



QST63

WWW.ZL2VH.ORG.NZ

NEW ZEALAND ASSOCIATION OF RADIO
TRANSMITTERS - BRANCH 63 UPPER HUTT

Branch 63 Clubrooms
Park Street, Upper Hutt



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President's Report

For members subscribed to QST63, you will receive from time-to-time additional emails from the club's executive on matters such as upcoming events, items for sale or purchase, or simply items of interest. If you have chosen to unsubscribe from these emails, then we have no way to contact you or keep you informed. We will endeavour to keep the number of emails to a minimum so as not to flood your inbox.

The club also operates on social media namely Facebook and X (formerly Twitter). Postings on these sites will also occur from time to time but less frequently. If you are using these mediums then subscribe to also receive updates.

You may hear ZL2MAE on the air from time-to time. This is Annalise from AREC (based at NZART HQ) who recently passed her amateur licence exam. She is building towards her 50 contacts/3 months requirement. So, give her a call if you hear her on the local analogue and DMR repeaters.

Repeater Report

Repeater: Status

Climie KiwiSDR	Off Air – pending mounting in a 1U rack, and re-install on a future visit.
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.

Icom's IC-7300 HF Transceiver Hits 100,000 Unit Sales in the Global Market



IC-7300



Since its debut in January 2016, Icom's IC-7300 HF Transceiver has sold over 100,000 units globally. More than half of these sales are the USA version, which complies with FCC regulations and primarily targets the North American market.

The IC-7300 introduced an innovative RF direct sampling system, a first for Icom's amateur radios. RF signals are directly converted to digital data and

processed in the FPGA (Field-Programmable Gate Array). This approach combines high performance with a simplified circuit design within a compact form factor. The integrated real-time spectrum scope and the waterfall function enhance receiver performance to increase QSO opportunities. These features were typically found in high-end models. The IC-7300 set the benchmark for performance and value and was warmly received by a diverse range of HF radio enthusiasts as the sales results show.

“We are delighted that the IC-7300 has found strong support from customers worldwide,” said the engineer of this products. “The RF direct sampling transceiver was a significant challenge, but our engineering efforts allowed us to balance compactness and high-performance for our customers. The IC-7300 is truly groundbreaking in amateur radio technology”.

International Sales Department General Manager added “The IC-7300’s popularity has been widely accepted in global markets. It has been well received by broad range of amateur radio users, from beginners to experienced operators, thanks to its reasonable price, superior performance, and extensive features. As a long-standing, best-seller product in our lineup, we will continue to promote the IC-7300 to meet ongoing demand”.

ZL Meteor and Aircraft Scatter observations

1) 2m Band Meteor scatter contacts have been observed between ZL4SY, ZL4ES and ZL1HD.

On VKSpotter [<https://vkspotter.com>] contacts are listed like this:

ZL4SY in RE43 144.260000 MHz MSK144 +21
Spotter: ZL1HD in RF82BH @209° 1143.3 Km
Prop: Meteor scatter.

ZL4ES in RE54 144.260000 MHz MSK144 +16
Spotter: ZL1HD in RF82BH @205° 968.3 Km
Prop: Meteor scatter.
5 watts TX power from Richard +16

ZL1HD RF82BH ZL4SY RE43VO39
144.260000 MHz MSK144 +10

Prop: Meteor Scatter 1096.4 kms
TNX for the QSO Peter.

Some stations are using low power and MSK144 digital mode via WSJT-X.

2) I have also observed that ZL stations QSO via aircraft scatter.
Wellington to Dunedin contacts via A320 flight on SSB.
ZL2YW RE78JP ZL4ES RE54KT 144.220000 SSB ACS 531.3 kms

Beacon reception confirmed to be aircraft scatter.
ZL2MHF RE78MU ZL3ADC RE66HM 28.229000 BCN ACS 331.5 kms

VK Beacon - ZL2ADC 6m.
VK2RSY QF56MH ZL3ADC RE66HM 50.289000 BCN ACS 2159.3 kms

It is great to see the amateur radio activity, around ZL, not centred on Repeaters. The possibilities are endless to the activity available out there.

EME is also a big activity worldwide, as seen from the links in our Branch 63 newsletter.

73 and good DX. John ZL2TWS

EME News

Latest EME newsletter updates:

The EME 432 and above Newsletter Editor AL KATZ (K2UYH) went SK 20th June 2024. <https://www.nitehawk.com/rasmit/em70cm.html>

Moon-Net forum members are united in continuing to produce an ongoing newsletter. Latest replacement version is here: <https://www.nitehawk.com/rasmit/NLD/eme2408.pdf>

The 144MHz EME Newsletter continues from DF2ZC.
<http://www.df2zc.de/newsletter/>

Manawatu Amateur Radio Society Longburn Table Sale

Saturday 5th October 2024 at 10:00 hours

The first weekend of October we will have our annual Longburn Table Sale. Doors open for sellers at 08.30hrs and the rope will drop to start trading at 10:00 hours.

This year the selling area will be roped off until 10:00 hours, with only sellers setting up allowed. However, the kitchen and toilet area will be open beforehand.

The usual kitchen food, along with hot and cold drinks will be available for sale. Costs for a table of your own to sell your surplus goods:

- Full Table \$25.00
- Half Table \$15.00

Please have these booked and paid for by Friday 27 September 2024.

For further details or to book a table email: tablesale@zl2ko.org.nz

The preferred method of payment is via internet banking to our club account:

- Account Name: Manawatu Amateur Radio Society
- Account Number: 03-1522-0161009-000

Use the Following details when making payment:

Particulars: Table Sale

Code: *Your Name*

Reference: *Your Callsign*

Please Note: This is a cash only event, please bring small change if possible.

Location: Longburn Community Centre, 17 Ngaire Street, Longburn (Off SH56)

Icom news: new radios announced

ID-52A/E PLUS

The ID-52A/E PLUS Empowered with Enhanced Bluetooth® Functionality and Versatile USB Type-C™ Port. The ID-52A/E PLUS 60th Anniversary Limited Edition is also released. Overseas suppliers are expecting models in stock in November. <https://www.icomjapan.com/lineup/products/ID-52APLUS>



The ID-52A/E PLUS has upgraded functions from the ID-52A/E. Terminal mode and Access Point mode, which previously required a cable connection, can now connect to an Android™ device*3 via Bluetooth® technology. In addition, dual operation of Terminal mode and Simplex/Repeater operations is now possible. While operating in terminal mode, you can quickly respond by switching to regular RF operations. Moreover, the USB connection terminal has been changed from USB micro-B to more versatile USB Type-C™ port for improved worldwide standardized usability.

The ID-52A/E PLUS 60th Anniversary Limited Edition will have a total limited production of only 2,400 units worldwide. It features a bright metallic-coloured body and comes with an exclusive hand strap engraved with our 60th Anniversary logo. It will also be delivered in a special packaging with the 60th Anniversary logo.

IC-7760



The IC-7760 offers a new “innovative Shack Style” consisting of a full control head with separate RF deck, connected through a control cable for greater installation flexibility. The supplied control cable is 3 m, 9.8 ft long, and by using a commercially available LAN cable, the RF deck can be installed in a more remote location. Furthermore, the control head and RF deck can be connected through a wired home LAN connection for remote operation. This simple configuration does not require a PC and can be easily operated from nearly anywhere in the home if a LAN connection is available.

Main and Sub dual displays with touch screen function are provided for improved visibility of information and smooth operation. The 7-inch main display centralizes information necessary for operation, such as Main/Sub frequencies and the setting/operating status of each function. The newly adopted 2.4-inch sub-display shows filter effects, various meters, and band stacking register keys.

DIGI-SEL (Digital Pre-selector) and the preamp can now be used together. DIGI-SEL prevents suppression of strong out-of-band signals, while the preamp improves receiver sensitivity. It also maximizes the dynamic range of the A/D converter to avoid signal overflow.

The IC-7760 offers a new Innovative Shack Style, combining 200 W of high output power with clean signal transmission assisted by the Digital Pre-Distortion feature, and convenient functions to support comfortable operation, making it ideal for contests and DX hunting.

<https://www.icomjapan.com/lineup/products/IC-7760/>



Yaesu news: replacement FT-818 announced the FTX-1F

Yaesu announced the FT-817, a portable radio (5W output) for the HF to 430MHz band, at the Ham Fair in August 2000. In February 2018, they announced the FT-818ND, a renewed model with increased battery capacity and a maximum output of 6W, and it has long led the "all-band, all-mode portable radio" genre. However, in January 2023, they announced the end of production of the FT-818ND due to difficulty in obtaining parts, and no successor model has been announced since then.

The "FTX-1F", which was announced at Ham Fair 2024, covers the HF to 430MHz bands in all modes including C4FM digital and supports simultaneous reception of two waves, making it a long-awaited portable device for Yaesu fans. No price yet. Availability is 2025.



The main features of the FTX-1F are as follows:

- Portable transceiver using SDR technology
- HF to 430MHz bands can be operated in SSB/CW/AM/FM/C4FM digital formats
- Fully compatible with APRS
- Equipped with a 2-wave fully simultaneous reception circuit, it allows for a variety of operations such as SSB operation on the HF band while citing local stations and C4FM on the VHF and UHF bands.
- Equipped with two BNC antenna connectors on the back. ① For HF/50MHz band, ② For 144/430MHz band



With a 5670mAh lithium-ion battery pack installed, it can operate for 9 hours in SSB mode and 8 hours in FM mode (measured with 6 seconds of transmission, 6 seconds of reception, and 48 seconds of standby), at 6W output. When using an external power source, the output is 10W.



- Equipped with "3DSS (3-dimensional spectrum stream)" that displays information within a band in three dimensions, with frequency on the X axis, signal strength on the Y axis, and time on the Z axis.
- Equipped with a 4.3-inch high-resolution full-colour touch display

- Adopts a duct system with two speakers (30 x 50 mm and 25 x 40 mm) installed on the back of the panel, providing high quality sound and sufficient volume from the front panel
 - Optional auto antenna tuner can be installed on the back
- An optional cooling fan can be installed on the back for comfortable operation of FT8.
- RF front end and low-noise reference oscillator provide amazing multi-signal characteristics
- High-resolution A/D converter and FPGA terminals for high performance SDR receiver circuit
- Effective interference cancellation function with high-speed 32-bit IF DSP
- USB port supports CAT operation, audio input/output, and TX control (convenient for connecting to a PC during FT8 operation)