Fort Purbrook Amateur Radio Club, Fort Purbrook Activity Centre, Peter Ashley Lane, Cosham, Hampshire, PO6 1BJ, United Kingdom

QRP
MUCH MORE FROM A LOT LESS

ROD G4SPS 21 June 2024

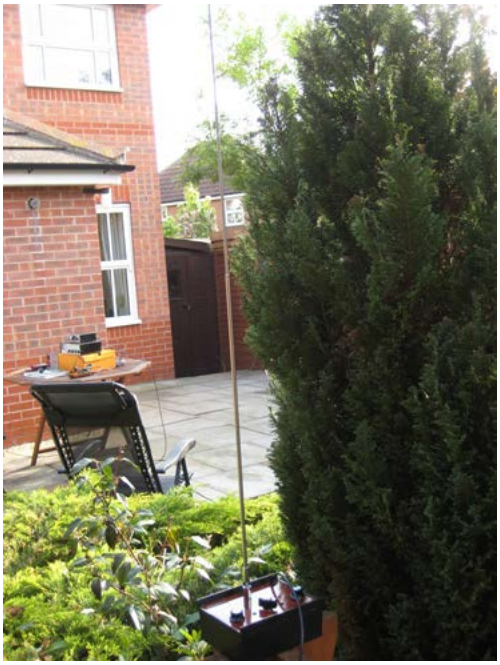
G4SPS operating QRP MFJ Transceiver

QRP INTRODUCTION

In amateur radio, QRP operation refers to transmitting at reduced power while attempting to maximise one's effective range. QRP operation is a specialised pursuit within the hobby that was first popularised in the early 1920s. QRP operators limit their transmitted RF output power to 5 W or less, regardless of mode (some call 10W on Phone QRP) - read more about QRP…

QRP was my own way of going active in amateur radio, after many years as an SWL (short wave listener). Whilst I coveted the well equipped stations of others, I concluded QRP was a challenging but economical route to progress beyond that pre-loved General Coverage Receiver (RX) and random bow antenna.

The newcomer reading the popular radio magazines and listening across the bands could easily be put off; seduced into the conclusion that amateur radio necessitated high finance and the very latest multi-band, multimode, high-powered and most complex commercial black box transceivers and matching antenna arrays. The first photo shows my set-up for operating CW from the patio with a commercial MFJ9020 Single Band 4 Watt Transceiver for 14MHz(20M).



G4SPS operating QRP

HOMEBREW QRP

However, nothing could be further from the truth. QRP lends itself to 'Homebrew', providing the extra satisfaction of building your own simple, affordable equipment. Not only are there an abundance of Receiver and Transmitter designs freely available, but for those new to home construction, there are kits suitable for all levels of ability. It's the ideal way to consolidate radio theory and get a compact station on the air.

For those without the time or experience, a number of reasonably priced basic single band QRP Transceivers for voice (SSB) </=10 Watts or (CW) </=5 Watts. Compact commercial aerials are available for deployment at home or portable (/P). Just select a 'band of interest', for example, 14 MHz (20M) which would afford world-wide communications, and then choose a suitable mode of operation. Historically, CW has been the most popular, but SSB and the newer Digital Modes are common and don't require the further challenge of Morse training.

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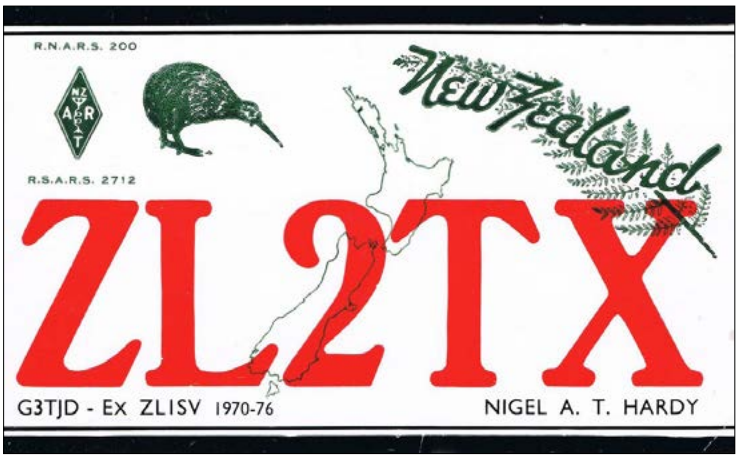
This photo shows my MFJ1621 Portable Antenna tuneable 7MHz (40M) to 10M (28 MHz).



First 4 Watt 14 MHz QRP CW contact with ZL2TX Wellington, New Zealand.

Fort on the Air confirming a 14MHz QRP CW contact with 4Z3C Caesarea, Israel.

QRP QSL CARDS

A couple of interesting 14 MHz (20M) CW 'QSL' cards from my QRP collection where contacts were made using the MFJ Transceiver.

The first: 'Landmark DX' - First 4 Watt 14 MHz QRP CW contact with 'ZL2TX' Wellington, New Zealand.

The second: another 'Fort on the Air' confirming a 14MHz QRP CW contact with '4Z3C' Caesarea, Israel.

INTERESTING LINKS

The G-QRP Club was formed in 1974 and is run entirely by volunteers to promote Low Power Radio. They have a quarterly members magazine called SPRAT.

Sotabeams - Summits On The Air (SOTA) amateur radio supplier offering a host of great products for the Portable / QRP enthusiast.

Kanga Products are an amateur radio supplier offering an excellent range of QRP kits and components.

SDR-Kits are an amateur radio supplier offering a range of products, including the KN-Q7A Single Band 40m Transceiver Kit.

Walford Electronics are an amateur radio supplier offering a range of kits at Simple, Intermediate and Advanced construction level. They also offer a range of accessory kits. A Construction Club can be joined, with a quarterly publication called Hot Iron.

Rod G4SPS