QUA FARC

Franklin Amateur Radio Club Inc. NZART Branch 10

FEBRUARY 2022

VOLUME 30 ISSUE 02

Committee

President: Gary Landon ZL1WGL Vice President: Peter Henderson ZL1PJH

Secretary: Tom McDonald ZL1TO Ph. 09 238 8580

with: Mike Jane ZL1UOM, Ted Doell ZL1BQA, Durlene

Griffin ZL1ULK, and Gary Collins ZL1GAC. Examiners: Peter ZL1PJH, Tom ZL1TO.

Web page: www.qsl.net/zl1sa/

MEETINGS: The club meets on the third Tuesday each month, in the clubrooms, 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 (controller ZL1PZ). Other 2 metre frequencies are 145.775 MHz, 146.625 MHz, and 146.900 simplex if repeaters off air.

Newsletter: Editor Peter ZL1PJH 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.

Silent Kev

It is with some sadness we have to report the passing of Fay Mosely ZL1TMI on 11TH January in Te Kawhata. Fay was XYL to Maurie Moseley ZL1WU who passed away some years ago. Maurie was a previous editor of this newsletter. Both Fay and Maurie were enthusiastic supporters of Franklin Amateur Radio Club and sons Steve and Pat also joined the fraternity. Bob ZL1BBZ and Peter ZL1PJH attended a service for Fay on Monday 17 January at Grahams Chapel in Waiuku.

News from ZLIVH Vaughan

Klondyke 6625 repeater is again back on the air. The North antenna power divider was damaged and has been removed for repair. Currently running using just the top bay of the fourbay antenna facing North. Users may note some drop in receive signal level and may need a little more power to get into the repeater.

The Auckland VHF Group will resume the Sunday evening News and Net on the 6625 Repeater from this Sunday 6 February.

The 6m repeater at Klondyke was tested and the receiver is a little "deaf". Repeater removed for repair.

Link transmitter towards Taranaki has been fixed and is again putting out a reliable signal. This should solve the problem of signals originating in Auckland only being heard intermittently further South on the National System.

Club Notice Board

Next General meeting: Tuesday 15 February

We meet at the clubhouse at 1930 hours. Please bring along vax pass or card and mask. The meeting will be followed by coffee or tea and light refreshments.

Jock White Memorial Field Day, 26-27 February Gary ZL1WGL has once again made the generous offer of the use of the onion farm grounds. Setup details to be decided at the February general meeting. Activities will run on Saturday 1500-2400 NZDT and Sunday 0600-1500 NZDT. This contest is primarily to test Branch organisation and weld a team of workers together. Come along. Members can be as competitive or as social as they like, or all points in between. There is work for all: spouses/partners, prospective members

We aim to include both phone and CW in our tally this year.



OTHER CLUB NEWSLETTER ITEMS...

Branch 3 Western Suburbs Radio Club – used equipment sale postponed until Saturday 12 February 2022

Branches 13/25 Napier/Hastings combined clubs newsletter article Simple Filters From Transmission Line Stubs. Detailed analysis of filter system.

Branch 65 Murdock ZL1TEY has his tilt-over tower for sale complete with rotator and antenna. Best offer after negotiation gets to take it away.

More from Branch 65: Dave ZL1DK advises National System Morse Training has recommenced from a repaired Klondyke connection. There will also be an HF link on 3.755 mHz

Branch 80: US Coast Guard advises High Frequency Voice Distress Watchkeeping will cease at most locations on 7 February 2022

Branch 89 Radio Electronics Group - Used equipment sale Saturday 21 May, at 211 Peacocks Road, Glenview, Hamilton



Minutes of Franklin Amateur Radio Club (Inc) General Meeting held in the Clubrooms Stadium Drive Pukekohe on 18 January 2022

President Gary ZL1WGL opened the meeting at 1940 hours, with a welcome to visitors and members.

Attendance: ZL1WGL, ZL1TO, ZL1PJH, ZL1BBZ, ZL1LL, ZL1ULK, ZL1ABR, Alan Makgill, ZL1GAC, ZL1TZP. Barry ZL1ABR was applauded on becoming a new, and financial, member.

Apologies: ZL1BQA, ZL1MFL, ZL1PZ acceptedZL1TO / ZL1PJH

Minutes of the December meeting, at the clubhouse. The report in January 2022 QUA was approved. ZL1PJH / ZL1ULK

Correspondence:

Inward - Newsletters from Branches as listed in January QUA, plus Branches 03, 66, 80

03 Western Suburbs used equipment sale 12 February at Rosehill Road. Te Puke sale 19 March. NZ Herald opinion of best shack in Auckland is the clubhouse!

66 General Meeting 17 January - BBQ from 6 pm. Ross Hull Memorial Contest runs through January and there will be VK hams looking for propagation to ZL. VHF Contest weekend Saturday 12 February from 5 pm - 11 pm and Sunday 13 February from 7 am - 1 pm; all bands 6m and up. EZNEC antenna modeling software by Roy Lewallen W7EL is now available for free download. Icom has been doing technical research on a new amateur radio available for use in the 2.4 GHz and 5.6 GHz bands.

80 General meeting 26 January. AGM 9 March. Report on working bee 11 December. Te Puke Market Day 19 March.

Message from Kelvin Barnsdale ZL3KB asking about the Franklin AREC portable transceiver – also known as EDAC – a solid state version of the ZC1 Mk 2. Barry ZL1ABR commented that Eddie Rogers ZL1BKX was involved for Philips, users of the EDAC name.

Message from Bob ZL1BBZ reporting the passing of former member Faye Moseley ZL1TMI. Bob added that Peter ZL1PJH and himself were at the farewell. Mike ZL1BEV was also present. Faye's family include Steve ZL1TWG and Pat ZL2AUH. The farewell was well attended. The President thanked Bob and Peter for attending on behalf of our club. Faye's main interests were swim coaching, and Scouts and Guides. The celebrant was one of Faye's swimmers.

The correspondence report was received. ZL1TO/ZL1PJH

Peter ZL1PJH reported that he has enrolled in CW Academy, an AARL organization – at the intermediate level (of beginner, intermediate, advanced and super advanced). This academy facility is available free to anyone in the world with an amateur callsign. Peter works with David ZL1DK on the national system doing morse practice. Farnsworth speed is characters at 20 words per minute but with big spaces at the start of practice sessions. Peter's skill is currently at 12 or 13 words per minute.

Finance:

Income

Interest from Deposit \$168.00 Subscription (ZL1PJH) \$20.00

Expenditure

We remain in credit with Watercare.

Power bill was zero for December due to Contact discount. Fire extinguisher check \$69.00 is due for payment 20 February

General Business:

Remit. Bob spoke on a proposed Franklin Branch remit to NZART.

When a radio amateur becomes a silent key or moves overseas permanently and never intends to use the NZ call sign again, the branch committee (usually the secretary or president but not necessarily so) contacts the call sign holders next of kin and advises them of the procedure on how to have the call sign deleted.

Explanation: There are hundreds, possibly thousands, of call signs listed to deceased persons. This will enable the call book to be more up to date. The next of kin should be given page 32 (or a copy) of the 2019 call book.

Barry ZL1ABR reported that Barry ZL1AAA is a recent silent key. The current procedure provides that if family member wants the call then they can request RSM to hold the call for a period of a year or so.

It was agreed that our club needs to do a bit of homework on the proposed remit. Discussion ensued. The topic will be brought up again at our next meeting.

Jock White Field Days 26-27 February – We are more than welcome at the farm of Gary ZL1WGL. We hope that Ian ZL1PZ may be able to come out at some stage. Members are happy to be at the onion farm.

The meeting closed at 2025 hrs

Violet McKenzie: Radio Girl

Peter Henderson (ZL1PJH)

In 1914, Florence Violet Granville, known to her family as Violet, applied to enrol as a student at the Engineering Department of the University of Sydney for the Degree of Electrical Engineering. But there was a problem with her application. The Engineering Department required students to be working as an engineer before they would grant an enrolment. Violet did not have a job with an engineering company. Furthermore, she was unlikely to convince an engineering company to hire her as engineering was seen as an exclusively male occupation. Therefore, the university declined her enrolment.



Violet McKenzie (1920s)

Violet argued back. Would my enrolment be accepted, she asked, if I started my own electrical engineering company and hired myself as an engineer? No, the university replied. Since she was a woman and unlikely to work as an engineer, they would not overturn the rules.

Violet tried another approach. The neighbouring Technical College offered the same courses. She would get a diploma rather than a degree but learn the same knowledge. Furthermore, the technical college would agree to her plan to apprentice herself to her own company. Violet purchased a company from her brother and won a contract to install electrical cabling in a new suburb thereby proving she had a legitimate employer. She got her enrolment.

While still studying electrical engineering, Violet purchased a second company that sold heavy electrical goods. One day a customer asked her for 'iron pyrites'. She didn't know what these were but quickly found they were used as diodes on crystal sets. By 1922, her interest in radio awakened, she opened The Wireless Shop – the go-to place for Sydney's amateur radio enthusiasts – selling all manner of components and materials used in this booming new hobby. A year later, with other radio amateurs, The Wireless Shop published the first amateur radio newspaper in Australia - The Wireless Weekly – with Violet contributing many of the technical articles and even some poems.

Violet married Cecil Roland McKenzie in 1924. She gained her Amateur Operator's Proficiency Certificate in 1925 (the first woman in Australia to do so). Amateur radio operators in the 1920s used CW and Violet quickly developed excellent Morse proficiency. Eager to help others learn, she shared her skills freely. By the mid-30s, she had instructed hundreds of operators in signalling and telegraphy.



The Wireless Shop

With World War 2 approaching, Violet increased the number of women students in classes. She intended them to replace male telegraphers called up for overseas service. In 1941, with a looming shortage of trained telegraphers, navy officer Commander Jack Newman visited her classes. He recommended her women signallers and instructors be included in navy establishments. Soon after, the Womens Royal Australian Naval Service came into being - formal recognition of the importance of Violet's well-trained signallers to the running of navy communications. The army and air force were quick to follow. Despite government reservations about women in the services, they began sending batches of men through her female instructed training classes. Violet had single-handedly created a valuable resource for Australian military communications. Even after war ended, Violet's classes remained important as there were no other schools available for the Morse needs of airline pilots, postmasters and sea captains.



Violet received an OBE in 1950 for her wartime services

Source: Radio Girl by David Dufty 2020

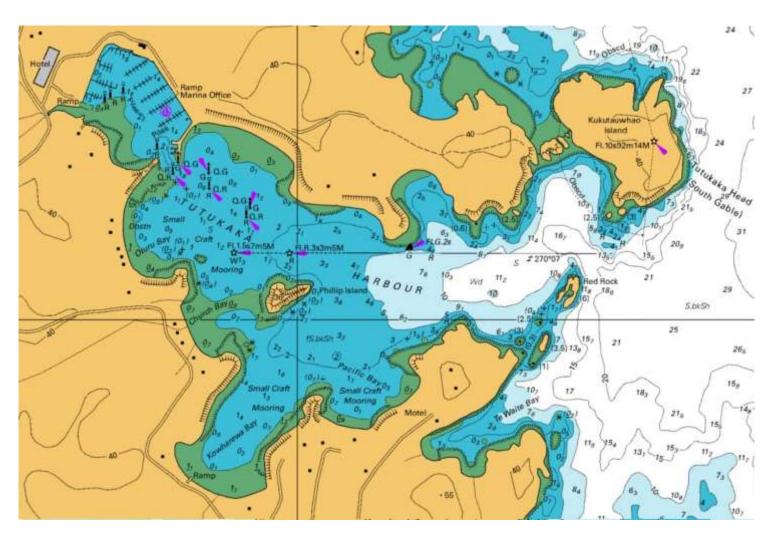
You can read more about Violet here.

Tongan Tsunami

Tom McDonald (ZL1TO)

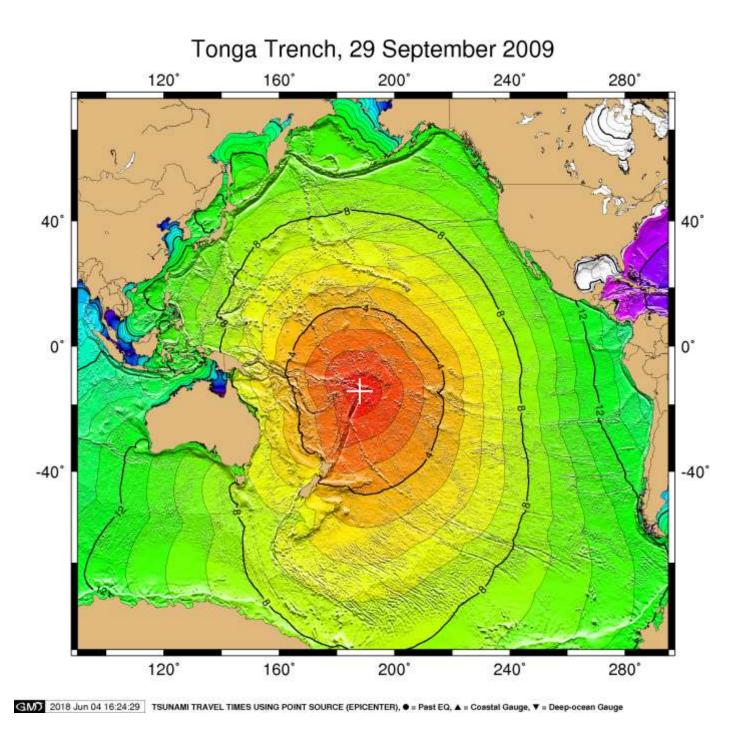
On 15 January an underwater eruption at Hunga Tonga Island, about 35 miles North of Nukualofa produced enough disturbance to raise a tsunami. The wave arrived at Nukualofa during the 6 pm TV1 news. The news broadcast showed video of a wave coming across the beach, the road, and around the reporter's address.

Although it was obvious that a tsunami had been produced we had no official warning in New Zealand; instead a tsunami advisory was issued. So the tsunami came as a surprise to boaties at Tutukaka. In the tidal surge considerable damage was done to the marina, and several yachts and launches suffered damage or were sunk as they collided with each other. Tutukaka may be more vulnerable that other bays in Northland as the marina is less that one mile from the open sea, and the reef at the entrance, although unnavigable, is not necessarily a barrier to an incoming



It has occurred to the author that we should take proactive steps in the event of another event of this kind. It looks as though the Pacific Tsunami Warning Centre was, until this eruption, concentrating on earthquakes as the source of tsunami.

Here is a mathematical model predicting the time taken (in hours) for a tsunami originating near Tonga.



Notice how the surge moves more rapidly in the deep water of the Tonga and Kermadec trenches than in the shallow sea of the continental shelf. So parts of the east coast of our North Island receive the tsunami sooner than some other places that may be less distance to the erupting volcano. If a tsunami were to originate from the vicinity of the Kermadec Islands then the picture above should allow a reasonable approximation of the arrival time on the east coast of Northland through to the Bay of Plenty as the Kermadecs are roughly in the same direction as Tonga.

The height of a tsunami appears to be more difficult to predict. So I have collated the reported wave height at 119 gauges around the Pacific for the Hunga Tonga event to see if a pattern emerges.

	GUAGE COORDINATES				TIME OF	MAXIMUM		WAVE			
					MEASURE	TSUNAMI		PERIOD	UTC	DELAY	DELAY
GAUGE LOCATION	LAT	LAT	LON	LON	(UTC)	HEIGHT		(MIN)	dec hour	h.hh	hhmm
						(m)	(feet)				
GREAT BARRIER IS NZ	36.2	S	175.5	E	849	0.7	2.3	10	8.82	3.72	343
OWENGA CHATHAM NZ	44	S	176.4	W	902	0.44	1.4	40	9.03	3.93	356
KINGSTON NORFOLK IS	29.1	S	168	E	840	0.78	2.6	10	8.67	3.57	334
LUGANVILLE VU	15.5	S	167.2	E	826	0.37	1.2	24	8.43	3.33	320
OUINNE NEW CALEDONI	22	S	166.7	E	826	1.13	3.7	8	8.43	3.33	320
THIO NEW CALEDONIA	21.6	S	166.2	E	819	0.57	1.9	20	8.32	3.22	313
LIFOU NEW CALEDONIA	20.9	S	167.3	E	746	0.89	2.9	16	7.77	2.67	240
EAST CAPE NZ	37.6	S	178.2	E	834	0.26	0,8	8	8.57	3.47	328
DART 01002	29.7	S	175	W	542	0.1	0.3	28	5.70	0.60	36
DART 01001	36	S	177.7	W	612	0.07	0.2	24	6.20	1,10	108
SUVA VITI LEVU FJ	18.1	S	178.4	E	633	0.26	0.9	18	6.55	1.45	
DART 01003	23.4	S	173.4	W	442	0.12	0.4	42	4.70	-0.40	-64
NUKUALOFA TO	21.1	S	175.2	W	516	0.82	2.7	6	5.27	0.17	10
PAGO PAGO AS	14.3	S	170	W	531	0.62	- 2	16	5.52	0.42	25
APIA UPOLU WS	13.8	S	171	W	551	0.17	0.5	18	5.85	0.75	45
HUNGA TONGA (time estimated)	20.5	S	175.4	W	506	0	0	0	5.10	0.00	