



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 Mike Lee ZL1MFL.

Examiners: Ian ZL1PZ, 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). 2 metre frequencies are 145.775 MHz, then 146.625 MHz, and 146.900 simplex if repeaters off air.

Newsletter: Editor Tom ZL1TO tom.mcdonald@xtra.co.nz

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

Talk at General meeting 18 May

Our guest was David Wilkins ZL1MR. David is a volunteer with St John. His talk mentioned the kinds of incident that a volunteer may face while on duty.

At the Club request much of the discussion was on heart attack and stroke.

In the picture below, David stands in front of his blackboard presentation, with some of a volunteer's kit in front.



The club extends thanks to David for an enlightening talk. A further picture is on page 3 of QUA.

Club Notice Board

General meeting, Tuesday 18 May

The meeting will include preparation for NZART Conference and will conclude with an illustrated presentation by Ted ZL1BQA on two of his recent projects – a balun and end fed antenna.

General Meeting, Tuesday 15 June

The meeting starts with general business and a brief Conference report. Most of the evening will be given over to a presentation by Neil ZL1NZ. Neil's particular interest is Morse Code.

Members may wish to get up to steam by visiting a web site that Neil edits:

<http://radio1nz.com/about-amateur-radio/new-zealand-nets/nz-net/newsletters/>

Franklin Junk Sale, Tuesday 20 July

The Franklin Junk Sale is back again. It will be held in the clubhouse, 19 Stadium Drive Pukekohe. Start time is 7:30 pm prompt.

Our sale is led by a sales conductor.

Vendors are encouraged to bring their items in saleable lots.

Buyers are asked to pay to the cashier, on the night, or register with the cashier prior to the sale if making electronic payment. The Club's account with the BNZ is 02-0404-0157944-00 Please identify payments with your callsign and Junk Sale in the reference fields.

The door will open at 7.00 pm.

Vendors may arrange for items to be delivered ahead of the sale by contacting the Secretary at 09-2388580 or 0210-8186962 or zl1to@nzart.org.nz

At the conclusion of the sale a complementary supper will be served.

Although the third Tuesday is usually given over to a general meeting, there will be no general meeting in July. The entire session is Junk Sale.



Minutes of Franklin Amateur Radio Club (Inc) General Meeting held at the clubhouse 19 Stadium Drive, Pukekohe, 20 April 2021

President Gary ZL1WGL opened the meeting at 1930 hours. A special welcome was extended to David ZL1MR.

Attendance: ZL1WGL, ZL1TO, ZL1PJH, ZL1BQA, ZL1UOM, ZL1LL,

ZL1MR, ZL1GAC, ZL1TGP, ZL1BXA, John, ZL1AMQ, ZL1DW (8:48pm). ZL1BBZ (8:50)

Apologies: ZL1PZ, ZL1MFL, ZL1ULK, ZL1BBZ(lateness)

Minutes of the 16 March 2021 meeting. The minutes were approved as true and correct. ZL1PJH / ZL1TO

Correspondence:

Inward - Newsletters from Branches 03, 29, 65, 66, 80, 86 as described in QUA.

Message from Douglas ZL1BFS who is LGLO – with news of a good outcome for Waikato Regional Authority rules on amateur configurations.

Outward - Franklin Positive Ageing – we will attend the Expo in October.

The correspondence report was received. ZL1TO / ZL1PJH

Finance:

Expenditure - Power bill Contact Energy \$45.96 paid.

Counties Firewatch have presented their cheque for \$69.00

The finance report was received. ZL1TO / ZL1BQA



Minutes of Franklin Amateur Radio Club (Inc) Committee Meeting held at the clubhouse 19 Stadium Drive, Pukekohe, 4 May 2021

President Gary ZL1WGL opened the meeting at 1930 hours.

Attendance: ZL1WGL, ZL1TO, ZL1PJH, ZL1BQA, ZL1MFL, ZL1ULK

Apology: ZL1UOM ZL1BQA / ZL1PJH

Minutes of the 6 April 2021 meeting.

The minutes were approved as true and correct.

ZL1BQA / ZL1PJH

Correspondence:

Inward - newsletters from Branches 13/25, 29, 65, 80, 86.

Chris Stabler acknowledged Positive Ageing Expo application with 'Many thanks'.

The correspondence report was received. ZL1TO / ZL1PJH

Finance:

Expenditure:

Power bill Contact Energy \$49.72 has been processed earlier today.

Spending in month to 24 April – Counties Firewatch \$69 – Contact Energy \$45.96

The finance report was received, and payment ratified.

ZL1TO / ZL1BQA

Reports:

AREC - James Allan Rally, has been reported in QUA.

Jock White Field Days. The logs are with Contest Manager.

St Patrick Day, Queen Street Auckland, ZL1TO and ZL1LL.

A message has been received from Andy ZL1COP relaying a request for amateur volunteers to assist Waikato SAR.

The AREC section offers heartfelt gratitude to Ian ZL1PZ who has given many years service to AREC on car rallies. Ian wishes to be excused future rally duties.

The AREC report was received. ZL1TO / ZL1PJH

Peter ZL1PJH reported that the Morse sessions Monday, Tuesday, Thursday and Friday at 7:30 pm are much louder and clearer than before, now that they are on the National System.

General Business:

May general meeting will include preparations for NZART Conference, with its single remit. Ted will bring along some of the projects upon which he has been working.

Junk sale. More offerings are being received. The committee is to decide, as things are looking more promising. The most likely date is the 3rd Tuesday in July.

Mike ZL1UOM remarked on four letter suffixes.

Bob ZL1BBZ observed that there are two different advertised times for this meeting. The phone book and clubhouse front wall have an incorrect time.

The meeting closed at 1956 hrs

Reports:

AREC - Tom ZL1TO asked that members of the section advise what training they seek to be included in a training scheme. The AREC report was received. Tom to check with Steve Davis to see what courses are available.

General Business:

Topics for coming general meetings

May. Business at the general meeting will include preparations for NZART Conference, with its single remit – on changes to the section on AREC. Ted will bring along some of the projects he has been working on – together with a presentation.

June. Neil Anderson ZL1NZ to talk about CW.

Junk sale - The quantity of offerings being received is increasing. The committee decided to go ahead with the sale on Tuesday 20 July. There has been an approach from Barbara Knowles to ask if we would sell a variety of cables from Bob's shack in the event we do have a sale. Tom will email a reply to Barbara on the morning after tonight's meeting. Advertising of the Junk Sale is to go ahead.

It was agreed that Ian ZL1PZ rigs should be shifted to the shack, and set up so that they can be shown off.

Life membership. Gary ZL1WGL brought up this topic. Our current life members are Ian ZL1PZ and Bob ZL1BBZ. Members were asked to put thinking their caps on with regard to the criteria for Life Membership.

There was a general discussion on banking procedures.

The meeting closed at 2055 hrs

13/25. Cover - promotion photos of coming NZART Conference. Good prizes in conference raffle. Conference registration form at <https://karl125.wixsite.com/nzartconference> Using WSPR logs in search for Flight MH370. Conference programme. Offers sought on items in a for sale list. Manawatu ham cram August 7/8.

29. Workshop 17 April for new hams. SAR exercise Riverhead Forest 17 April. ZL1MIT involved in search for person missing from rest home - found OK. Next cram classes May 29/30. List of regular nets in the Auckland area. Maps of repeater coverage of Auckland area repeaters.

65. Meeting 5 May with topic satellite communication for hams ZL1AOX. 12 May building flowerpot antenna. Papakura Streetfest 6 May 10 am to 2.00 pm with PRC involved. Article 'Are you ready for the future'. An IC7300 control box. Stars composed of antimatter. NZART Conference programme. ZL2SEA new hamshack. REG sale 15 May.

66. Cover – two vector network analysers. Meeting 10 May on remits and delegates to conference plus VNA

applications. Incorporated Societies Bill making progress. Go ahead given for new cable trays at Klondyke. Spectrum 50 years ago. Antenna splitters. Circuit board and RG58C/U coax recently arrived at trading table.

80. Meeting 12 May. Earth Station working bees.

86. Sinking of the Kaitawa by Neil ZL1NZ 16 May. Getting the data rack to Musick Point. Why don't they make a clock that tells the time? Ann ZL1BFB retiring as Secretary/Treasurer.

What goes around comes around

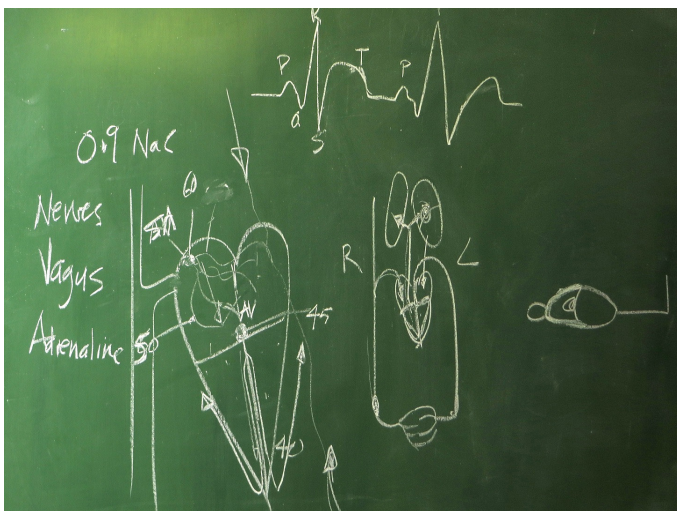
A recently discovered asteroid was traveling in a solar orbit similar to that of planet earth.

Earth had captured the tiny object from its orbit around the Sun and was expected to keep it as a temporary satellite for a few months before it escapes back to a solar orbit. But the object is likely not an asteroid; it's probably the Centaur upper stage rocket booster that helped lift NASA's ill-fated Surveyor 2 spacecraft toward the Moon in 1966.

This story of celestial catch-and-release began with the detection of an unknown object by the NASA-funded Pan-STARRS1 survey telescope on Maui in September 2020. The orbit of 2020 SO around the Sun was very similar to that of Earth: It was at about the same distance, nearly circular, and in an orbital plane that closely matched that of our planet.

The heart in action

Below are illustrations, from the April general meeting talk, showing the path of electrical activity in the heart from several important nodes. The picture at right explains how CPR works.



NZART Conference, June 5 and 6

The Napier ARC (Branch 25) is organizing and running the 2021 NZART annual Conference and AGM. We have set up a small information website to promote the event at: <https://karl125.wixsite.com/nzartconference>

Please fill in the registration form (two for couples) completing the bottom box with the options chosen. Work out the cost and enter the amount due. We will correlate this with bank statements. I will confirm receipt of registration and payment. Registrations close Friday May 14. Late registrations will be accepted only with the late payment fee. Looking forward to seeing you June 5 and 6, Queen's birthday weekend in Napier.

Regards and 73
Karl Matthys ZL1TJ,
Secretary, Napier ARC, Branch 25 NZART.

There is always space available in the newsletter for YOUR article. How about giving it a go?

Neighbours

Peter Henderson ZL1PJH

In 2018, Jane Greaves of Cardiff University asked one of her colleagues a question: What gas would best show signs of life in another planet? Her colleague, Emily Drabet-Munder, an expert on penguin poo, thought the most likely candidate was phosphine. On earth phosphines can be produced in industry or laboratories but most arise from decaying organic matter. Emily Drabet-Munder had been able to find a bacteria that lived in penguin guts that produced phosphines in measurable quantities.



Jane next applied to radio telescopes around the world in the hope they would point their antennae at other planets in the solar system and find 'life' through finding phosphines. She got a number of refusals but eventually James Clark Maxwell telescope in Hawaii agreed to look at

Venus for her. What Jane and Emily hoped for was a 'dip' in the absorption level of different light frequencies which would correspond to the known absorption frequency of phosphines. After months of analysis of James Clark Maxwell data, she thought she could detect such a 'dip' in the results back from Venus.



Another Cardiff expert, William Bains, tasked himself with explaining the presence of the phosphines on Venus. He reviewed the known gases on the planet and combined them in as many as 75 different ways. None of his combinations produced as much as a 10,000th of the phosphines that James Clark Maxwell was detecting.

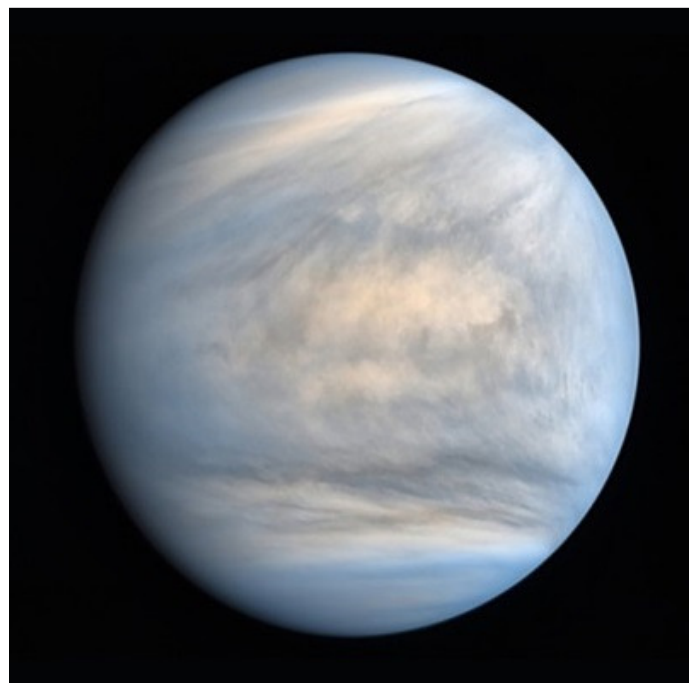
Back on earth phosphines lasted a few hours at most. So what produced them in such large amounts on Venus? It could be either some radically different chemical process from anything known on earth or, improbably, life. The term 'improbably' is there because Venus is a hell-hole with huge pressures, hurricane winds, blazing temperatures and sulphuric acid clouds.

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Jane then approached ALMA telescope in Chile. The Atacama Large Millimeter/submillimeter Array is an astronomical interferometer of 66 radio telescopes in the Atacama Desert of northern Chile, which observes electromagnetic radiation at millimeter and submillimeter wavelengths. It took only one and a half hours for this telescope to confirm a 'dip' in the light spectrum absorption at the phosphine frequency. ALMA also confirmed this 'dip' occurred around the equatorial regions of Venus, not at the poles.

Jane speculates that at atmosphere altitudes of 50 km or more, bacteria could survive in the lower pressure and cooler temperatures. The bacteria must protect itself against sulphuric acid clouds, even at these heights, so must be a



completely different kind of life to anything we see on our hospitable planet. She hopes one day we send a robot craft over Venus to engage with these newly discovered neighbours in our solar system.

NZART

It's not them

It's us