blanik BA, ready, launch.”





## Gliding, approach and landing

Although the gliding usually takes place in a predefined zone, the ATC may ask for the glider's position.

During the take-off phase, the winch operator may issue corrections to the glider.

### Winch operator

#### Correction to the right (left).

When reaching maximum altitude, the glider will disconnect and report the action.

| Glider Pilot 9AGBA                                           | Winch operator |
|--------------------------------------------------------------|----------------|
| Blanik BA, disconnected, altitude 430 meters, turning right. |                |
|                                                              | Winch, roger.  |

### Gliding, approach and landing

Although the gliding usually takes place in a predefined zone, the ATC may ask for the glider's position.

| ATC                         | Glider Pilot 9AGBA                                                 |
|-----------------------------|--------------------------------------------------------------------|
| Blanik BA, report position. |                                                                    |
|                             | Blanik BA, cementara, 2700 meters, climbing 1.5 meters per second. |
| Blanik BA, roger.           |                                                                    |

The sailplane pilot should notify the ATC when the sailplane is read to land.

| ATC                                                 | Glider Pilot 9AGBA                                        |
|-----------------------------------------------------|-----------------------------------------------------------|
|                                                     | Blanik BA, Špansko, 800 meters, for landing.              |
| Blanik BA, report right-hand downwind runway 28R.   |                                                           |
|                                                     | Blanik BA, wilco, runway 28R.                             |
|                                                     | Blanik BA, right-hand downwind 28R, gear down and locked. |
| Blanik BA, wind 300/5, runway 28R free for landing. |                                                           |
|                                                     | Landing on runway 28R, Blanik BA.                         |





## Communication related to skydiving activities

When skydiving operations are in progress, the cooperation of all traffic is of vital importance, especially at uncontrolled aerodromes.

### 3.9. Communication related to skydiving activities

When skydiving operations are in progress, the cooperation of all traffic is of vital importance, especially at uncontrolled aerodromes. To increase the level of safety and raise situational awareness, the skydiving aircraft shall make the following announcements on the appropriate frequency: “five minutes to drop”, “two minutes to drop”, “entering jump run” and “skydivers in the air”, along with the number of canopies dropped.

| Skydiving Ground                              | Pilot                                                 |
|-----------------------------------------------|-------------------------------------------------------|
|                                               | 9ABCD, five minutes to drop, three canopies.          |
|                                               | 9ABCD, two minutes to drop, three canopies.           |
|                                               | 9ABCD, entering jump run, three canopies.             |
|                                               | 9ABCD, three canopies in the air.                     |
| Skydiving Ground, all canopies on the ground. |                                                       |
|                                               | 9ABCD, roger, joining right-hand downwind runway 10R. |

At controlled aerodromes, the appropriate ATC unit shall give the permission to drop prior to entering the jump run. The jump run is considered to begin when the skydiving aircraft is at the appropriate altitude, heading, position and configuration for the drop.

| ATC                   | Pilot                                       |
|-----------------------|---------------------------------------------|
|                       | 9ABCD, two minutes to drop, three canopies. |
| 9ABCD, drop approved. |                                             |
|                       | Drop approved, 9ABCD.                       |
|                       | 9ABCD, entering jump run, three canopies.   |
|                       | 9ABCD, three canopies in the air.           |

\* It is not necessary to announce on the frequency 5 minutes to drop at a controlled airport.

Additionally, the skydiving aircraft or the skydiving ground crew shall confirm all parachutes on the ground once there are no more canopies in the air. This is all for other aircraft to adjust their flight paths in a way that does not endanger the skydivers.

| Pilot / Skydiving ground                         |
|--------------------------------------------------|
| Lučko Tower (Radio), all canopies on the ground. |



## Traffic informations

At an uncontrolled aerodrome, the skydiving pilot or skydiving ground crew should inform any relevant traffic if there are canopies in the air.

At an uncontrolled aerodrome, the skydiving pilot or skydiving ground crew should inform any relevant traffic if there are canopies in the air. Vice versa, any relevant traffic should inform the skydiving aircraft of its presence in the skydiving zone once the pilot has announced "two minutes to drop" at the latest. The traffic is considered to be relevant for skydiving operations if it is situated inside the skydiving zone, whether in the air or on the ground, and if it is entering the skydiving zone.

| Non-skydiving Pilot 9AXYZ              | Skydiving Pilot 9ABCD                              |
|----------------------------------------|----------------------------------------------------|
|                                        | <b>9ABCD, two minutes to drop, three canopies.</b> |
| 9AXYZ, final 28L, landing.             |                                                    |
|                                        | <b>9ABCD, standing-by for drop.</b>                |
| 9AXYZ, on the ground, engine shutdown. |                                                    |
|                                        | <b>9ABCD, entering jump run, three canopies.</b>   |

The next scenario describes the situation at an uncontrolled aerodrome in which the skydiving pilot does not receive the message about the aircraft on final so the skydiving ground relays the message.

| Non-skydiving Pilot 9AXYZ              | Skydiving Ground                                | Skydiving Pilot 9ABCD                              |
|----------------------------------------|-------------------------------------------------|----------------------------------------------------|
| 9AXYZ, final 28L, landing.             |                                                 | (not hearing the message)                          |
|                                        |                                                 | <b>9ABCD, two minutes to drop, three canopies.</b> |
|                                        | 9ABCD, Skydiving Ground, aircraft on final 28L. |                                                    |
|                                        |                                                 | <b>9ABCD, standing-by for drop.</b>                |
| 9AXYZ, on the ground, engine shutdown. |                                                 |                                                    |
|                                        |                                                 | <b>9ABCD, entering jump run, three canopies.</b>   |





## Communication in urgency and distress

The distress message has priority above all other messages and the urgency message has priority above all other except distress messages.

The next scenario describes the situation at an uncontrolled aerodrome in which the incoming aircraft intends to join the traffic pattern for landing and the skydiving ground informs the aircraft about the skydivers in the air. The information about the skydivers in the air may be given either by skydiving ground or by the skydiving pilot if he receives the message.

| Non-skydiving Pilot<br>9AXYZ                                              | Skydiving<br>Ground                                        | Skydiving Pilot<br>9ABCD                 |
|---------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------|
| (not hearing the message)                                                 |                                                            | <b>9ABCD, three canopies in the air.</b> |
| Lučko Radio, 9AXYZ, H4, 2000 ft, will join left-hand downwind runway 28L. |                                                            | <b>(not hearing the message)</b>         |
|                                                                           | 9AXYZ, Skydiving Ground, three canopies in the air.        |                                          |
| 9AXYZ, orbiting at H4.                                                    |                                                            |                                          |
|                                                                           | Lučko Radio, Skydiving Ground, all canopies on the ground. |                                          |
| 9AXYZ, joining left-hand downwind runway 28L.                             |                                                            |                                          |

### 3.10. Communication in urgency and distress

The main difference between the distress and urgency is that the aircraft in distress requires immediate assistance. The distress message has priority above all other messages and the urgency message has priority above all other except distress messages. Those two categories of messages are transmitted on the frequency that is currently in use by the aircraft in distress/urgency but if it is required or convenient the communications can be moved to the emergency frequency of 121.500 MHz.

If the distress message is transmitted on the frequency or the concerning aircraft or ATC transmit “All stations, stop transmitting”, all other traffic shall stop transmitting on that frequency until:

- The distress traffic has ended (“All stations, Zagreb Radar, distress traffic ended”), or
- The traffic in distress is moved to another frequency, or
- ATC gives permission to transmit, or
- Another aircraft can help the distress traffic.





## Response to an aircraft in distress

If the aircraft receives a distress or urgency message which was not acknowledged by the ATC, it shall respond to the aircraft in distress/urgency and relay the message to the ATC.

The distress and urgency messages have the following form:

- 3 x MAYDAY (for distress) or 3 x PANPAN (for urgency)
- Callsign of the unit addressed
- Callsign of the aircraft in distress/urgency
- Nature of the problem causing distress/urgency
- Intention of the pilot
- Current position, altitude and heading
- Other relevant information for urgency messages.

### Pilot

**MAYDAY MAYDAY MAYDAY, Zagreb Radar, 9ABCD, engine on fire, landing on Savski nasip, position overhead Zagreb city, 3000 ft, heading 090, request firefighting services.**

If the aircraft receives a distress or urgency message which was not acknowledged by the ATC, it shall respond to the aircraft in distress/urgency and relay the message to the ATC. If the state of distress ends, the aircraft shall transmit "Cancel distress".

## 3.11. Communications at an uncontrolled aerodrome

While flying at an uncontrolled aerodrome, since there is no ATC, the air traffic participants shall regularly inform each other on their actions and intentions to prevent possible safety degradations. On such aerodromes, pilots shall always listen out on designated frequency and be aware of other traffic, their movements and activities.

If intending to depart from an uncontrolled aerodrome, the pilot shall transmit the following information before the take-off:

- Aerodrome identification
- Aircraft registration and type
- Taxi intentions
- Runway to be used
- Intentions/destination

### Pilot

**Varaždin Radio, 9ABCD, Cessna 172, taxiing to holding point, Runway 16 for flight to Čakovec.**





## Airport and airplane identification

Each transmission emitted on uncontrolled aerodrome frequency should begin with aerodrome identification and aircraft registration.

If intending to land at an uncontrolled aerodrome, the pilot should transmit the following at least five minutes prior to entering aerodrome traffic zone:

- Aerodrome identification
- Aircraft registration and type
- Position and altitude
- Intentions

### Pilot

**Varaždin Radio, 9ABCD, Cessna 172, Čakovec city, 1000 ft AGL, inbound Varaždin airfield for landing, will join left-hand downwind, runway 34.**

When flying in traffic pattern at an uncontrolled aerodrome, the position report shall include:

- Aerodrome identification
- Aircraft callsign
- Position in traffic pattern
- Runway to be used

### Pilot

**Varaždin Radio, 9ABCD, left-hand downwind, runway 34.**

Each transmission emitted on uncontrolled aerodrome frequency should begin with aerodrome identification and aircraft registration. Every significant action should be communicated as well, those action being but not limited to: start-up, taxiing, line-up on runway, take-off, airwork, downwind and final of the traffic pattern, airwork at certain position, changing frequency when leaving the ATZ, vacating the runway. When a new aircraft transmits on the frequency for the first time, it is paramount and in the interest of safety to report your position and actions for the new aircraft to be aware of you.

Aircraft type shall be included in transmissions to taxi, take-off and when entering the uncontrolled aerodrome's zone.

When exiting uncontrolled airspace and entering controlled airspace, contact with the appropriate ATC unit must be initiated at least five minutes prior to entry into controlled airspace.

If departing from an uncontrolled aerodrome which is below controlled airspace, contact must be made as soon as possible but in all cases, before entering controlled airspace. If the flight plan was not submitted, the initial contact must include the following information:

- Aircraft callsign and type
- Speed
- Position
- Departure aerodrome, route, destination aerodrome
- Altitude

### Pilot

**Varaždin Radio, 9ABCD, Cessna 172, speed 90 knots, Beletinec, departed Varaždin, routing N1, N2, destination Lučko, 1000 ft AGL.**





## How do you pronounce frequency?

The frequency 118.885 is pronounced as: "one one eight decimal eight eight five".

## 4. Whole Flight Examples

### 4.1. VFR route

The following example is for a flight departing from the controlled aerodrome LDZA which has ATIS, with flight plan, routing is S2, Križevci, Koprivnica, Martijanec through radar-covered airspace, destination uncontrolled aerodrome LDVA.

| ATC                                                                                                                        | Pilot                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                            | <b>Zagreb Tower, 9ABCD.</b>                                                                                                          |
| 9ABCD, Zagreb Tower.                                                                                                       |                                                                                                                                      |
|                                                                                                                            | <b>9ABCD, stand G36, request start-up, information M, for route to Varaždin.</b>                                                     |
| 9ABCD, start-up approved, QNH 1012, information M correct.                                                                 |                                                                                                                                      |
|                                                                                                                            | <b>Start-up approved, QNH 1012, 9ABCD.</b>                                                                                           |
|                                                                                                                            | <b>9ABCD, request taxi.</b>                                                                                                          |
| 9CD, taxi via F and B to holding point runway 04.                                                                          |                                                                                                                                      |
|                                                                                                                            | <b>Taxi via F and B to holding point runway 04, 9CD.</b>                                                                             |
|                                                                                                                            | <b>9CD, request ATC clearance.</b>                                                                                                   |
| 9ABCD, cleared destination Varaždin via flight planned route, 2000 ft, after departure turn right inbound S2, squawk 0013. |                                                                                                                                      |
|                                                                                                                            | <b>Cleared destination Varaždin via flight planned route, 2000 ft, after departure to turn right inbound S2, squawk 0013, 9ABCD.</b> |
| 9CD, report when ready for departure.                                                                                      |                                                                                                                                      |
|                                                                                                                            | <b>9CD, wilco.</b>                                                                                                                   |
|                                                                                                                            | <b>9CD, ready for departure.</b>                                                                                                     |
| 9CD, runway 04, cleared for take-off, wind 060/10.                                                                         |                                                                                                                                      |
|                                                                                                                            | <b>Runway 04, cleared for take-off, 9CD.</b>                                                                                         |
|                                                                                                                            | <b>9CD, S2, 2000 ft.</b>                                                                                                             |
| 9CD, contact Zagreb Radar on 118.885.                                                                                      |                                                                                                                                      |



## VFR route

In uncontrolled airspace, the rule is: see and be seen.

| ATC                                  | Pilot                                                                                                                                   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
|                                      | 118.885, 9CD.                                                                                                                           |
|                                      | Zagreb Radar, 9ABCD.                                                                                                                    |
| 9ABCD, Zagreb Radar.                 |                                                                                                                                         |
|                                      | 9ABCD, 2000 ft, request 4000 ft.                                                                                                        |
| 9CD, identified, climb 4000 ft.      |                                                                                                                                         |
|                                      | Climbing 4000 ft, 9CD.                                                                                                                  |
| 9CD, report Martijanec 1000 ft AGL.  |                                                                                                                                         |
|                                      | 9CD, wilco, 1000 ft AGL.                                                                                                                |
|                                      | 9CD, Martijanec, 1000 ft AGL.                                                                                                           |
| 9CD, monitor Varaždin Radio 118.275. |                                                                                                                                         |
|                                      | 118.275, 9CD.                                                                                                                           |
|                                      | Varaždin Radio, 9ABCD, Cessna 172, Martijanec, descending 1000 ft AGL, inbound Varaždin airfield for overflying the runway and landing. |
|                                      | Varaždin Radio, 9ABCD, overflying the runway.                                                                                           |
|                                      | Varaždin Radio, 9ABCD, joining left-hand downwind runway 34.                                                                            |
|                                      | Varaždin Radio, 9ABCD, final runway 34.                                                                                                 |
|                                      | Varaždin Radio, 9ABCD, runway vacated.                                                                                                  |





## VFR route

When you move from uncontrolled airspace to controlled space (class C or D), you must contact ATC before entering.

The following is an example of a flight departing from the uncontrolled aerodrome LDVC, routing Čakovec, N1, N2, via non-radar covered airspace, destination controlled aerodrome LDZL.

| ATC                                            | Pilot                                                                                                                      |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
|                                                | Čakovec Radio, 9ABCD, main apron, starting-up.                                                                             |
|                                                | Čakovec Radio, 9ABCD, Cessna 172, main apron, taxiing to holding point, runway 21 for VFR flight to Lučko.                 |
|                                                | Čakovec Radio, 9ABCD, Cessna 172, taking off runway 21, after departure will turn right inbound Čakovec city, 1000 ft AGL. |
|                                                | Čakovec Radio, 9ABCD, Čakovec city, 1000 ft AGL, changing to Zagreb Information 135.050.                                   |
|                                                | Zagreb Information, 9ABCD.                                                                                                 |
| 9ABCD, Zagreb Information.                     |                                                                                                                            |
|                                                | 9ABCD, Čakovec, 1000 ft AGL, inbound N1, N1 at 57.                                                                         |
| 9ABCD, roger, QNH 1013.                        |                                                                                                                            |
|                                                | QNH 1013, 9ABCD.                                                                                                           |
|                                                | 9ABCD, N1, 1000 ft AGL, N2 at 09.                                                                                          |
| 9CD, roger.                                    |                                                                                                                            |
|                                                | 9CD, N2, 1000 ft AGL.                                                                                                      |
| 9CD, contact Lučko Tower 118.075.              |                                                                                                                            |
|                                                | 118.075, 9CD.                                                                                                              |
|                                                | Lučko Tower, 9ABCD.                                                                                                        |
| 9ABCD, Lučko Tower.                            |                                                                                                                            |
|                                                | 9ABCD, N2, 1000 ft AGL.                                                                                                    |
| 9ABCD, runway in use 28L, QNH 1014, report P3. |                                                                                                                            |
|                                                | Runway in use 28L, QNH 1014, wilco, 9ABCD.                                                                                 |
|                                                | 9ABCD, P3, 1000 ft AGL.                                                                                                    |
| 9ABCD, join right-hand downwind runway 28L.    |                                                                                                                            |



## Do you know which

## points you must report pattern traffic

Downwind leg  
(e.g. "right downwind leg, course 10D")

Final leg (e.g. "final leg, runway 10R")

Other positions  
(e.g. base leg) are reported only if requested by the ATC.

| ATC                                             | Pilot                                          |
|-------------------------------------------------|------------------------------------------------|
|                                                 | To join right-hand downwind runway 28L, 9ABCD. |
|                                                 | 9ABCD, right-hand downwind runway 28L.         |
| 9ABCD, runway 28L, cleared to land, wind 240/4. |                                                |
|                                                 | Runway 28L, cleared to land, 9ABCD.            |
| 9ABCD, vacate via D, taxi to the apron.         |                                                |
|                                                 | Vacate via D, taxiing to the apron, 9ABCD.     |
|                                                 | 9ABCD, engine shutdown.                        |

## 4.2. Traffic patterns

The following is an example of an airplane performing traffic patterns at a controlled aerodrome.

| ATC                                                                             | Pilot                                                             |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------|
|                                                                                 | Lučko Tower, 9ABCD.                                               |
| 9ABCD, Lučko Tower.                                                             |                                                                   |
|                                                                                 | 9ABCD, main apron, request start-up for traffic patterns.         |
| 9ABCD, start-up approved, QNH 1009.                                             |                                                                   |
|                                                                                 | Start-up approved, QNH 1009, 9ABCD.                               |
|                                                                                 | 9ABCD, Cessna 172, main apron, request taxi for traffic patterns. |
| 9CD, taxi to holding point C, runway 10R.                                       |                                                                   |
|                                                                                 | Taxiing to holding point C, runway 10R, 9CD.                      |
| 9ABCD, right traffic patterns approved, runway 10R, report ready for departure. |                                                                   |
|                                                                                 | Right traffic patterns approved, runway 10R, wilco, 9ABCD.        |
|                                                                                 | 9CD, ready for departure.                                         |
| 9CD, runway 10R, cleared for take-off, wind variable 2 knots.                   |                                                                   |



## Traffic patterns

If the ATC instructs you to maintain your position, be sure to confirm this with the phrase "I maintain my position", so that the control knows that you understood the instruction.

| ATC                                                | Pilot                                                    |
|----------------------------------------------------|----------------------------------------------------------|
|                                                    | Runway 10R, cleared for take-off, 9CD.                   |
|                                                    | 9CD, right-hand downwind, runway 10R, touch-and-go.      |
| 9CD, runway 10R, cleared touch-and-go, wind 120/4. |                                                          |
|                                                    | Runway 10R, cleared touch-and-go, 9CD.                   |
|                                                    | 9CD, right-hand downwind, runway 10R.                    |
| 9CD, report final.                                 |                                                          |
|                                                    | 9CD, wilco.                                              |
|                                                    | 9CD, final, runway 10R.                                  |
| 9CD, runway 10R, cleared to land, wind 080/5.      |                                                          |
|                                                    | Runway 10R, cleared to land, 9CD.                        |
| 9CD, backtrack, vacate via D, taxi to the apron.   |                                                          |
|                                                    | Backtracking, vacating via D, taxiing to the apron, 9CD. |
| 9CD, expedite taxi.                                |                                                          |
|                                                    | Expediting taxi, 9CD.                                    |
| 9CD, hold short of taxiway A.                      |                                                          |
|                                                    | Holding short of taxiway A, 9CD.                         |
| 9CD, continue taxi.                                |                                                          |
|                                                    | Continuing taxi, 9CD.                                    |
|                                                    | 9CD, engine shut down.                                   |



## Airwork

Work in the zone begins and ends with a clear announcement.

### 4.3. Airwork

The following situation describes an airplane performing airwork at an uncontrolled aerodrome.

| Other aircraft                                                         | Pilot                                                                                                           |
|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
|                                                                        | Lučko Radio, 9ABCD, main apron, starting-up.                                                                    |
|                                                                        | Lučko Radio, 9ABCD, Cessna 172, main apron, taxiing to holding point E, runway 28L for airwork in zone Horvati. |
|                                                                        | Lučko Radio, 9ABCD, Cessna 172, taking-off, runway 28L, after departure turning left inbound zone Horvati.      |
| Lučko Radio, 9AXYZ, final 28L.                                         |                                                                                                                 |
|                                                                        | Lučko Radio, 9ABCD, holding position on holding point E.                                                        |
| Lučko Radio, 9AXYZ, runway vacated via D, taxiing to the apron.        |                                                                                                                 |
|                                                                        | Lučko Radio, 9ABCD, Cessna 172, taking-off, runway 28L, after departure will turn left inbound zone Horvati.    |
|                                                                        | Lučko Radio, 9ABCD, commencing airwork in zone Horvati.                                                         |
| Lučko Radio, 9AEFG, L7, 1000 ft AGL, inbound zone Horvati for airwork. |                                                                                                                 |
|                                                                        | Lučko Radio, 9ABCD, zone Horvati.                                                                               |
| Lučko Radio, 9AEFG, inbound zone Samobor for airwork.                  |                                                                                                                 |
|                                                                        | Lučko Radio, 9ABCD, airwork in zone Horvati completed, will join left-hand downwind runway 28L.                 |
|                                                                        | Lučko Radio, 9ABCD, left-hand downwind, runway 28L.                                                             |
|                                                                        | Lučko Radio, 9ABCD, engine failure imitation from left base runway 28L.                                         |
|                                                                        | Lučko Radio, 9ABCD, final 28L.                                                                                  |
|                                                                        | Lučko Radio, 9ABCD, vacating via D, taxiing to the apron.                                                       |
|                                                                        | Lučko Radio, 9ABCD, engine shut down.                                                                           |





## Skydiving flight

Parachute operations in controlled airspace can be conducted day and night in VMC conditions and within appropriate airspace structures.

### 4.4. Skydiving flight

The following situation describes a skydiving flight at an uncontrolled aerodrome.

| ATC                                              | Pilot                                                                                                                |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|                                                  | Lučko Radio, 9ABCD, main apron, starting-up.                                                                         |
|                                                  | Lučko Radio, 9ABCD, Cessna 206, main apron, taxiing to holding point E, runway 28L for parachute drop from FL110.    |
|                                                  | Lučko Radio, 9ABCD, Cessna 206, taking-off, runway 28L, after departure will turn left and climb for parachute drop. |
|                                                  | Lučko Radio, 9ABCD, aerodrome, 2000 ft, contacting Zagreb Radar on 118.885.                                          |
|                                                  | Zagreb Radar, 9ABCD.                                                                                                 |
| 9ABCD, Zagreb Radar.                             |                                                                                                                      |
|                                                  | 9ABCD, 2000 ft, request flight level 110.                                                                            |
| 9ABCD, identified, climb flight level 110.       |                                                                                                                      |
|                                                  | Climbing flight level 110, 9ABCD.                                                                                    |
|                                                  | 9ABCD, five minutes to drop, two canopies.<br><i>*transmitted both on Lučko and Radar*</i>                           |
| 9ABCD, cleared to drop.                          |                                                                                                                      |
|                                                  | Cleared to drop, 9ABCD.                                                                                              |
|                                                  | Lučko Radio, 9ABCD, two minutes to drop, two canopies.                                                               |
|                                                  | Lučko Radio, 9ABCD, entering jump run, two canopies.                                                                 |
|                                                  | Lučko Radio, 9ABCD, two canopies in the air.                                                                         |
|                                                  | 9ABCD, drop completed.                                                                                               |
| 9ABCD, descend to Lučko, report passing 3000 ft. |                                                                                                                      |



## Skydiving flight

When you are sure that all the canopies are on the ground, continue with the planned flight.

| ATC                                 | Pilot                                                                                                                       |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|                                     | Descending to Lučko, wilco 3000 ft, 9ABCD.                                                                                  |
|                                     | 9ABCD, passing 3000 ft.                                                                                                     |
| 9ABCD, monitor Lučko Radio 118.075. |                                                                                                                             |
|                                     | 118.075, 9ABCD.                                                                                                             |
|                                     | Lučko Radio, 9ABCD, Cessna 206, descending south of the airfield, passing 2500 ft, will join left-hand downwind runway 28L. |
|                                     | Lučko Radio, 9ABCD, left-hand downwind runway 28L, orbiting until canopies on ground.                                       |
|                                     | Lučko Radio, 9ABCD, all canopies on the ground, inbound final runway 28L.                                                   |
|                                     | Lučko Radio, 9ABCD, final 28L.                                                                                              |
|                                     | Lučko Radio, 9ABCD, vacating via D, taxiing to the apron.                                                                   |
|                                     | Lučko Radio, 9ABCD, engine shut down.                                                                                       |



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