

STARLITE

THE JOURNAL FOR THE STOURBRIDGE AND DISTRICT A.R.S.



**G6OI
G6SRS**



ISSUE: AUGUST 2021



G4CVK

**STOURBRIDGE & DISTRICT AMATEUR RADIO SOCIETY
INCORPORATING
OLDSWINFORD HOSPITAL SCHOOL RADIO CLUB**

MEETINGS NORMALLY HELD AT

**OLDSWINFORD HOSPITAL SCHOOL
HEATH LANE
STOURBRIDGE
[8:00 TO 10:00 PM]**

VISITORS ALWAYS WELCOME

**DURING COVID, THE SOCIETY HOLDS ITS MEETINGS
EVERY MONDAY ON 2M FM AND ZOOM VIDEO**

RSGB AFFILIATED SOCIETY

STARLITE

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StARS Website URLs:-

www.g6oi.org.uk
<http://g6oi.ross-lewis.co.uk>

StARS Facebook Page:-

<https://www.facebook.com/groups/stourbridge.ars/>

Forthcoming Meetings

| | |
|-----------------------------|--|
| August 2 nd | Club Net 145.325MHz FM & Zoom Video. 8pm |
| August 9 th | Club Net 145.325MHz FM & Zoom Video. 8pm |
| August 16 th | Kite Aerials Video On Zoom. 8pm |
| August 23 rd | Club Net 145.325MHz FM & Zoom Video. 8pm |
| August 30 th | Club Net 145.325MHz FM & Zoom Video. 8pm |
| September 4/5 th | SSB Field Day ??? TBC |
| September 6 th | Club Net 145.325MHz FM & Zoom Video. 8pm |
| September 13 th | Club Net 145.325MHz FM & Zoom Video. 8pm |
| September 20 th | Zoom Presentation By A Guest Speaker. 8pm |
| September 27 th | Club Net 145.325MHz FM & Zoom Video. 8pm |
| October 4 th | Club Net 145.325MHz FM & Zoom Video. 8pm |
| October 11 th | Club Net 145.325MHz FM & Zoom Video. 8pm |
| October 18 th | Zoom Presentation By A Guest Speaker. 8pm |
| October 25 th | Club Net 145.325MHz FM & Zoom Video. 8pm |
| November 1 st | Club Net 145.325MHz FM & Zoom Video. 8pm |

Editor's Comment

The welcome return of the Society's BBQ took place at The Sheepwalks on the evening of the July main meeting. I am unable to say how the event fared, as no-one sent me a report. I, also, believe the Club station was going to be on air, too, but I listened on 40, 20, 17 and 15 metres - I heard nothing! Did it go well? Did you enjoy it? I'm sure those of us who couldn't attend would love to know.

A couple of years ago, I let a local ham borrow my Trio TS120V. Upon its return, there was no power output from the rig. . A couple of repairers commented that they could not effect a repair, so that was that – or so I thought. GOOD NEWS. Thanks to John G3KZG the rig was repaired, as he had a spare power bank. I haven't had chance to try the transmit just yet, but the receiver is still excellent. As most of you will be aware, the old Trio (later Kenwood) receivers were very much more sensitive and selective than their closest competitors.

I receive no information or news from anyone, so have nothing to report on any activities in which we may become involved. Therefore, this issue only contains news and any other information I found on the internet.

You will notice that I have (historically) included SSB Field Day in the calendar. This is not definite and is to be confirmed as to whether we shall enter this year. I'm sure the Committee will make a decision soon.

Ever wondered about Field Days in other countries? Have a look at these two You Tube videos. The first one was sent to me by Jim G4WAO and features Hayden VK7HH's report

How they did Winter Field Day in VK7

<https://youtu.be/Nx41wrFVYvE>

The second one I saw and shows what can be done.

W6VVR ARRL Field Day 2021 (How many stations???)

<https://www.youtube.com/watch?v=ZC-FdIZR6hM>

Roundabout Radio Adventures

Richard Newstead G3CWI, has resumed making content for his popular Radio Adventures YouTube channel. He looks at all aspects of portable radio operating in a lighthearted but informative way.

In his latest video he sets up an HF radio station on a motorway roundabout. What could possibly go wrong?

<https://bit.ly/G3CWI-RR>

Foundations of Amateur Radio

Streaming a dozen repeaters with an RTL-SDR dongle

A while ago as part of my ongoing exploration into all things radio I came across a utility called `rtlsdr-airband`. It's a tool that uses a cheap software defined radio dongle to listen to a station frequency or channel and send it to a variety of different outputs. Originally written by Tony Wong in 2014, it's since been updated and is now maintained by Tomasz Lemiech. There are contributions by a dozen other developers.

The original examples are based around listening to Air Traffic Control channels. I know of a local amateur who uses it to listen to and share the local emergency services communication channels, especially important during local bush fires.

While sophisticated, it's a pretty simple tool to use, runs on a Raspberry Pi, or in my case, inside a Docker container. It's well documented, has instructions on how to compile it and how to configure it.

Before I get into what I've done, as a test, let's have a look at the kinds of things that `rtlsdr-airband` can do.

First of all, it's intended to be used for AM, but if you read the fine documentation, you'll learn that you can also make it support Narrowband FM. It can generate output in a variety of different ways, from a normal audio file, to an I/Q file - more about that at another time, and it can also send audio as a stream to a service like `icecast`, `broadcastify` or even to your local pulse audio server. If that last one doesn't mean much to you, it's a local network audio service, popular under Linux, but it runs on pretty much anything else thanks to the community efforts of many.

So, on the face of it, you can listen to a channel, be it AM or Narrowband FM, and send that to some output, but I wouldn't spend anywhere as much time on this if that was all there was to it.

The software can also dynamically change channels, support multiple dongles, or simultaneously listen to several channels at once and output each of those where ever you desire.

Another interesting thing and ultimately the reason I thought to discuss it here is that `rtlsdr-airband` also supports the concept of a mixer. You can send multiple channels to a single mixer and output the result somewhere else.

Using a mixer, in addition to setting cut off frequencies and other audio attributes, you can set the audio balance for each individual channel. This means that you can mix a channel exclusively to the left ear, or to the right ear, to both, or somewhere in between.

Now, to add one extra little bit of information.

In my location there's about a dozen or so amateur repeaters most of which can be heard at some time or another from my QTH. The frequency spread of those dozen repeaters is less than 2 MHz. A cheap RTL-SDR dongle can handle about 2.56 MHz.

Perhaps you've not yet had the ah-ha moment, but what if you were to define an `rtlsdr-airband` receiver that listened to a dozen amateur radio repeaters - at the same time - and using the audio balance spread those repeaters between your left and right ear, you could stream that somewhere and listen to it.

I'm sitting here with my headphones on, listening to the various repeaters do their idents,

various discussions on different repeaters, a local beacon, incoming AllStar and other links, all spread out across my audio horizon, almost as if you can see where they are on the escarpment, though truth be told, I've just spaced them out evenly, but you get the idea.

My original Raspberry Pi wasn't quite powerful enough to do this in the brute force way I've configured this, so as a proof of concept I'm running it on my main computer, but there's nothing to suggest that doing a little diligent tweaking won't make my Pi more than enough to make this happen.

As for audio bandwidth, it's a single audio stream, so a dial-up connection to the internet should be sufficient to get the audio out to the world.

I will point out that there may be legal implications with streaming your local amateur repeaters to the world, so don't do that without checking.

For my efforts, this is an example of: "I wonder if ..."

As it turns out, Yes you can. As it happens, my next challenge is to use this code on a PlutoSDR where the bandwidth is slightly larger, mind you, I'll have to do some fancy footwork to process the data without overwhelming the CPU, but that's another experiment in my future.

What kind of crazy stuff have you tried that worked?

I'm Onno VK6FLAB

• *This article is the transcript of the weekly 'Foundations of Amateur Radio' podcast, produced by Onno Benschop, VK6FLAB who was licensed as radio amateur in Perth, Western Australia in 2010. For other episodes, visit <http://vk6flab.com/>. Feel free to get in touch directly via email: cq@vk6flab.com*

• *If you'd like to join a weekly radio net for new and returning amateurs, check out the details at <http://ftroop.vk6flab.com/>, the net runs every week on Saturday, from 00:00 to 01:00 UTC on Echolink, IRLP, AllStar Link, Brandmeister and 2m FM via various repeaters, all are welcome.*

Svalbard Operation

Tom, OH6VDA/LA6VDA, will once again be active as JW6VDA from the JW5E club station (<http://jw5e.com/>) in Longyearbyen (JQ78tf) on Spitsbergen Island (EU-026) between October 12th and November 1st.

Activity will be holiday style on various HF bands using SSB and FT8/FT4.

QSL via LoTW, eQSL, ClubLog's OQRS or QRZ.com log. Bureau cards via LA6VDA.

St. Kitts

John, W5JON, has announced he will once again be active as V47JA from his Calypso Bay, St. Kitts, West Indies vacation home, located 200 feet from the Caribbean Sea, between October 4-18th.

Activity will be on 160-6 meters using SSB and FT8.

Equipment is a Yaesu FT1000MP, FT450D and an Elecraft KPA500 Amplifier. John states his antennas are a Mosley Mini32A 10/15/20m, 33' Vertical 10-40m, 35' Top Loaded 80m Vertical, 160m Vertical and 6m 5 element Yagi.

ALL QSLs go to W5JON direct or via LoTW. NO Bureau QSLs. ADDED NOTE: John will also make a side trip to Saint Eustatius Island (PJ5) and Saint Martin Island (FS)

St. Helena Island

Gerry, G3WIP (VK0GB, VK4BGL, VP8DPD), has now received his callsign and will be active as ZD7GB from the main village of Jamestown on St. Helena Island (AF-022).

He is there working as a doctor on the island until September 6th.

Activity will be during his free/spare time on 40-10 meters using SSB and FT8/FT4. Gerry also brought his QO-100 satellite gear with him. His equipment is a FT857 and Atlas-210. Antennas are a vertical that tunes on 20 meter as well as a longwire.

QSL details are not figured out yet.

The Woodpecker becomes a national heritage site

Many of us can still recall the shortwave QRM resembling a hammering woodpecker. Until the nuclear disaster at the Chernobyl power plant in 1986, the 'woodpecker' was a daily nuisance on HF

The woodpecker was a Soviet over-the-horizon radar, designed to detect incoming rockets during a potential attack from the west.

Now the Ukraine has declared the installation known as 'DUGA 1', a phased array of broadband dipoles with a reflector array held up by steel towers and wires, a national monument. The array is over 700m long and 140 meters tall.

Together with the neighbouring ruin of the reactor complex and the abandoned town of Pripjat, the Ukraine wants the 'woodpecker' installation to become part of an UNESCO world cultural heritage site. Declaring it a national monument is the first step in the application process.

Australian 2X1 Callsigns

Great news for the Australian Amateur Radio Cohort after the WIAs affirmative call to action results in 2x1 Callsign announcement, after delays in the implementation of the 2X1 Callsigns for a substantial period of time of around 18 months.

The WIA has received advice that the ACMA (Australian Communications and Media Authority) is intending to release an E-bulletin concerning the AMC (Australian Maritime College) implementation plans for the issue of this class of callsigns in the very near future. Whilst the WIA has not been privy to the specific AMC implementation details, it is believed they differ materially from the approach that has been originally proposed.

This appears to be as a direct result of the WIA offering to help with the implementation after lengthy delays.

The WIA was able to show within days that a system could be up and going and working, an amazing effort by the WIA IT team.

While the AMC did not take up the WIA offer, the WIA still extends its other services when needed to the AMC to help the cause of Australian Amateur Radio, as it does appear they are struggling with the intricacies of the administration of the AR system.

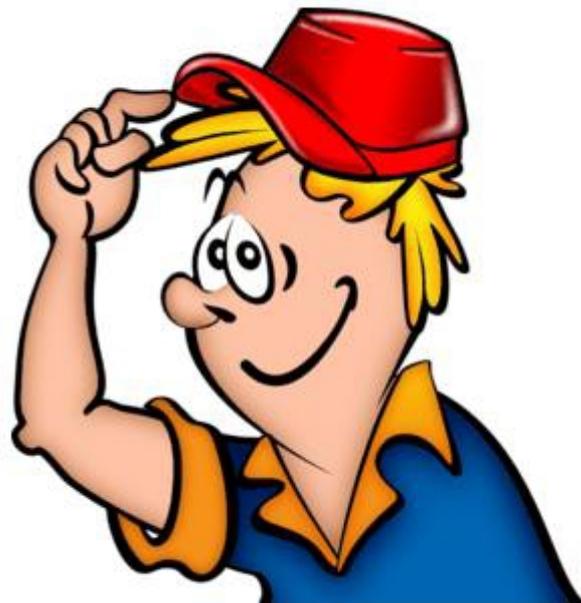
It is in the charter of the WIA to represent all Australian Radio Amateurs and we intend to uphold those high standards set by our predecessors.

WIA congratulates the team working on the 2 X 1 callsign programme implementation.

Trent VK4TS

wia.org.au

**Ham Radio
Is Only an
“Addiction”
If Your Trying
To Quit**



Morse code used by police

The Indian Express newspaper reports Police in Pune are keeping Morse code as a robust stand-by communications mode

The report says:

In the era of satellite communication, which involves transmitting signals into space and back, and internet based systems transferring gigabytes of data in a flash, police have kept alive the age-old system of Morse Code – a primitive method of sending messages in the form of dots and dashes.

Every Sunday, an operator with Pune Police's wireless wing sends a Morse Code message to the office of the Director General of Police, Maharashtra. While this is their way of paying tributes to one of the earliest modes of telecommunication, it is primarily a way of maintaining a robust stand-by mode of message delivery in case all other means of communication fail.

Pune City police have recently started a series of tweets featuring the communication systems used by the police and their evolution till date. On Sunday, Pune Police Commissioner Amitabh Gupta tweeted, "As an ode to the beginning of wireless communications, the Commissioner's Office still uses Morse Code to transmit Messages every Sunday."

Read the full article at

<https://indianexpress.com/article/cities/pune/pune-police-morse-code-satellite-7412482/>

Commissioner Police Pune City

<https://twitter.com/CP PuneCity/status/1416603799532146688>



YOUR COMMITTEE



| | | |
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