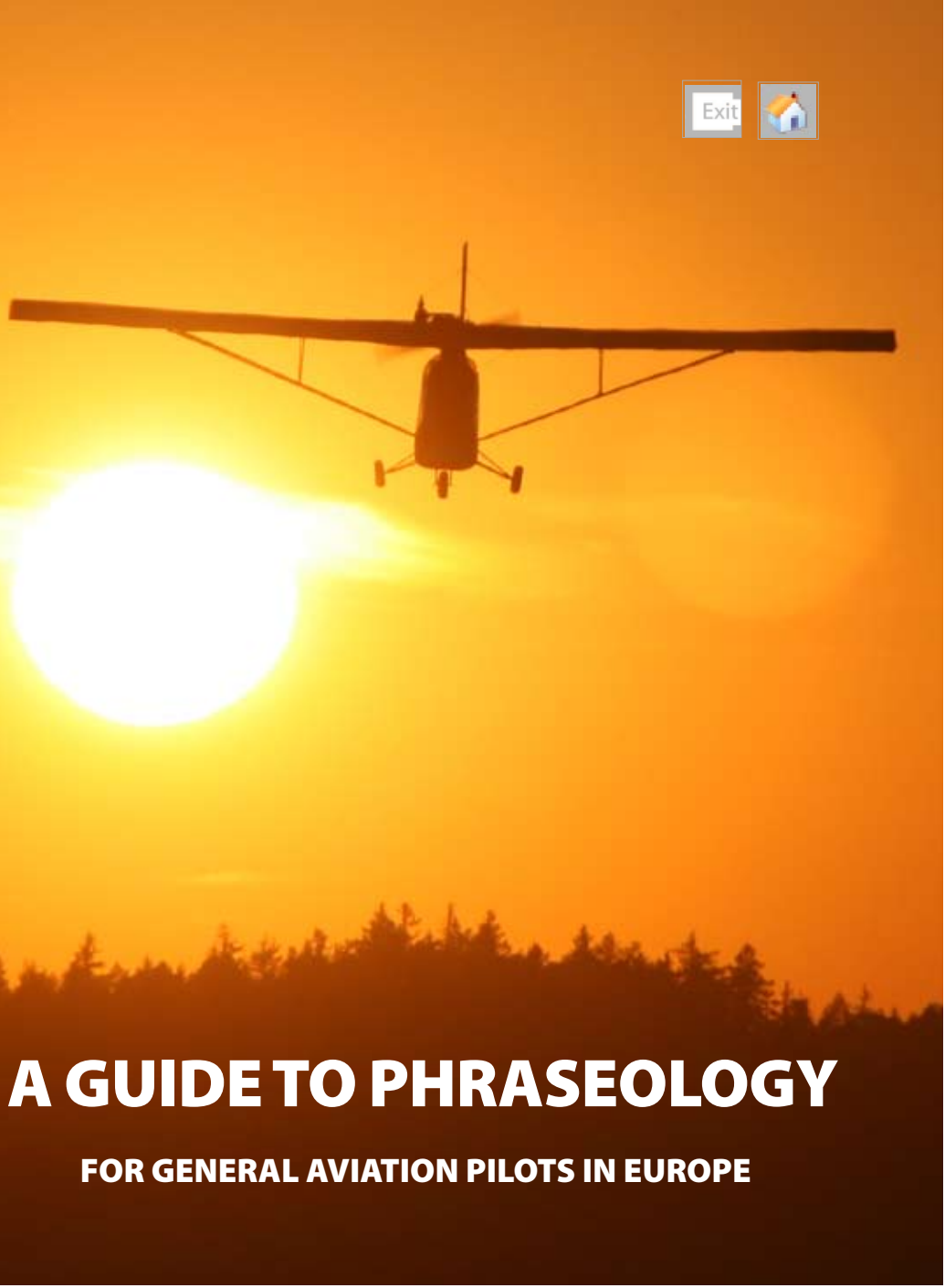

A GUIDE TO PHRASEOLOGY

FOR GENERAL AVIATION PILOTS IN EUROPE

EGAST
Component of ESSI
European General Aviation Safety Team

EUROCONTROL

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A Guide to Phraseology for General Aviation Pilots in Europe

1 Introduction

The priorities for safe flying are 'Aviate, Navigate, then Communicate'. Whilst this is always true, correct standard radiotelephony (RTF) phraseology makes an important contribution to the safe and efficient operation of aircraft. Communication errors and inappropriate use of phraseology continue to feature as contributory factors in safety-related incidents throughout Europe involving General Aviation (GA) aircraft, such as AIRPROXES, runway incursions and airspace infringements.

To conform to International Civil Aviation Organisation (ICAO) Language Proficiency requirements, pilots and others who use radiotelephony communications must have achieved a specified level of proficiency in English. GA pilots come from different backgrounds, and some have difficulty learning or remembering how to use RTF efficiently. This document provides pilots with a guide in English to common phraseology used during GA flights in Europe and explains why certain words and phrases are used. The aim is to improve safety by helping pilots and ground stations communicate clearly.

Phraseology has been developed over time to provide maximum clarity and brevity in communications. However, while standard phraseology is available to cover most routine situations, not everything can be catered for or remembered. Therefore, pilots should be prepared to use simple language when necessary, keeping phrases as clear and concise as possible. Long radio calls with unnecessary information waste time and may endanger others.

This guide incorporates a range of material published by ICAO, Eurocontrol and the UK Civil Aviation Authority. Some States may specify national differences from the ICAO standard phraseology in the individual State's Aeronautical Information Publication (AIP). Pilots should consult the appropriate AIP(s) when planning international flights.

Common Abbreviations

A number of common abbreviations are used in this Guide. Those marked in the following list with an asterisk are normally spoken as a complete word, e.g 'Ay-tiss'. The remainder are normally spoken using their constituent letters rather than the spelling alphabet, e.g. 'Vee-dee-eff'.

Commonly used Abbreviations

ACAS*	Airborne collision avoidance system
AFIS	Aerodrome flight information service
AFISO	Aerodrome flight information service officer
AIP	Aeronautical information publication
AMSL	Above mean sea level
ATC	Air traffic control
ATIS*	Automatic terminal information service
ATS	Air traffic service
ATZ	Aerodrome traffic zone
FIS	Flight information service
IMC	Instrument meteorological conditions
POB	Persons on board
PTT	Press to transmit
QDM	Magnetic heading (assuming no wind) to a VDF station
QDR	Magnetic bearing of aircraft from a VDF station
QFE	Atmospheric pressure at aerodrome level (or runway threshold)
QNH	Altimeter subscale setting to indicate elevation (AMSL) when on the ground and altitude when in the air
QTE	True bearing
RTF	Radiotelephony
RVR	Runway visual range
SSR	Secondary surveillance radar
VDF	Very high frequency direction finding
VHF	Very high frequency (30 to 300 MHz)
VFR	Visual flight rules
VOLMET*	Meteorological information for aircraft in flight

2 Good Radiotelephony Practice

Before you transmit

Make sure that the volume and squelch controls on the radio are correctly set. The best way to do this is to wait for and listen to another station transmitting on the frequency – ideally the station you are going to call.

Ensure that the intercom, if fitted, does not drown out radio calls. Make sure that any headset volume controls are also correctly set and that the microphone boom stays in its set position.

Before starting a flight ensure that you can hear others' transmissions and they can hear you. You should also check that you know how to change frequencies and that the frequency selected is the one you want to use first.

Many frequencies are very busy, so after changing frequency wait and listen before transmitting. Do not interrupt other transmissions and allow time for any necessary reply from someone else.

Think about what you are going to say before you transmit. When time and other circumstances permit, try to say the message just to yourself before you press the transmit button. This is also known as the press to transmit (PTT).

Depress the transmit button fully before you start to talk. This avoids 'clipping' transmissions and the possible loss of important information.

When you transmit

Use a normal conversational tone and speak clearly and distinctly. Do not talk too fast and maintain an even rate of speech – not more than 100 words per minute. Remember the recipient may be writing down parts of the message.

Keep the microphone close to your lips but not touching them. Do not hold the boom of a combined headset/microphone system, as this can distort speech. If using a hand-held microphone do not turn your head away from it while speaking.

Many transmissions contain numbers. A short pause before and after numbers makes them easier for the other person to understand.

Avoid hesitation sounds such as 'umm' and 'er'. Release the transmit button if you need time to think – a controller will normally ask for anything you may have missed.

When transmitting a long message, it is helpful to interrupt your transmission from time to time to confirm that the frequency is clear and allow the recipient to request a repeat of any parts not received.

Use standard phraseology where possible and avoid unnecessary RTF. However plain language is always better than silence or incorrect and potentially confusing phraseology.

After you transmit

Do not release the transmit button until after you have finished speaking.

A jammed frequency is potentially dangerous. Ensure that you release the transmit button after each transmission. Make sure that a handheld radio or microphone is never placed where the transmit button is pressed in, as this will jam the frequency and no one else will be heard if they transmit. Most radios show a symbol on the display (e.g. TX) when transmitting.

After making a transmission, wait at least 10 seconds before attempting a second call. This will allow the other person time to reply to your first call and helps avoid unnecessary transmissions.

If there is no response to your transmission, check your volume level – for example you might have been briefing your passengers and turned it down. Alternatively increase the squelch (SQ) until you hear the noise and adjust the volume to the expected level.

Always read back any instructions you are given and include your callsign after the information. It is normally best to read back the items in the order given, but there are some exceptions to this. It may help to note down instructions. For more details see the list of messages to be read back on page 10 of this guide.

If you do not understand the instructions you are given, ask for clarification. Never guess what you are being told to do.

Listening

Listen carefully to make sure you understand what is said to you - it is easy to hear what you expect, rather than what is actually said.

At all times listen for your callsign and any new instructions or information. As the situation changes you may be given different instructions or new information.

Transmissions from other pilots also contain valuable information about their intentions that can help you maintain awareness of the other traffic around you. Listening out is a useful addition to look-out, particularly in the aerodrome circuit.

Check your radio, especially the position of the transmit button, if there seems a long break in activity on the frequency.

3 General Phraseology

Aircraft Callsigns

Pilots either use their aircraft registration, e.g. 'F-ABCD', or for many commercial aircraft a company callsign followed by a number, letters or both, e.g. 'Blue Skies 347A'. Aircraft registered in some countries may use a registration consisting of numbers or letters and numbers.

Aircraft Callsign Prefixes

Where the additional information may help the controller or other pilots, the name of the aircraft manufacturer or name of the aircraft model may be used as a prefix to the registration, e.g. 'Cessna F-DCBA' or 'Harvard G-ABCD'. This may be especially useful if the aircraft has particular operational characteristics. However you must not change your type of callsign during a flight, unless you are instructed to do so by an air traffic control unit, usually because an aircraft with a similar callsign is on the same frequency.

Broadcast Calls

Broadcast calls to aircraft operating on a frequency normally start with 'All stations'. However, when operating at an unattended aerodrome, your transmissions should start with the aerodrome's name as shown on pages 43 and 44. Including the aerodrome name helps other pilots understand where you are.

Ground Station Callsigns

Ground stations are identified by the name of the location followed by a word (suffix) indicating the type of unit or the service provided. This will normally be either air traffic control or flight information service. You must be familiar with the differences between the services that may be offered and what your own actions should be. Examples of ground station callsigns follow.

Once satisfactory communication has been established and provided that it will not be confusing, the name of the location or the callsign suffix may be omitted, e.g. 'Tower' or 'Borton'.

Unit or service	Callsign Suffix	Instructions or information
Air Traffic Control (ATC) unit at an aerodrome	"GROUND' 'TOWER' 'APPROACH' 'ARRIVAL' 'DEPARTURE' 'DELIVERY'	ATC service is provided to prevent collisions between aircraft and on the manoeuvring area between aircraft and obstructions. You should comply with ATC instructions unless you advise the controller that you are unable to do so. At busy aerodromes separate controllers may use different callsigns for different tasks as shown
Radar unit (ATC)	'RADAR'	Radar unit in general
Area control centre (ATC)	'CONTROL'	Area control centre
Aerodrome Flight Information Service (AFIS)	'INFORMATION'	AFIS provides pilots with information useful for the safe and efficient conduct of aerodrome traffic. An AFISO may relay ATC clearances issued by a controller.
Flight Information Service (FIS)	"INFORMATION'	FIS provides pilots with information useful for the safe and efficient conduct of flight. A FISO may relay ATC clearances issued by a controller.
Aeronautical Station	'RADIO'	Aeronautical station in general

Read back

Reading back a clearance and any safety critical information helps both the pilot and the controller understand what the aircraft has been instructed to do. It also serves as a check that the right aircraft, and only that aircraft, will take action on the clearance. It may help to note down the clearance prior to read back and ask any other pilots (or an educated passenger) in the aircraft to listen to all clearances, including taxi clearance. If in any doubt you must request clarification.

Items to be Read back

Messages containing the following must be read back:

- ATC route clearance
- Clearances/instructions to enter, land on, take-off from, hold short of, cross or backtrack any runway
- Runway in use
- Altimeter settings
- SSR codes
- Level or heading instructions
- Speed instructions
- Transition levels

When a read back is required you must ensure it is complete and follow it with your callsign. It is normally best to read back the items in the order given, as this makes it easier for the controller to check the accuracy and identify any missing items. However, there are some exceptions to this, e.g. if departure instructions are transmitted together with a take-off clearance, it may be more logical to read back the take-off clearance first, followed by the departure instructions.

Use of 'Wilco'

'Wilco' means 'I understand your message and will comply'. It should not be used in place of a full read back of the items on page 10. It may be used for brevity, or where readback of an instruction or part of an instruction might be confused with a transmission advising completion of the action instructed.

Acknowledgement by Callsign

If a transmission contains information that does not need to be read back, you should acknowledge by transmitting your callsign. You may also transmit your callsign together with the word 'roger', which means 'I have received all your last transmission'.

Conditional Clearances

A conditional clearance allows a pilot to carry out an action only after another action has taken place. Conditional clearances speed up traffic flow, but you must follow the instructions carefully and make sure you have identified the correct aircraft or vehicle on which the clearance is based. Where there might be ambiguity as to the subject of the condition the controller will give additional details such as aircraft type, colour or position in order to help you identify the correct aircraft or vehicle. The structure and order of conditional clearances is essential to their safe execution, but if in doubt, you should hold position and ask for clarification.

Conditional clearances consist of:

- Aircraft callsign
- Condition
- Clearance
- Brief reiteration of the condition

Correct and full read back of a conditional clearance is vital. The condition must be the first item read back so that the controller is aware that you have heard the condition on which the clearance is based.

RTF **Conditional Clearance**

F-CD, behind the landing PA 28 line up behind

Behind the PA 28, lining up behind, F-CD

▶ Play

Transmission of Numbers

For clarity and brevity, numbers used in the transmission of altitude, cloud height, visibility and runway visual range (RVR) information are transmitted as shown below.

Altitude	*Transmitted as*
800	**Eight hundred**
3 400	**Three thousand four hundred**
12 000	**One two thousand**
Cloud height	*Transmitted as*
2 200	**Two thousand two hundred**
4 300	**Four thousand three hundred**
Visibility	*Transmitted as*
1 000	Visibility **one thousand**
700	Visibility **seven hundred**
Runway Visual Range	*Transmitted as*
600	RVR **six hundred**
1 700	RVR **one thousand seven hundred**

Other numbers are transmitted by pronouncing each digit separately, e.g. 'Blue Skies two four seven', 'runway three two', 'heading zero eight zero', 'flight level six zero', 'QNH one zero one zero' and 'squawk four two one three'.

Pronunciation of Numbers

To reduce the possibility of numbers being misheard, the number '9' is transmitted as 'niner' in RTF phraseology.

Omitting Words from Transmissions

The following words may be omitted from transmissions as described below provided that no confusion will result. However, adding the word 'degrees' to any heading ending in zero reduces the risk of headings being confused with flight levels.

'Surface' in relation to surface wind direction and speed

'Degrees' in relation to radar headings

'Visibility', 'cloud' and 'height' in meteorological reports

'Hectopascals' when giving pressure settings

VHF Frequencies - Use of Six Digits

To prevent confusion, you should transmit all 6 digits of a VHF frequency except where the final two digits of the frequency are both zero in which case only the first four digits need to be transmitted, e.g. 'One two three decimal six'. The word 'decimal' indicates the position of the decimal point.

4 Departure Phraseology

Aerodrome with ATC

This section provides examples of the RTF typically used by a pilot departing from a controlled aerodrome. Make sure you know what kind of service is provided at each aerodrome. Even if the aerodrome has a control tower building, you may not be calling during its hours of operation and an ATC service may not be available.

Establishing Communication

To reduce the possibility of confusion, you must use the full callsigns of both stations in your initial call, first saying whom you are calling then who you are.

Continuing Communication

Once satisfactory communication has been established the ground station may abbreviate callsigns, e.g. 'F-CD' or 'Cessna CD'. To reduce the possibility of confusion with other aircraft on frequency, do not shorten the callsign of your aircraft until after the ground station has shortened it. Only a ground station can shorten your callsign.

Test Transmissions

When testing a radio you should follow the format shown in the example on page 16. The format is designed to identify the frequency used and allow the receiving station time to assess the transmission quality. Using the readability scale, '5' means perfectly readable. At the other end of the scale, '1' means unreadable.

Automatic Terminal Information Service (ATIS)

At aerodromes where departure information is broadcast on an ATIS, the request for departure information is omitted. When requested to do so on the ATIS broadcast you should acknowledge receipt of the ATIS information by including the ATIS identifying letter in your request for taxi.

RTF Start Up and Taxi

✈	Borton Tower, F-ABCD, radio check 118.725
🏢	F-ABCD, Borton Tower, reading you 5
✈	F-ABCD, request departure information
🏢	F-CD, runway 24, wind 220 degrees 6 knots, QNH 990, temperature 2 dewpoint minus 1
✈	Runway 24, QNH 990, F-CD
✈	F-CD, C172 at the south side hangars, request taxi VFR to Walden, 2 POB*
🏢	F-CD, taxi to holding point G1 runway 24, QNH 990
✈	Taxi holding point G1 runway 24, QNH 990, F-CD

▶ Play

** POB (total persons on board and pronounced 'pee- oh-bee') may be included, e.g. where a flight plan is not required and has not been filed*

Placing of Callsigns

Once satisfactory communication has been established, a message is normally prefixed with the aircraft callsign. However, when you need to read back an instruction or important information the instruction or information is repeated first followed by the aircraft callsign. This makes it easier for the controller to check that you have received all of the instruction or information correctly.

Clarification of Instructions

If you do not fully understand the instructions given, or they are inconsistent with your request, you must ask that they are repeated or clarified. The phrase 'say again' means repeat the entire message.

Taxi Clearance

All taxi clearances contain a clearance limit, which is the point at which you must stop unless further permission to proceed is given. A taxi clearance in any case is not a clearance to enter the runway or take-off. Sometimes the controller may use the additional phrase 'hold short' to emphasise a clearance limit or where no defined point, e.g. holding point, exists. Omission of the phrase 'hold short' does not mean you have clearance to enter the runway. Taxi clearances can be complicated. Noting them down whenever possible helps to prevent runway incursions.

Clearance for Take-off or Landing

In relation to runway movements, and to avoid confusion, the word 'cleared' is only used in connection with a clearance to take-off or land. For other RTF exchanges, words such as 'cross', 'departure' and 'approved' should be used.

After Departure

For the same reason, the words 'take-off' are only used when an aircraft is cleared for take-off, or when cancelling a take-off clearance. At other times you should use the terms 'departure' and 'airborne'.

'After departure' is not a clearance to take-off – do not assume you are cleared to take-off and depart. The expression 'after departure' is used when issuing or reading back departure instructions or route clearances.

Hold Position

If there is conflicting traffic, the controller may instruct you to 'hold position'. You should always acknowledge an instruction to hold and you must not proceed until the controller calls back with permission. Revised clearances and post-departure instructions may also be prefixed with an instruction from the controller to 'hold position', as shown below.

RTF Take-off

F-CD, ready for departure, request right turn when airborne
F-CD, hold position. After departure right turn approved climb not above 1500 feet until the control zone boundary
Holding. After departure right turn approved, not above 1500 feet until the control zone boundary, F-CD
F-CD, wind 220 degrees 4 knots, runway 24 cleared for take-off
Runway 24 cleared for take-off, F-CD

▶ Play

Unsure of Position

If you are unsure of the position of your aircraft on the aerodrome, you should stop the aircraft and advise the controller, including your last known position. If however you are on a runway you should advise the controller and vacate the runway before stopping.

Changing Frequency

You will normally be advised by the ground station to change from one radio frequency to another in accordance with agreed procedures. In the absence of such advice, you must notify the ground station before changing frequency, using the expression 'changing to' followed by the name of the next air traffic service unit. However in controlled airspace you must get permission from the controlling authority before changing frequency.

RTF Climb Out

F-CD, contact Borton Approach 118.750
118.750, F-CD
Borton Approach, F-ABCD, airborne turning right, climbing to 1200 feet
F-CD, Borton Approach, report control zone boundary
Wilco, F-CD
F-CD, passing the control zone boundary, 1200 feet
F-CD, contact Montana Information 125.250
Montana Information, 125.250, F-CD

▶ Play

Aerodrome with AFIS

This section provides examples of the RTF typically used by a pilot departing from an aerodrome with an AFISO on duty. An AFISO provides information useful for the safe and efficient conduct of aerodrome traffic. AFIS is not air traffic control and as a pilot using the service it is your responsibility to maintain proper spacing in compliance with the Rules of the Air.

Position Reports

An AFISO may request pilots to report at a specified position, as shown in the following exchange. These are requests, not instructions, but it is expected that pilots will comply in order to help improve the situational awareness of the AFISO and pilots of other aircraft. For safety reasons pilots should always report 'final'.

Circuit Direction

The visual circuit direction may be a left hand or a right hand pattern. When planning a flight always check the circuit directions at your destination aerodrome. If you are going to fly a right hand pattern you must include this in your transmissions, as shown in the examples on pages 21 and 37 to 39. You need not specify a left hand pattern, although it is advisable to do so if you are at an aerodrome where the circuit direction is variable and there has been a recent change. If there is any possibility of confusion, you should include the circuit direction.

Parallel Runways

Some aerodromes have parallel runways. These have the same numerical designator but they are distinguished by adding the word 'left' or 'right' after the number, e.g. 'Runway 27 left' and 'Runway 27 right'. At aerodromes with parallel runways you should take extra care and ensure you use the correct runway.

RTF Start Up, Taxi and Take-off

	Walden Information, D-ABCD, radio check 119.725
	D-ABCD, Walden Information, reading you 5
	Walden Information, D-ABCD, request departure information
	D-CD, runway 06 right hand circuit, wind 060 degrees 10 knots, QNH 1002
	Runway 06 right hand circuit, QNH1002, D-CD
	D-CD, ready to taxi at the pumps, VFR local flight
	D-CD, taxiway Charlie available to holding point C1 runway 06 right hand circuit
	Will taxi via taxiway Charlie to holding point C1 runway 06 right hand circuit, D-CD

▶ Play

	D-CD, ready for departure
	D-CD, no reported traffic, runway 06 right hand circuit free for departure, wind 090 degrees 8 knots, report airborne
	Runway 06 right hand circuit free for departure, wilco, D-CD
	D-CD, airborne departing to the west
	D-CD, roger, report passing Westfield
	Report passing Westfield, D-CD
	D-CD, passing Westfield, changing to Arcoville Information

▶ Play

5 Aerodrome Phraseology for Helicopters

Helicopter Operations

Subject to the appropriate permission, helicopters may be able to land on or take-off from areas of the aerodrome other than the runway. Therefore it is important that you make clear in your transmissions which area of the aerodrome you intend to use. This helps improve the situational awareness of the controller and other pilots.

Similarly, if you intend to air taxi you should include the term 'air taxi' in your taxi request.

Operating at Aerodromes with ATC

The remainder of this section shows examples of phraseology for use by helicopter pilots at an aerodrome with ATC.

Helicopter Take-off

You should use the phraseology in the example below when you intend to take-off from the runway. Where take-off is to be from another point on the manoeuvring area, e.g. a designated helicopter landing area, you should specify the area by transmitting for example, 'F-HELI, Area Whiskey ready for departure' and the controller will preface the take-off clearance with the words 'Area Whiskey'.

RTF Helicopter Taxi and Take-off from the Runway

	Borton Tower, F-HELI, request air-taxiing from fuel station to holding point Runway 06
	F-HELI, Borton Tower, air-taxi direct to holding point H1 runway 06, avoid PA28 on taxiway Bravo
	Air-taxi direct to holding point H1 runway 06, traffic in sight, F-HELI
	F-HELI, ready for departure
	F-LI, wind 070 degrees 15 knots, runway 06 cleared for take-off
	Runway 06 cleared for take-off, F-LI

▶ Play

Helicopter Landing

When you intend to land on the runway, you should include the runway designator in your transmissions and use the phraseology 'F-LI, final runway 06'.

When you intend to land at another point on the manoeuvring area you should include the name of the area, e.g. 'F-LI, final Area Whiskey'.

6 Cross Country Flight Phraseology

Initial Call

When establishing contact your initial call should consist of your callsign and that of the unit you are calling. Normally the ground station will reply with your callsign followed by its own. You should then reply with the necessary information to advise the ground station of your position, intentions and service required.

To make it easier for the recipient who will be expecting the information in a standard format you should reply with the information in the order shown below:

- Aircraft callsign and type
- Flight rules, and departure and destination aerodromes
- Position
- Flight level or altitude, including passing level and cleared level if not in level flight
- Additional details, e.g. next way point with time, subsequent planned route

RTF **Initial Call**

✈	Arcoville Information, F-ABCD
🎤	F-ABCD, Arcoville Information
✈	F-ABCD, C172 VFR from Walden to Borton, 15 miles south of Eastville, 2500 feet, Seatown 55, Eastwick 06, Weston 19

▶ Play

Identification by Squawk

Using your transponder helps the controller and the pilots of other aircraft that are fitted with airborne collision avoidance system (ACAS). If you have a transponder, you should select and transmit the conspicuity code 7000 with Mode C (altitude reporting) unless another code is appropriate or the controller instructs you otherwise, as shown in the example below. Occasionally, controllers may give you vectors to help establish the identification of your aircraft.

RTF **Squawking**

✈	Montana Control, F-ABCD
🎤	F-ABCD, Montana Control
✈	F-ABCD, C172 VFR from Walden to Borton, 2 miles north of Wicken, flight level 50, Seatown 08, Weston 22
🎤	F-CD, squawk 2433
✈	Squawk 2433, F-CD
🎤	F-CD, identified 2 miles north of Wicken. Next report at Seatown
✈	Wilco, F-CD

▶ Play

Avoiding Action

When a controller at a radar unit considers that an imminent risk of collision will exist if action is not taken immediately, the controller will provide avoiding action in the form of radar vectors as shown in the examples below. Information on conflicting traffic is given in the form of relative bearing of the conflicting traffic in terms of the 12 hour clock, your distance from the conflicting traffic, the direction of flight of the conflicting traffic followed by any other pertinent information where known, such as its general speed, aircraft type and level and whether climbing or descending.

RTF Avoiding Action

F-CD, turn left immediately heading 340 to avoid unidentified traffic one o'clock 5 miles opposite direction slow moving

Left heading 340, F-CD

F-CD, turn right 40 degrees immediately, to avoid unidentified traffic one o'clock 5 miles opposite direction, fast moving

Right 40 degrees, F-CD

▶ Play

Use of Immediately

The word 'immediately' is only used in RTF transmissions when immediate action is required for safety reasons.

Traffic Information

Controllers also provide traffic information on other aircraft in your vicinity to assist with your situational awareness in circumstances where immediate action is not necessary. The phrase 'looking out' acknowledges the traffic information and tells the controller that you are looking for the other traffic. The controller may ask if you need radar vectors, as shown below. When you have located the other traffic you should advise the controller by transmitting 'traffic in sight'. If you cannot locate the other traffic you should advise the controller using the phrase 'negative contact'. You can request radar vectors by transmitting 'negative contact, request vectors'.

RTF Traffic Information

D-CD, traffic 2 o'clock 5 miles northbound, Cherokee at 2000 feet

Looking out, D-CD

D-CD, do you want vectors?

D-CD, negative vectors, traffic in sight

D-CD

▶ Play

VFR Position Reports

Position reports provide valuable situational awareness information for the controller and other pilots. In order to help the controller and other pilots on the frequency you should provide the following elements in the standard order.

- Aircraft callsign
- Position
- Flight level or altitude including passing level and cleared level if not in level flight

RTF VFR Position Reports

D-CD, overhead Wicken, leaving 2500 feet climbing to flight level 50

▶ Play

Transmission of time

When transmitting time only the minutes of the hour are normally required and each digit is pronounced separately. However the hour should be included where any possibility of confusion is likely to arise.

Activating Flight Plans

As the aircraft pilot you are responsible for filing a flight plan in specified circumstances. In addition you are responsible for activating and closing the flight plan in the following circumstances:

- Departure is from an aerodrome with an air traffic service unit, but the flight is outside their normal hours of operation
- Departure is from an aerodrome without an air traffic service unit
- Departure is from a private air strip

Having filed the flight plan on-line, by fax or telephone, you need to activate it once airborne. This can be done by a responsible person telephoning the flight briefing unit at the appropriate parent air traffic service unit as soon as you are airborne and passing a departure time. Alternatively, you may ask an air traffic service unit to activate the flight plan for you.

RTF Activating a Flight Plan (assumes communication already established)

D-CD, request activate flight plan. D-ABCD departed Borton for Seaville at 38

D-CD, departure time 38, flight plan activated

▶ Play

Closing a Flight Plan

If you are landing at an aerodrome in another country, or at an aerodrome which was not your planned destination, you must close the flight plan to avoid unnecessary search and rescue activity. Even if you land at an aerodrome with an ATS unit, it is wise to confirm they have closed your flight plan. You may do this by radio just before landing (as shown below) or by telephone after landing.

RTF Closing a Flight Plan

D-CD, request close flight plan. D-ABCD arrived Borton at 30, original destination Seaville

D-CD, arrival time 30, flight plan closed

▶ Play

Changing from IFR to VFR Flight

During a flight a pilot may change from IFR to VFR flight.

RTF Changing from IFR to VFR

Montana, F-CD, request cancel my IFR flight, proceeding VFR estimating Borton at 1701

F-CD, IFR flight cancelled at 35, contact Montana Information 125.750

▶ Play

If the controller has any meteorological information which suggests that flight under VFR may not be possible, the controller will transmit this. You may then choose to continue IFR.

Requesting Weather Information

Useful weather information in the form of reports, forecasts or warnings is provided either by broadcast systems, e.g. ATIS, VOLMET, or by specific transmissions from ground stations as shown below.

RTF Weather Request

Walden Approach, F-ABCD, request Walden weather

F-CD, Walden Approach, present weather wind 360 degrees 5 knots, visibility 20 kilometres, few 2500 feet, QNH 1008

QNH 1008, F-CD

▶ Play

Weather Avoidance

Weather does not always do what the forecasts predict and it can deteriorate very fast. For a VFR pilot, it is important to recognise cloud ahead early enough to avoid it. If you are receiving an air traffic control service you should advise the controller of the situation and request an alternative level or route.

Your first priority as always is to fly the aircraft.

RTF Unable to Maintain VMC

F-CD, unable maintain VMC due cloud over Seaville, request turn left to Littletown

▶ Play

Navigational Assistance: Lost

Immediately that you suspect that you are lost make a note of the time and, if you are in touch with an ATC unit, request assistance. If you are also short of fuel, or are experiencing other additional problems, you should declare a PAN as described on the back cover of this guide. However, an early call for assistance will often prevent the situation becoming more serious.

RTF **Lost**

Approach, D-CD, 2000 feet heading 190 degrees, unsure of my position, request heading to Walden

D-CD, Approach, fly heading 160 degrees, your position 6 miles north of Walden

Heading 160 degrees, D-CD

▶ Play

Navigational Assistance: Very High Frequency Direction Finding (VDF)

A VDF station can provide you with various types of navigational information on request. These include the magnetic heading to steer (assuming no wind) to reach the VDF station (QDM), the magnetic bearing of the aircraft from the VDF station (QDR) and the true bearing of the aircraft from the VDF station (QTE).

When requesting a bearing you should end the transmission by repeating your callsign. This lengthens the transmission and helps to confirm that the correct information is given to the correct aircraft. If the transmission has been too short for the VDF station to obtain a bearing, you may be asked to transmit again and given specific instructions about the length of the transmission, e.g. you may be asked to transmit for bearing or give a short count.

The accuracy of the bearing is classified as follows:

Class A – accurate within plus or minus 2 degrees;
Class B – accurate within plus or minus 5 degrees;
Class C – accurate within plus or minus 10 degrees;
Class D – accuracy less than Class C.

RTF **Requesting VDF**

Borton Approach, D-ABCD, request QDM (or QDR), D-ABCD

D-ABCD, Borton Approach, QDM (or QDR) 090 degrees, class Bravo

Class Bravo 090 degrees, D-ABCD

▶ Play

Crossing Controlled Airspace

If you are planning to fly through controlled airspace, you will need to obtain clearance to enter it, and will need to follow ATC instructions. You must make the initial call in good time (normally at least 5 minutes) and as part of your request you should advise the controller where you plan to enter the airspace and at what time. To make this easier you should work these out as part of your pre-flight planning.

RTF Requesting Crossing Clearance

✈	Seaville Radar, F-ABCD
🗼	F-ABCD, Seaville Radar
✈	F-ABCD C172, VFR from Walden to Borton, 15 miles south of Eastville,1500 feet. Seatown 25. Request cross Seaville Zone from Seatown to Eastwick
🗼	F-CD, squawk 3651
✈	Squawk 3651, F-CD
🗼	F-CD, enter Seaville Zone, via Seatown, route to Eastwick VFR, not below 2000 feet QNH 1007
✈	Enter Seaville Zone, via Seatown, route to Eastwick VFR, not below 2000 feet QNH 1007, F-CD

▶ Play

Unable to Comply with Clearance

If the clearance is different from your intended route or altitude, make sure you can follow it safely. If you cannot do so, you must advise the controller and explain why. Depending on circumstances, it may be possible for the controller to amend the clearance or you may have to hold or route round.

RTF Unable to Comply with Clearance

✈	F-CD, unable comply due cloud at 2000 feet, request 1500 feet

▶ Play

7 Arrival Phraseology

Aerodrome with ATC

This section provides examples of the RTF typically used by a pilot arriving at a controlled aerodrome. The examples in this section are for a right hand circuit and show the pilot carrying out a normal visual circuit and landing.

Arrival and Radio Failure Procedures

Not all aerodromes have the same radio failure procedures. If your destination aerodrome publishes radio failure procedures, you should make yourself familiar with these when planning the flight and expect to follow them unless ATC instruct otherwise. Details of individual aerodromes and heliports can be found in each State's AIP.

Receipt of ATIS Broadcast

If an ATIS is provided, you should listen early, write down the details and acknowledge receipt of the broadcast in the initial call, as shown in the following example. If the aerodrome does not have ATIS, the controller will transmit the aerodrome information which you should read back in the usual way.

Timing of Initial Call

You should make your initial call in sufficient time (normally at least 5 minutes is required) to allow a planned entry into the circuit, and where applicable the Aerodrome Traffic Zone (ATZ), or controlled airspace. You must also take account of other traffic in the vicinity. All clearances contain a clearance limit, which is the point that you must not pass unless further permission to proceed is given.

RTF Inbound for Join

✈	Borton Approach, F-ABCD
🗼	F-ABCD, Borton Approach
✈	F-ABCD, Seneca VFR from Walden, 2500 feet, 8 miles west of the control zone boundary, for landing at Borton, Information Golf
🗼	F-CD enter Borton Control Zone proceed to Borton VFR, runway 34 right hand circuit, QNH 1012, traffic southbound Cherokee 2000 feet VFR
✈	Enter Borton Control Zone, cleared to Borton VFR, runway 34 right hand circuit QNH 1012, traffic in sight, F-CD
🗼	F-CD, report aerodrome in sight
✈	Wilco, F-CD
✈	F-CD, aerodrome in sight
🗼	F-CD, contact Borton Tower 118.7
✈	Borton Tower 118.7, F-CD

▶ Play

RTF Joining the Circuit

✈	Borton Tower, F-ABCD
🏢	F-ABCD, Borton Tower
✈	F-ABCD, 5 miles north of Borton 2000 feet for landing.
🏢	F-CD, proceed via overhead to join right hand downwind runway 34, QNH 1012
✈	Proceed via overhead to join right hand downwind runway 34, QNH 1012, F-CD
✈	F-CD, overhead 1500 feet
🏢	F-CD, report descending
✈	F-CD
✈	F-CD, descending
🏢	F-CD, report right hand downwind runway 34
✈	F-CD

▶ Play

Calls in the Circuit

It is particularly important that RTF calls when joining and flying in the visual circuit are made in the correct positions. A diagram showing the visual circuit and the positions at which you should make your calls is on the back inside cover of this leaflet.

Circuit and Landing

Having joined the circuit you should make reports as required by local procedures. If you are planning to make a touch and go or low approach and go-around, it is useful to advise the controller as part of the downwind call, e.g. 'F-CD, downwind touch and go'. This helps the controller and other pilots plan ahead. If you do not state your intentions, the controller will assume that you intend to land, as shown in the example.

The runway designator is not normally included with a position call, but if there is any possibility of confusion, e.g. more than one runway is in use or there has been a recent runway change, you should include the designator.

RTF Circuit and Landing

✈	F-CD, right hand downwind
🏢	F-CD, number 2, follow Cherokee on right base
✈	Number 2, traffic in sight, F-CD
✈	F-CD, right base
🏢	F-CD, report final
✈	F-CD
✈	F-CD, final
🏢	F-CD, continue approach, vehicle crossing
✈	Continue approach, F-CD
🏢	F-CD, runway 34 cleared to land, wind 310 degrees 7 knots
✈	Runway 34, cleared to land, F-CD

▶ Play

Continue Approach

'Continue approach' is not a clearance to land. If the runway is obstructed when you report final, but it is expected to be available in good time for you to make a safe landing, the controller will delay landing clearance by issuing the instruction to continue your approach.

If you are following another aircraft, and the runway is expected to be available within a few seconds, the controller may change the word order and transmit the surface wind followed by your landing clearance.

RTF Vacating the Runway

F-CD, taxi to the end, report runway vacated

Taxi to the end, wilco, F-CD

F-CD, runway vacated

F-CD, taxi to the flying club via taxiway Kilo

Taxi to the flying club via taxiway Kilo, F-CD

▶ Play

Vacating the Runway

To avoid confusion with clearances to land or take-off, you should use the expression 'vacated' when taxiing off the runway.

The runway is vacated when the whole aircraft is beyond the relevant runway holding position. Make sure you understand the taxiway markings and do not stop before the runway holding point.

Go Around Initiated by ATC

In order to avert an unsafe situation, a controller may instruct you to carry out a 'go around' using the phraseology shown below. If time permits it, the controller may add the reason for the instruction. You should read back the instruction and, if operating under VFR, you should continue into the normal traffic circuit, unless instructed otherwise.

RTF Go around initiated by ATC

F-CD, go around, aircraft on the runway

Going around, F-CD

▶ Play

Go Around Initiated by the Pilot

In the event that you need to initiate a go-round for any reason, you should use the phrase 'going around' to advise the controller and other pilots in the circuit.

RTF Go around Initiated by the Pilot

F-CD, going around

F-CD, roger, report downwind runway 05

Wilco, F-CD

▶ Play

Aerodrome with AFISO on Duty

This section provides examples of the RTF typically used by a pilot arriving at an aerodrome with an AFISO on duty. The examples in this section show the pilot carrying out a left base join and landing.

Joining Information

An AFISO will provide joining information, not instructions, and you should position your aircraft accordingly.

RTF Left Base Join and Landing

✈	Walden Information, D-ABCD
🎙	D-ABCD, Walden Information
✈	D-ABCD, C152 over Seatown, 1800 feet, for landing
🎙	D-CD, runway 27, wind 260 5 knots, temperature 15, QNH 1004, no reported traffic, report left base
✈	Runway 27, QNH 1004, wilco, D-CD
✈	D-CD, left base
🎙	D-CD, report final
✈	D-CD

▶ Play

✈	D-CD, final
🎙	D-CD, runway 27 free for landing, wind 260 5 knots
✈	Runway 27 free for landing, D-CD
✈	D-CD, runway vacated
🎙	D-CD, taxiway Alpha available to the flying club
✈	Will taxi to the flying club, via taxiway Alpha, D-CD

▶ Play

8 Unattended Aerodrome Phraseology

Operations outside the hours of ATS

At some aerodromes operations may take place outside the promulgated hours of watch of the air traffic service unit. To improve safety, you should broadcast information on your position and intentions to other aircraft that may be operating on or in the vicinity of the aerodrome.

As some aerodromes share frequencies, you should include the name of the aerodrome in your transmissions. At unattended aerodromes including the runway designator of the runway you intend to use is particularly helpful to other pilots.

RTF Taxiing and Departure

✈	Lexington Aerodrome, HB-CDA, taxiing runway 09
✈	Lexington Aerodrome, HB-CDA, lining up for departure runway 09
✈	Lexington Aerodrome, HB-CDA, airborne departing north

▶ Play

Arrival Transmissions

Your initial call should be made in good time, normally 5 minutes before you reach the aerodrome.

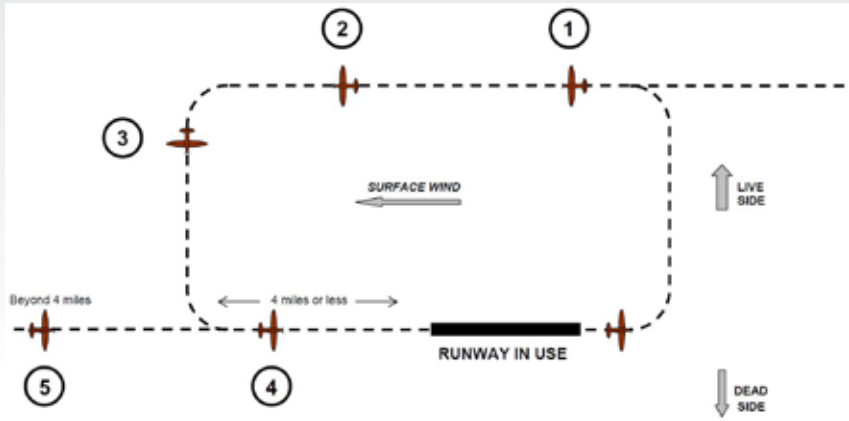
The arrival transmissions shown here are examples relating to a normal traffic pattern and pilots should be prepared to make, omit or adapt calls as necessary depending on the situation and any other traffic in the vicinity. At unattended aerodromes including the runway designator of the runway you intend to use is particularly helpful to other pilots.

RTF Arrival

- **Lexington Aerodrome, HB-CDA, overhead 2000 feet , joining righthand downwind runway 09**
- **Lexington Aerodrome, HB-CDA, righthand downwind runway 09**
- **Lexington Aerodrome, HB-CDA, right base runway 09**
- **Lexington Aerodrome, HB-CDA, final runway 09**

▶ Play

Aerodrome Traffic Circuit



Left-Hand Circuit

Position 1: Aircraft reports on '***Downwind***' leg.

Position 2: Aircraft reports '***Late downwind'*** if it is on the downwind leg, has been unable to report '***Downwind***' and has passed the downwind end of the runway.

Position 3: Aircraft reports '***Base***' leg (if required).

Position 4: Aircraft reports '***Final'***. Clearance to land issued here.

Position 5: Pilot reports '***Long final***' (between 8 and 4 miles) when aircraft is on a straight in approach.

Exit

Emergency Messages

Pilots should seek assistance whenever there is any doubt about the safety of a flight. An early call may prevent serious problems later.

The word 'MAYDAY' identifies a distress message transmitted because there is serious and/or imminent danger which requires immediate assistance. The words 'PAN PAN' identify an urgency message, concerning the safety of an aircraft or other vehicle, or of some person on board or within sight, but not requiring immediate assistance.

Pilots should stop using any frequency on which distress or urgency messages are being transmitted, until the emergency has been terminated.

To help controllers to give maximum assistance, the emergency message should contain as much of the following information as possible, ideally in the order given. However you may need to change the phraseology to fit your specific needs and the time available.

a) 'MAYDAY / MAYDAY / MAYDAY' or 'PAN PAN / PAN PAN / PAN PAN'

b) Name of the station addressed

c) Callsign of the aircraft

d) Nature of the emergency

e) Intention of the person in command

f) Position (present or last known), level and heading of the aircraft

g) Any other useful information