



ZL2VH Newsletter – December 2024

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President's Report

As outlined in the last newsletter, and follow-up email that was sent out the two new DSTAR repeaters were turned on, on Wednesday 6 November 2024. The Mix Mode of DV/FM was also enabled. This means that the two repeaters – 5425 and 860 can operate as DV and FM repeaters. They cannot cross talk with each mode so its DV in – DV out or FM in – FM out. DV has priority over FM so until there is at least a 5 second break in DV so if two people are talking on DV then an FM transmission is blocked. Also, there is a requirement for a Tone to access the repeaters – 151.4 Hz. Initially this was enabled to stop any button pushes realising that they can now use the DV repeaters with FM. To allow you to monitor these repeaters in FM, on the next visit to Climie a Tone (151.4 Hz) will also be enabled on the repeater output. For those monitoring these repeaters with an FM only transceiver – this way you shouldn't be annoyed by the DV transmissions. (**Note:** 860 has a -7 MHz offset)

On Saturday 16 November 2024, the KiwiSDR was reinstalled on Climie by Simon ZL2BRG and Ben ZL4BDG.

The SDR has been moved to another cabinet in the South Hut, away from all the repeaters. Various cables have all been re-routed under the floor to enable this. The current End Fed HF Antenna is still in good working condition, having

been tested prior to re-connection. Also included but not yet operational, Simon has built a VHF and above receiver. Discussions are taking place to also build a discone antenna (Climie proof) for mounting in the future. More information about this receiver will be announced when ready the install the antenna. It will also be accessible from the Internet.

The KiwiSDR can be accessed from this link: <http://123.255.47.67:8073>

The next trip to Climie is booked in for Sunday 15 December 2024. This is for installation of the 10 GHz Beacon, AC mains filter installs on the 730 PSU, preparation of the two Huts for a repaint in the new year, an audit of the South Hut for a new site Agreement with Greater Wellington Regional Council for be completed in the new year.

The Club's caravan is now ready for Jock White Field Day on 22/23 February 2025, being registered and warranted. A location has yet to be decided on but will be announced once known. Not sure it will a one or two-day affair.

Have you seen the second MFJ Power Supply:



A recent audit of the clubrooms has managed to locate all the club's assets, but we are missing one of the MFJ Power Supplies as shown above. We have the box it came in but are missing the actual power supply. Does someone have this at home and forgot to return it? If so, then please bring it back. It would be disappointing if the item is "lost" to the club.

STOP PRESS: Field Day Contest is running next weekend 7/8 December 2024. All bands 6m and above. <https://www.nzart.org.nz/activities/contests/vhf/>

The contest is called Field Day Contest, but you don't have to be a Field Day Station to participate or send in a log.

All stations can take part and even home stations can win the contest as we've seen in the last two contests.

Repeater Report

Repeater: Status

Climie KiwiSDR	On Air
10 m Beacon (28.229 MHz)	On Air
3 cm Beacon (10368.275 MHz)	Off Air - pending reinstallation on GNS pole.
1292 (23 cm)	On Air. SWR check pending next visit.
D-Star 5425, 860	5425/860 On Air.
730	On Air. SR-250C PSU mains filter to be fitted at next visit to further reduce SDR noise. SWR and output power re-check next visit.
395 (6 m)	On Air.

AMSAT News Service: ANS-329

In this edition:

- * The Space Age, Morse Code and STEM Innovation
- + ASRTU-1 Designated ASRTU-OSCAR 123
- * CubeSatSim Kits Available Once Again (Revised)
- * New Chinese Satellite Completes Frequency Coordination
- * Update on PARUS-T1A Satellite

- * Air Leak on ISS Russian Module Is Getting Worse
- * Changes to AMSAT-NA TLE Distribution
- * Space Station Raises Orbit Avoiding Orbital Debris
- * ARISS News
- * Upcoming Satellite Operations
- * AMSAT Ambassador Activities
- * Satellite Shorts From All Over

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT, the Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analogue and digital Amateur Radio satellites.

The news feed on <http://www.amsat.org> publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to: ans-editor [at] amsat.org [1]

You can sign up for free e-mail delivery of the AMSAT News Service Bulletins via the ANS List; to join this list see:

<https://mailman.amsat.org/postorius/lists/ans.amsat.org/>

AMSAT OSCAR-7 50TH ANNIVERSARY — THE SPACE AGE, MORSE CODE AND STEM INNOVATION

It has often been reported that the oldest satellites still working in space are the space probes Voyager 1 and Voyager 2. The Voyagers were both launched in 1977 to take advantage of the planetary alignment called, back then, the “Grand Tour”. Their images changed the human vision of our solar system. But, are they really the oldest, still functional spacecraft in outer space? What if we include spacecraft that remained behind in Earth Orbit? Is it even believable that the oldest still working satellite in space wasn’t even designed or operated by NASA, USAF, ESA or any other space agency? What if this satellite was designed by Radio Amateurs and the final assembly occurred in a basement laboratory not far from Goddard Space Flight Center?

Then all things considered, AO-7, a SmallSat launched on November 15, 1974 is the oldest working satellite and is still providing service to hundreds of Amateur Radio operators around the world. In its first life, AO-7 lived a very healthy lifetime of 6.5 years. Not to over-state the case, AO-7 outlived both its commercial and government co-passengers launched by Delta-104.

In late 1980, AO-7's poor, abused, NiCad battery began to show serious signs of increased series resistance. This was a sure sign to AMSAT command stations that the end was in sight. The cells had been originally matched for capacity by NASA. And indeed, the cells all failed within a matter of weeks of one another.

AO-7 stayed asleep for 21 years, to the nearest month. Then one day AO-7 woke up again. This was only possible if something caused an open circuit in the battery.

A very active user of AO-7, Pat Gowain G3IOR, from the UK, made a telephone call to Perry Klein, W3PK , (first AMSAT President and designer of the VHF/HF transponder). This was on June 21, 2002. Pat wondered if we had launched a new LEO spacecraft. He was hearing Morse Code Telemetry again on the old beacon frequency of AO-7. He played Perry a tape recording. It sure sounded like AO-7 telemetry!

Many radio amateurs who were satellite enthusiasts very quickly began to observe the signals from AO-7 and the second life of the "Sleeping Beauty" of satellites began.

Over the next three weeks in November AMSAT News Service will honour this historic achievement with a series of short articles highlighting the life of AMSAT OSCAR 7. In the meantime be sure to visit a special page on the AMSAT website where you will find a collection of AO-7 articles and links at www.amsat.org/amsat-ao-7-a-fifty-year-anniversary/.

New Shark RF device available

The M1KE is our latest battery powered, handheld WLAN IP transceiver designed for both amateur radio and unlicensed use. Besides chatting with other M1KE users nearby, you can talk to people living on the other side of the world very easily. The M1KE combines the features of a conventional digital

transceiver (such as a DMR or other digital radio) and a hotspot like the [openSPOT4 Pro](#) in a single device – offering even more beyond that and ensuring exceptional ease of use.

<https://www.sharkrf.com/products/m1ke/>



SDR Report

From: Radio Galiza <radiogaliza@radiogaliza.gal>

Sent: Tuesday, November 19, 2024 06:50

Subject: THANKS for the SDR

Thank you very much to your club for getting your SDR back up and running. It's a pleasure trying to reach your SDR with my 200 watt and an omnidirectional antenna.

Since about a year ago it is very common to get this communication on 11m (27,500) despite not being able to find a New Zealand station often.

I'm from Galiza, a country in the northwest of Spain, just in our respective antipodes. I live in a little village, Baralla, between mountains about 1.000 meters high. A big hug and thank you again.

Lois Toirán
30 ACA 69
www.radiogaliza.gal

EME Newsletter

Latest EME Newsletter for November 2024:

<https://eme.radio/component/content/article/432-and-above-2024-11>

D-STAR QSO Party 2024

A promotional banner for the D-STAR QSO Party 2024. The background is dark blue with a glowing globe and circuit-like patterns. The text is white and yellow. At the top, it says 'D-STAR® QSO PARTY 2024' in large white letters, followed by 'Invitation to the Biggest D-STAR QSO PARTY!' in yellow. Below that, it says 'JARL (The Japan Amateur Radio League) authorized event' in small white text. A central box contains the dates: '2024 December 27th 0:00 UTC' and '2025 January 5th 23:59 UTC' with a yellow arrow pointing from 2024 to 2025. At the bottom, it says 'Don't forget to add to your seasonal activity list. Join D-STAR QSO Party 2024 for a relaxed holiday communication festivities. Exchange pictures for quicker prize eligibility!' in white text.

Don't forget to add to your seasonal activity list.

Join D-STAR QSO Party 2024 for a relaxed holiday communication festivities.

Exchange pictures for quicker prize eligibility!

The following link will take you the detailed information page:

<https://www.icomjapan.com/event/dqp2024/>

New club web site

The club has a new web site located at <https://zl2vh.nz> This web site for those eagle-eyed amongst you this has been advertised on the masthead at the top of this newsletter (and some earlier issues). All the information from the old web site has been copied across to the new one. Please update your bookmarks to the new site as the old one will not be updated anymore. The IRLP Node and NZART Branch directory have also been updated as well.

Upper Hutt Amateur Radio Club



Home D-STAR News Repeaters Beacons Contact



ZL2VH: Upper Hutt Branch 63 NZART

ZL2VH is the call-sign for Upper Hutt Branch 63 NZART. We are the Upper Hutt Amateur Radio Club. We're involved in a wide range of activities associated with amateur radio, from basic radio operation and volunteer activities to radio theory, use of new digital communications methods and experimentation.

QST63 the club's newsletter is now back as a monthly release, on the first day of the named month - November 2024 was released on 1 November 2024, etc. The D-Star Newsletter is when information to share is available and as such has a less frequent release date.

Come along to a meeting - see the details in the footer below.

Latest Newsletters:

- [QST63 November 2024](#)
- [QST63 October 2024](#)
- [QST63 September 2024](#)
- [QST63 August 2024](#)
- [QST63 July 2024](#)