



President: Gary Landon ZL1WGL
 Vice President: Peter Henderson ZL1PX
 Secretary: Tom McDonald ZL1TO Ph. 09 238 8580
 Committee Members: Mike Jane ZL1UOM, Ted Doell ZL1BQA,
 Durlene Griffin ZL1ULK, Gary Collins ZL1GAC

Examiners: Tom ZL1TO, Peter ZL1PX

Web page: www.qsl.net/zl1sa/ Webmaster: Peter ZL1PX

MEETINGS: The club meets on the third Tuesday each month, in the clubrooms, 19 Stadium Drive Pukekohe, 7.30 pm. Visitors welcome.

The committee meets on the first Tuesday of each month (excepting January) at 7.30 pm in the clubrooms.

SUBSCRIPTIONS: \$20.00, family \$30.00.

NETS: Every Sunday at 9.00 am on 3.700 MHz (controller ZL1UOM) and 9.30 am on the 146.900 MHz repeater (first log-on becomes controller). Other 2 metre frequencies are 145.775 MHz, 146.625 MHz, and 146.900 simplex if repeaters off air.

Newsletter: Editor Peter ZL1PX pjh@teachlit.com

A copy is sent to members and clubs in the Auckland area. Sent free of obligation by e-mail to anyone interested.

Club News

Successful July Junk Sale



Our July junk sale attracted a happy bunch of ham ops to the clubrooms on Tuesday 19 July. Most items were from the estate of Ian Sexton ZL1PZ. Mike, see above, stepped up to conduct the sale when Ted ZL1BQA was unable to attend. In the picture you can see John Sexton, Ian's nephew, reviewing items for sale and deciding on prices on behalf of the estate. All items including the HF rigs shown on the front table, were sold. There was also a produce raffle. Durlene, out of photo-shot, was cashier, while Steve ZL1TZP and Peter ZL1PX were runners and Lynette ZL1LL arranged delicious banana cake and coffee for the after-sale refreshments.

Next Club Meeting

Tuesday 16 August at Clubrooms, 19 Stadium Drive, Pukekohe, 7.30 pm

After the meeting, Doctor David Black ZL1MZ, technical adviser to Glenbrook Vintage Railway, will chat to members on locomotives, coaches, rail stations, platforms, signals, rails, coals, water and the galaxy of technologies and skills that have made this heritage, family appeal, tourist attraction such a solid success in our region.

AREC

WRC Rally

Franklin will provide three intermediate checkpoint stations for the WRC rally at Te Akau North on Friday 30 September. Report time on site 0914 hrs, unlikely to be cleared earlier than 1800 hrs. Checkpoint A ZL1WGL and Michael; Checkpoint B ZL1TO and ZL1LL; Checkpoint C ZL1ULK and ZL1MFL. Briefing will be at Papakura Radio Club at 1300 hrs on Saturday 24 September. One member of each team to attend the briefing.

James Allan Rally Sprint

The James Allan day/night rally sprint in Maramarua forest will be held on 18 September. Fit and able amateur stations will be required for safety communications. Contact David Karrasch david@southcitymotors.co.nz.

SARTrack Exercises

Tom ZL1TO attended an AREC SARTrack training session at Papakura Radio Club on 29 June. [Click for SARTrack item.](#)

A night search and rescue exercise, using SARTrack was held at Totara Park, Manurewa from 1900 hrs to 2100 hrs on Wednesday 13 July. In addition to amateur operators at base (in a car park) several amateurs observed, running SARTrack from their homes.

Clubhouse Relocation

Tom ZL1TO sat in as an observer at the Franklin Local Board meeting on Tuesday 26 July. The agenda ran to 160 pages, with pages 9 to 91 carrying reports on consultation regarding the development of Roulston Park and the skate park. The reports suggest that Roulston Park should go ahead – using most of the \$1.5 million budget. The skate park will be delayed, with health and safety matters to be resolved, and additional funds required.



News from Other Groups

SOTA Signal

In July's SOTA Signal, Philip Sharp reports on a recent trip to Canterbury when he activated a number of summits...

ZL3/CB-806 Ōmawete / Cooper's Knob Friday June 30. Ōmawete / Cooper's Knob is near the southern end of the Port Hills. This summit of 573 m (a one-point summit in the ZL3 association, it would be a two-point summit in the ZL1 association) is reached after a 15 minute walk from the road. The last 10 to 15 vertical metres of the summit are an easily climbed rock outcrop. Despite this ease, HF activators are encouraged to activate at the base of the rock outcrop where there is a convenient fence post to attach a mast.

We found a spot sheltered from most of the wind and I began CQing. I had my first contact at 1400 hours and my fourth contact at 1403. I CQed for a few more minutes and then, on Dave's advice, I ended the activation. Dave surmised that since I was activating on a weekday, I would struggle to get more contacts

Hamilton Amateur Radio Club

Hamilton Amateur Radio Club Market Day
Saturday 20th August, Gordonton Hall, 104 Gordonton Road,
South Highway 1B, Gordonton. Vendors report time: 8 AM.
Selling commences at 10 AM. Entry/raffle is \$2. Contact person is
Robin ZL1IC (021 127-9998)

Te Puke Amateur Radio club

20th Market Day will be held Saturday 24 September.
Paengaroa Community Hall, 4 Old Coach Road, Paengaroa.
Venue opens for Vendors from 07.00am. Sale time 10.00am.
Hot Breakfast Available from 07.30am to 11.00am.
Door Charge \$2.00 per person to help recover costs.
Table Costs
Pre-Sale 1.8m Table \$20.00, On the Day \$25.00
Pre-Sale ½ Table \$12.00, On the Day \$15.00.

For further information & Table Bookings
Syd Rowe ZL1LWR Phone (07) 533 1029,
Mobile: 0272488664 Email: sydrowe@xtra.co.nz
Postal Address: 223 State Highway 33, RD 9, Te Puke 3189

Papakura Amateur Radio Club

On Saturday the 13th of August and Saturday the 27th of August we will be holding Free Classes at the Papakura Amateur Radio Club. There is no fee to attend the training, and it's fully compatible with the on-line classes, we will be recording sessions, and uploading them onto the on-line site for anyone who misses any part. The start time will be 9am, and we should hope to finish about 4pm - the 13th covers the first half of the course, and the second week is part 2. At the end of week 2, we will be offering the Exam, There is a fee of \$100.00 for the exam, of which we send \$95.00 to wellington for registering of the callsign and license, and the club keeps \$5.00 to cover postage. We will need to photograph you if you apply for the license (Govt Requirement) and once you have passed 40 out of 60 questions passed (or higher) we will have radios available to help you get on air.

Replies to Gavin Denby zl1nux@outlook.com



Minutes of Franklin
Amateur Radio Club
(Inc) Committee
Meeting held at the
clubhouse, Stadium
Drive, Pukekohe 2
August 2022

President Gary ZL1WGL opened the meeting at 1930 hours

Attendance: ZL1WGL, ZL1TO, ZL1PX, ZL1BQA, ZL1UOM, ZL1ULK

Apologies: Although an open invitation was extended to other members, no others attended.

Minutes of the July meeting. have been circulated.

The minutes were approved. ZL1UOM/ZL1PX

Correspondence

There has been no acknowledgement or reply of ours to Janet Kamau of Panuku on 29 June.

A reply is to be sent along the lines of "It has been over a month sent we sent our letter dated 29/6. Could you give us an update?"
The inward correspondence was received and outward approved.

ZL1BQA ZL1TO

Finance

Income: Subscriptions ZL1GSM and ZL1TGV total \$40

Donation \$4.30

Sale of donated goods net \$76.90

Raffle \$53.00

Expenditure: Power bill to 19 July \$57.15 paid 29 July

The finance report was received. ZL1TO/ZL1ULK

General Business

Damage to clubhouse. Tags have been report on a weekly basis and are being overpainted by Manukau Beautification.

Remits to NZART conference, on pages 34 and 35 of Mar/Apr BreakIn were considered. Recommendations to the general meeting (16 August) are: 1. Banking - remove reference to cheques. In favour. 2. Reduction of councillors to five. - Five keen councillors is better than 10 who have reluctantly been pushed into doing the job. In favour.

We approve both published remits, as a committee

ZL1WGL / ZL1PX

Topics for future meetings.

August – Dr David Black to chat on Glenbrook Vintage Railway.

September – Philip Sharp to chat on SOTA and POTA.

November – AGM.

The meeting closed at 2108 hours.



Maidenhead (QTH) Locator

Peter ZL1PX



Sometimes, when there are Morse contests on the 80, 40 and 20m bands, I haven't the speed to join in so I just listen. And when I listen, I will often hear strings of numbers and letters in a four or six digit sequence. For example, I might hear a message like this...

ZL1PXE DE VK3PX 090/QF22mi/010 K

The 090 is likely to be the serial number for the message. That is, this VK has already answered 89 fellow contestants and this one is his 90th. The slash is used for separation in CW contests. After the slash is the series of characters QF22mi that I puzzled over when I first heard them. The final number series might be the branch or membership number of this particular ham. But what had this VK ham meant by sending QF22mi?

The answer is he sent the QTH grid square for the suburb in which he lives – Thomastown, in Melbourne Australia. He used the Maidenhead Locator, a system developed by hams for hams that has been in use since the late 80s. The letters QF show he lives within a large area that includes Melbourne and the 22 digits point to a smaller area within QF. I will explain the 'mi' further down this article.

How does all this work?

The Field

The Maidenhead Locator code fits over the longitude and latitude geographic numbers. However, the Locator refers to an area rather than intersecting longitude and latitude. The first letter Q derives from the longitudinal position. The second letter F arises from latitude. Together these letters describe a rectangle area known as a field. A field is quite large and takes in a lot of territory.

There are 324 fields in the locator grid. They begin with AA at the bottom left and end at RR at top right as shown in this chart below...



Below is a close-up of the fields that cover Australia and New Zealand. The field QF, where my VK op lives, includes most of New South Wales, all of Victoria and the eastern part of South Australia



But a field is enormous. How can I know more precisely where my VK is living?

The Square

Maidenhead Locator further divides each field into 100 areas called squares. The first square is 00 at bottom left and the last square is 99 at top right - the same orientation as used in the field labels. Square 22 in VK3PX's Maidenhead location is in the south-west corner of the QF field. You find this square by counting the longitude number along the bottom of the field and then the latitude number upwards. These "squares" are more rectangular than square. Their true shape will vary depending on their location on the surface of the earth and they are approximately 170 km east-west and 220 km north-south in size.



In our Australian example, square 22 would include all of Melbourne and surrounding regions - accurate enough for HF communications.

To bring this closer to home, the Maidenhead Locator field RF would include most of the North Island.



When we divide RF into 100 squares, we find most Franklin Amateur Radio Club members would fit into the same square, RF72, shown below, although John ZL1AQS would be in the square above (RF73), as would Tom ZL1TO and Lynette ZL1LL when they reside in Maraetai.



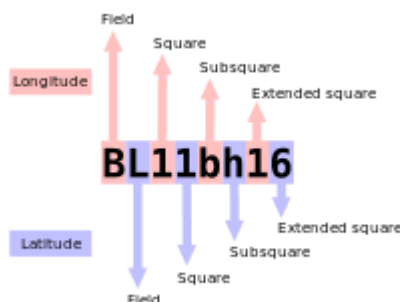
Being “square” is okay when the operators in radio contests are hundreds or thousands of kilometres apart, but what happens when they are close? VHF operators might be within 50 to 100 km of each other. How do they show a separate location to their contacts?

The Subsquare

Maidenhead Locator provides a sub category to the square known as the subsquare. There are 576 subsquares within a square, named aa through xx and each is about 7 x 9 km in size. At this level of accuracy, ham operator Mike ZL1UOM, who is within subsquare RF72is, at Waiuku can exchange his grid locator reference with Gary ZL1GAC at subsquare RF72kt in Pukekohe. The VK amateur I picture at the top of this article sent his subsquare detail when he included “mi” within his grid locator information.

The Extended Square

As you can see in the key below, the subsquare further divides into extended squares which are identified by numbers 0 to 9. There are 100 extended squares within a subsquare and each is only 700 by 900 metres in size. At that level of accuracy, Mike ZL1MFL, if he is calling from his shack, would be occupying extended square RF72IQ87 while Durlene ZL1ULK, answering him, would be at the extended square known as RF72kt92.



A recap on the Maidenhead Locator...

There are 324 fields covering the planet labelled AA to RR.

Each field has 100 squares numbered 00 to 99. (approx. size = 170 x 220 km)

A square contains 576 subsquares named aa to xx. (approx. size = 7 x 9 km)

Each subsquare holds 100 extended squares numbered 00 to 99. (approx. size = .7 x .9 km)

Is there a Google lookup? Of course there is. Hams around the grids don't have to sweat these details. We can look up our Maidenhead Locator reference on a number of sites. The one I have added below will sub-divide with ease so you can get your grid locator reference specificity to within less than a metre. Have fun!

[Grid Locator link – Find your Maidenhead grid.](#)



SARTrack

From the perspective of an observer

Tom ZL1TO

SARTrack is a system for tracking and managing search and rescue operations.

The SARTrack application, running on a computer, allows a person to display the disposition of search assets, such as search teams, messages and radio transmitters.

There was a night search exercise in Totara Park, Manurewa from 1900 hours to 2100 hours on 13 July. Ten search teams were each equipped with ESB band hand held transceivers. A repeater for the searchers' radio channel was installed at a high point on Redoubt Road. As each hand held was capable of analogue voice, the messages could be copied by anyone with a scanning receiver. In addition the hand held radios were set up to send a brief digital message with the GPS position every 15 minutes. A small team of amateurs was at search base in a car park adjacent to the park.

The author was at his QTH in Maraetai, where the ESB repeater could easily be copied. And I, along with other amateur observers was allowed to make a contribution through an amateur band repeater.

All of the data was transferred in real time to a database that is accessible from the internet.

From an observers point of view the beauty of this arrangement is that each observer can choose to arrange to have on their computer screen their own selection of display windows and any of a variety of map types and scales.

Some people will be critical of SARTrack relying on the internet to disseminate information on a database. However, to be realistic, most searches are for an individual, or small groups of individuals where the internet is quite intact. Perhaps, in the case of a major event, such as the Christchurch earthquake the internet might be accessible only from a longer distance.

With a significant amount of the input data coming direct in digital form there is less need for voice communication. This makes the voice communication less hurried and the channel less hectic.

The AREC version of SARTrack is available to all AREC members. To be fair, it takes some time getting used to the system, with all its options, and the training sessions put on by AREC were necessary to get started satisfactorily.

The illustration shows a screen grab taken during the 13 July exercise. Each of the tabs in the column at the right can pull up a window, and multiple windows can be active at the same time.

