



Safety net – communication with air traffic control

Communication with air traffic control (ATC) involves exchanging safety-critical information between pilots and air traffic controllers

Successful communication relies on the use of standard phraseology whenever possible. Radiotelephony (RTF) discipline and maintaining a good listening watch also make for safe and effective communication.

Phraseology and readbacks?

Most standard radio transmissions and readbacks are in a format that enables both the pilot and the air traffic controller to relay required information efficiently and effectively. The use of non-standard radio calls or readbacks affects the ability of ATC to understand your intentions and confirm that you have understood your clearance.

If your readback is incorrect or incomplete, ATC will need to confirm your understanding; leading to additional conversation, complexity, workload and frequency congestion. This may also impact you or other aircraft by increasing the chances of incorrect information being passed or received.

AIP GEN 3.4 -12 details pilot radio call and readback requirements. The following components of an ATC transmission will require readback:

1. an ATC route clearance in its entirety, and any amendments
2. any en route holding instructions
3. any route and holding point specified in a taxi clearance
4. any clearances, conditional clearances or instructions to hold short of, enter, land on, line-up on, wait, take-off from, cross, taxi or backtrack on any runway
5. any approach clearance
6. assigned runway, altimeter settings directed to specific aircraft, radio and radio navigation aid frequency instructions
7. SSR codes, data link logon codes
8. level, direction of turn, heading and speed instructions.

Common errors

Common errors include the failure to read back:

- the taxi holding point (if given during a clearance)
- the runway designator.

Pilots also often fail to read back a radio frequency change prior to selecting the new frequency. This means that ATC cannot ensure that you have copied the correct frequency and will not know which one you are on, if you select an incorrect frequency.

Good RTF discipline

- Use standard phraseology whenever possible to prevent misunderstandings.
- Keep transmissions clear and concise.
- Think about what you want to say before pressing the button in order to avoid rambling transmissions.
- Stick to plain English in unusual or emergency situations where non-standard phraseology is necessary.
- Make sure you are listening on the correct frequency and the radio volume is at a suitable level.
- If there is a long period of radio silence, do a radio check with ATC to ensure that your radio is correctly tuned and is operating normally.
- Always listen before broadcasting to make sure no one else is currently using the frequency. Do not transmit if another aircraft is about to transmit a readback.
- If unable to make a call at the required place or time because of frequency congestion, wait for a pause on the frequency then give ATC an accurate position report with your intentions. Do not enter airspace for which ATC clearance is required.
- Speak up if you think there is any possibility that a transmission has been addressed to, or answered by, the wrong station.
- Speak up if you hear two stations over-transmit.

Is the tower active?

There have been some safety occurrences where pilots are unsure if a tower is active or if CTAF procedures apply. If you are unsure, listen to the ATIS. If the tower is not active, the ATIS will be information ZULU and will include the time of activation and the CTAF frequency.

Maintain a listening watch

A listening watch is vital for the safe conduct of your flight.

Make sure you:

- actively listen to all transmissions
- use the information gained from listening to build your situational awareness and to assist you to see-and avoid other aircraft.

Radio failure

Effective radio communication between pilots and ATC is critical to safe operations. In the event of a radio failure, after checking the most likely cause of the radio failure (for example, volume, incorrect frequency etc.) ensure you follow the communication failure procedures detailed in both the Emergency Procedures and Local Procedures sections of ERSA.

More information

More pilot safety information is available on the Airservices website at bit.ly/pilotsafety.



If you have any feedback or questions about this publication please email, safetypromotions@airservicesaustralia.com.

