

QRS International Flight Contest 2025

Introducing a contest with a difference, a contest reminiscent of old wired telegraphy without the unpredictability, frustrations and propagation problems of wireless. We shall send Morse by internet in sound files. For those wanting to gain on-air experience, entries may also be sent by radio.

*See 'Sending Options' below.

For eleven consecutive weeks on Wednesdays beginning on 18 June, a sound file will be uploaded to the QRS International Flight Contest website Sound file access page. Each sound file will give the number of the flight, the name of one airport and the map coordinates of another. The following is an example:

QRS IFC QNC
<CT> NR 00 =
EMBK 12R4150S 130R8829E =
DEST CHRISTCHURCH INT, NEW ZEALAND =
DE ZL3TK <AR>

EMBK is the embarkation airport and DEST of course, is the destination airport.

A sound file with this QNC may be heard and/or downloaded from the IFC Demo Sound files page.

Don't let speed be a worry. If the sending speed is too fast, use this great online app to reduce speed by up to 50 % without any change in pitch: <https://audiotrimmer.com/audio-speed-changer> The slowed-down file may be played immediately and/or downloaded, or even cascaded for an even slower rendition - it's an excellent app in any man's language.

Map coordinates in CW are sent with the decimal point as the letter R. When written onto the flight log form, the incoming QNC will look like this:

Flight NR	Embarkation Airport			Destination Airport			Distance Flown	Great Circle Bearing
00				CHRISTCHURCH INT, NEW ZEALAND				
	IATA	Latitude	Longitude	IATA	Latitude	Longitude	km	deg T
		12R4150 S	130R8829 E					

Map coordinates to four decimal places have an accuracy of +/- 11 m at mid-latitudes.

Flight-log forms may be downloaded from links in the IFC homepage.

To compile a reply, the seven remaining blank fields may be populated with information found by consulting Google Search and Google Maps.

Each sound file will be available for 14 days following upload on a Wednesday, and then deleted after two weeks. There's obviously no pressure, but best not be tardy.

Enter the map coordinates in the sound file into the Google Maps search field to generate a pin on that airport's name. Enter the name of the other airport to find its map coordinates.

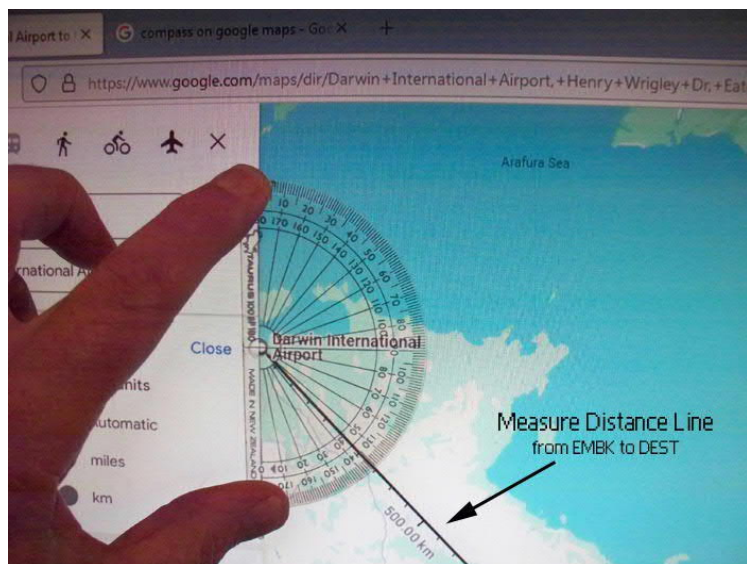
There are two ways to determine the distance between airports and the departure bearing.

1. Manual method. Measure the distance between the two airports with a right-click on the map to bring up the window with menu window showing 'Measure Distance' at the bottom.

Basic Google maps does not have a built-in compass rose. Either deploy a simple protractor laid against one edge of the map, or use your favorite method to determine the great circle compass bearing relative to true north on which the aircraft will fly towards its destination.

If using the left-edge of the map, with the outside graticule 0 ° to the top (true north), move clockwise from the top to read off the great circle route bearing.

If using the right-edge of the map, this time with the outside graticule 180 ° to the top, moving clockwise from the bottom, read the protractor's outside graticule to find the bearing, then add 180 °



2. On-line calculator method for spherical-earth distance and bearing calculation.
<https://www.movable-type.co.uk/scripts/latlong.html> This utility proves the manual method is also highly accurate.

Now we have the data needed to populate the seven previously-blank fields, constituting your entry to the contest.

Flight NR	Embarkation Airport			Destination Airport			Distance Flown	Great Circle Bearing
	DARWIN INT, AUSTRALIA							
00	IATA	Latitude	Longitude	IATA	Latitude	Longitude	km	deg T
	DRW			CHC	43R4876 S	172R5373	5273	137

Here is a competitor's data in QTC format ready for transmission:

QRS IFC QTC <CT>
 NR 00 =
 EMBK DARWIN INT, AUSTRALIA DRW
 = DEST CHC 43R4876S 172R5373E =
 5273 137 =
 DE (your call sign) <AR>

A demo sound file with the QTC shown above may be heard and/or downloaded from the IFC Demo Sound Files page.

This table shows points earned for correctly filling in each of the previously blank fields and transmitting the data in its correct sequence in a simple QTC, either by sound file, IP-to-IP or on-air, to ZL3TK:

Points earned for each correctly reported data field (14 max per flight)

Flight NR	Embarkation Airport			Destination Airport			Distance Flown	Great Circle Bearing
	2			2				
	IATA	Latitude	Longitude	IATA	Latitude	Longitude	km	deg T
	1	2	2	1	2	2	3	3

Total potential points earned for correctly reporting all flights: 14 points x 10 flights = 140 points.

Be aware there is a degree of flexibility with map coordinates since no one geographic point can possibly define an area the size of an airport. The two least significant figures in four-place decimal-degree coordinates may be subject to variations and will be accepted so long as they fall within the physical boundaries of the airport.

The accuracy of manual distance and bearing measurements will be proportional to Google map magnification. A generous $\pm 5\%$ tolerance will be allowed relative to the highest magnification available, obviously there will be no such concerns with the on-line calculator.

Now, in a final dash to the finish line, a correctly executed 11th task will gain contestants 20 bonus points, raising the possible total points to 160. The task will be to correctly plot and interpret a geographically-referenced acronym, then send it spelled out in full words as your 11th entry.

* Sending Options:

Any sending option may be chosen for any of your 11 entries, it's totally flexible:

1. Create a Morse sound file and email it to zl3tk@qsl.net
2. Email zl3tk@qsl.net to arrange a live, private, QRM-free Vail sked, or via the not-so-private second choice, Vband.
3. Email zl3tk@qsl.net to arrange a live, private, QRM-free echolink sked using MCW.
4. By radio, contact ZL3TK during a 'QRS Group FFA' event.
Will be listening Tuesdays between 0940Z and 1000Z on 7.0257 MHz.
5. By radio, contact ZL3TK during a weekly FDU QSO party.
Will be listening Fridays between 0940Z and 1000Z on 7.0257 MHz.

After collating the entries, results will be published and an A4-size, PDF participation certificate with your placing on the leader board emailed to every contestant, another exhibit to be proudly displayed in your ARO 'Hall of Fame'.

