

# Sunair



## FLIGHT TRAINING

### Basic Radio Skills



Contains useful information to help you during the beginning of your training.

## Garmin G430

The Garmin G430 GPS has a built-in NAVCOM radio set on the left of the screen. This GPS/Radio setup is commonly installed on small GA aircraft.



## Bendix/King KX155

The more common setup is the Bendix/King KX155 NAVCOM radio. Aircraft may be fitted with several radios, in which case they will be labeled as Comm 1, Comm 2 etc.



## VHF Antennas

Radio communication is made using the VHF Antennas mounted on the top of the wing. The antennas rely on 'line-of-sight' for clear communication, and may be distorted by hills.



## Radio Communication

During your training you will learn how to communicate with other aircraft, and or air traffic control (ATC). Confusion or misinterpretation over the radio can be a serious problem. To avoid this, the phonetic alphabet is used. For numbers, the table below displays the correct pronunciation. It is important to know these off by heart.

<b>Phonetic Alphabet</b>	
<b>A - alpha</b>	<b>N - november</b>
<b>B - bravo</b>	<b>O - oscar</b>
<b>C - charlie</b>	<b>P - papa</b>
<b>D - delta</b>	<b>Q - quebec</b>
<b>E - echo</b>	<b>R - romeo</b>
<b>F - foxtrot</b>	<b>S - sierra</b>
<b>G - golf</b>	<b>T - tango</b>
<b>H - hotel</b>	<b>U - uniform</b>
<b>I - india</b>	<b>V - victor</b>
<b>J - juliet</b>	<b>W - whiskey</b>
<b>K - kilo</b>	<b>X - x-ray</b>
<b>L - lima</b>	<b>Y - yankee</b>
<b>M - mike</b>	<b>Z - zulu</b>

<b>Number</b>	<b>Code Word</b>	<b>Phonetic Pronunciation</b>
0	Zero	ZEE-RO
1	One	WUN
2	Two	TOO
3	Three	TREE
4	Four	FOW-ER
5	Five	FIFE
6	Six	SIX
7	Seven	SEV-EN
8	Eight	AIT
9	Nine	NIN-ER
100	Hundred	HUN-DRED
1000	Thousand	TOU-SAND

## Radio Calls

There are 5 main items we include in a radio call, these are:

1. **Who you are talking to** (i.e. 'Harbour traffic')
2. **Who you are** (i.e. 'Charlie Bravo Zulu')
3. **Position** (i.e. 'Overhead Te Puke')
4. **Altitude** (i.e. 'Two thousand feet')
5. **Intensions** (i.e. 'Tracking to Tauranga')

## Readback

In controlled airspace, any clearance received requires a 'readback'. This is basically repeating the clearance given by ATC to verify that the pilot has understood, and will comply with the clearance. If a pilot is unable to comply with or would like a different clearance, this may be requested.

## Clearance vs Information

When an ATC clearance is issued, they may give the pilot extra information about traffic, weather or other.

For example:

***"Charlie Bravo Zulu join final runway 25, you're number 2 behind Dash 8 traffic on a 4 mile final, caution wake turbulence"***.

The clearance is 'number 2, runway 25 via the final leg', the rest is all to do with the other aircraft. In this case we only need to 'acknowledge' the traffic information, so our response should be:

***"Join final runway 25, number 2, copy wake turbulence, Charlie Bravo Zulu"***.

## Controlled vs Uncontrolled

In controlled airspace, we need a clearance for just about everything, however ATC will separate us from other traffic.

In uncontrolled airspace, we can fly anywhere without a clearance, however we are now responsible for maintaining radio communication with other aircraft in the area to maintain separation.

Note: Separation is usually maintained by flying at different altitudes, different locations or both if possible.