

# STARLITE

The Journal for the Stourbridge and district a.r.s.



G6oi  
g6srs



issue: august 2022



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 at norton social club,  
osmaston road, stourbridge

rsgb affiliated society

# STARLITE

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StARS Website URLs:-

[www.g6oi.org.uk](http://www.g6oi.org.uk)

StARS Facebook Page:-

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

## Forthcoming Meetings

August 1 <sup>st</sup>	Club Meeting at Norton Social Club. 8pm
August 8 <sup>th</sup>	Club Meeting at Norton Social Club. 8pm
August 15 <sup>th</sup>	Club Meeting at Norton Social Club. 8pm
August 22 <sup>nd</sup>	Club Meeting at Norton Social Club. 8pm
August 29 <sup>th</sup>	Club Meeting at Norton Social Club. 8pm
September 5 <sup>th</sup>	Club Meeting at Norton Social Club. 8pm
September 12 <sup>th</sup>	Club Meeting at Norton Social Club. 8pm
September 19 <sup>th</sup>	Club Meeting at Norton Social Club. 8pm
September 26 <sup>th</sup>	Club Meeting at Norton Social Club. 8pm
October 3 <sup>rd</sup>	Club Meeting at Norton Social Club. 8pm
October 10 <sup>th</sup>	Club Meeting at Norton Social Club. 8pm
October 17 <sup>th</sup>	Club Meeting at Norton Social Club. 8pm
October 24 <sup>th</sup>	Club Meeting at Norton Social Club. 8pm
October 31 <sup>st</sup>	Club Meeting at Norton Social Club. 8pm

Another month has passed and I still have nothing from the Society to report.

I understand that the BBQ went well and a short overview is on this page.

I recently heard a station on 2m calling from the Sheepwalks. Upon investigation, I discovered that he was Mark **2E0HXP** (formerly M7ENV). Congratulations on your success, Mark.

## **The 2022 BBQ by Tony M6AHW**

The barby went off very well and it was nice to catch up with people again. Wayne M5LLT did his usual Indian street food of which, if you are a fan, is very good.

I arrived on site just after Wayne and Nick G6DQN and set up the portable station using my FT-897D, the 20mtr ground mounted quarter wave vertical and a Diamond 2m/70cms colinear.

Geoff G0KVK logged the QSOs and we used the club callsign G6OI – the first time that has been used for about three years! 20mts was a bit dodgy to start with, but we managed two into Italy and one to Switzerland. Bot bad using 10 watts.

The repeaters, as usual, were very quiet, but managed three simplex contacts with some guys on a net in the east Midlands on 2m and the last one before packing up was on Hubnet, via GB3HN, with another club in the north of England, GX3RCM.

In total, we made 13 contacts.

Let's hope the club can get in a few more events before the end of the year.

## More From The M6AHW Junk Box

The photos are of antennae made from the junk box.

The clip-on window mount took about an hour to make.



The fence post cap colinear took about 15 minutes to make.



The weird-looking 2m and 70cms took a couple of hours at playing about to get the swr right.



# Foundations of Amateur Radio

## *The sun shines on our hobby in unexpected ways*

When you begin your amateur radio journey, one of the first things you learn about that's not directly involved with radios and antennas is the ionosphere and its impact on long distance communications. Immediately after that you are more likely than not to be introduced to the biggest plasma experiment in our backyard, the Sun.

With that introduction comes information about solar flares, solar flux, sunspots, geomagnetic storms, coronal mass ejections as well as the solar cycle, the solar index and associated propagation forecasts.

Before I dig further, I will point out that I'm mentioning this with the ultimate aim for you to get on air and make noise, so fasten your seat-belt and let's go for a ride.

The Sun is big. If it was hollow, it could fit more than a million Earths inside. The Sun accounts for 99.8% of the total mass of our entire solar system. About 73% of the Sun's mass is hydrogen, about 25% is helium and the rest, about 1.69% is made up of all the other heavier elements, both gasses and metals, which add up to around 5628 times the mass of Earth.

The Sun rotates. Counter-clockwise. Since it's mostly plasma, it doesn't rotate like Earth does. The equator takes about 24 days, the poles around 35 days and because its rotating on an angle of about 7.25 degrees from Earth's rotation axis, we get to see more of the solar north pole in September and more of the solar south pole in March.

Earth orbits the Sun in a year, but it's not a circular orbit. We're closest to the Sun in December and furthest from the Sun in June. It takes about eight minutes and 19 seconds for a photon leaving the Sun to reach Earth, but that same photon can take between 40,000 and 170,000 years to travel from the core where two atoms were heated and compressed to fuse into a new element releasing a photon and heat. It takes this long because the photon keeps bumping into other atoms along the way. While we're at it, consuming about 4 million tons of hydrogen per second, the Sun will take another 5 billion years to consume all the available hydrogen.

Whilst we experience the Sun as a source of light on a daily basis, as a radio amateur you know that light is just one tiny part of the electromagnetic spectrum. It should come as no surprise that the Sun is radiating across all frequencies all the time, only some of which is visible to our naked eye.

As an aside, it's interesting to note that our eyes are essentially translating light into electricity, or said differently, your eye converts radio spectrum into electricity, something which your radio antenna also does.

Back to the Sun.

I'm highlighting this level of solar complexity because there's so much talk about the A index, the K index, the SFI, the solar cycle and propagation by experts and amateurs that it's easy to hide behind those numbers and think that a low A between 1 and 6, a low K of 0 or 1 with an SFI above 100 will give you the propagation you're looking for.

If you think for a moment that the weather forecaster has a difficult job accurately telling you if you need to postpone your outdoor activation because of rain or snow, then you can begin to understand just how complex the interplay between the Sun and our ionosphere is. And I haven't even mentioned that the ionosphere isn't static either.

It's important to remember that the cute little weather icons you see on the TV news are just as much an indicator of expected weather as the A, K and SFI numbers are for the Sun and its impact on radio propagation. They give you an idea of what might happen, but it doesn't mean that on any given day something completely random and isolated happens that just affects your station and the path that a radio signal took from your antenna to that other rare DX station.

Just like it would be smart to take an umbrella with you when there's rain forecast, it's also smart to consider the bands you want to operate next time you go on air with a particular solar forecast, but just because it might rain, doesn't mean you're guaranteed to get wet.

So, in other words, wait for it, get on air and make some noise!

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](mailto:cq@vk6flab.com)*

## **Breathing New Life Into A Tired Baofeng UV-5R**

Oh, the Baofeng UV-5R... it is revered or reviled but, in any event, there are lots of them about, and many in use today that have quite a few miles on them. Sometimes errant programming has resulted in some unpredictable anomalies or have resulted in them appearing to be defective.

Based on some experience and feedback, here are some methods that may revive yours. Performing a reset is extremely easy, however if you speak only English and the voice prompts are in Chinese, performing a simple reset or recovering from one may require a little more attention.

To set the language from Chinese to English

1. Press MENU.
2. Press the UP and DOWN arrow key to select VOICE (Menu Item 14).
3. Press MENU to choose VOICE.
4. Press the DOWN arrow key to choose ENG.
5. Press MENU to choose ENG.

NOTE: a VFO RESET only resets the frequency values in VFO mode. To reset the radio back to factory defaults, choose RESET/ALL. A reset should resolve most issues, but may not resolve them all.

Follow the steps below to reset a Baofeng UV-5R, BF-F9, BF-F8+, UV-B6 or UV-82 transceiver.

To perform a VFO reset

1. Turn on the radio and press the MENU button.
2. Press the UP and DOWN arrow key to select RESET (Menu Item 40).
3. Press MENU to choose RESET.
4. Press the DOWN arrow key to choose VFO.
5. Press MENU. The radio will display SOURCE?
6. Press MENU to confirm. The radio will display WAIT... for a few seconds, then beep twice to confirm reset is complete. The radio will revert to Chinese language mode. Reset is complete.

And, at last resort...

To perform a FULL factory reset

1. Complete steps 1 to 3 above.
2. Press the DOWN arrow key to choose ALL.
3. Press MENU. The radio will display SOURCE?
4. Press MENU to confirm. The radio will display WAIT... for a few seconds, then beep twice to confirm reset is complete.
5. The radio will revert to Chinese language mode. Reset is complete.

Some scenarios, such as inoperability due to an incorrect or corrupt image file may not be resolved with a reset and require another resolution. A reset is usually a standard first step when troubleshooting the radio.

A few years ago, someone did a torture test to try to break one. Have a look, you may be surprised:

<https://youtu.be/SyuhllNz8RA>

~ John VE7TI

## **Direct-To-Full Exam - Your questions answered**

Essex Ham have released a video that answers some common questions about the new Direct-To-Full amateur radio exam

They say they've been inundated with questions about the new Direct-to-Full exam, so have released a quick "questions answered" video.

Watch Direct to Full - Your Questions Answered

<https://www.youtube.com/watch?v=wwRDG7Izp00>

Essex Ham Direct-To-Full page

<https://www.essexham.co.uk/rsgb-launches-direct-to-full.html>

## **V47FWX Saint Kitts Island**

Gary, G0FWX will be active again as V47FWX from Saint Kitts Island, IOTA NA-104, 20 - 31 August 2022.

He will operate on HF Bands.

QSL via M0URX, OQRS.

Address for direct QSL:

Tim Beaumont V47FWX 83 Limbrick Avenue Tile Hill Coventry West Midlands CV4 9EX ENGLAND, UK

## **V4/NT5V Saint Kitts Island**

V4/NT5V will be active from Saint Kitts Island, Saint Kitts and Nevis, IOTA NA - 104, 8 - 18 August 2022.

He will operate on HF Bands, CW, SSB, FT8.

QSL via home call.

## **VK0MQ Macquarie Island**

Matt, VK5HZ will be active as VK0MQ from Macquarie Island, IOTA AN - 005, starting Mid June 2022.

He will operate on HF Bands, SSB, FT8, using ICOM IC-7100 transceiver and tuned whip antenna.

QSL via LOTW, ClubLog.

## **Hackaday: Homemade 28 MHz antenna made from foil**

On Hackaday Chris Lott WD4OLP writes about DL1DN's aluminum foil 20cm antenna for 28 MHz (10m) operation

David DL1DN, is an Amateur Radio enthusiast with a penchant for low-power (QRP) portable operations. Recently he was out and about, and found that 10 m propagation was wide open. Not discouraged by having forgotten his antenna, he kludges up a makeshift one using a 20 cm length of aluminum foil.

Read the Hackaday story and watch the video at

<https://hackaday.com/2022/07/02/aluminum-foil-20-cm-antenna-for-10-m-operation/>

## Hackaday: LORA satellite ground station

Chris Lott WD4OLP writes about a DIY low-cost LORA satellite ground station on Hackaday

Embedded engineer Alberto Nunez has put together a compact LoRa satellite telemetry ground station that fits in your hand and can be built for around \$40 USD.

The station receives signals from any of several satellites which use LoRa for telemetry, like the FossaSat series of PocketQube satellites. Even with a sub-optimal setup consisting of a magnetic mount antenna stuck outside a window, Alberto is able to receive telemetry from satellites over 2,000 kilometers distant. He also built a smaller variant which is battery powered for portable use.

Read the Hackaday post at

<https://hackaday.com/2022/07/07/diy-low-cost-lora-satellite-ground-station/>

## IARUMS newsletter - Unknown intruder in 21 MHz band

IARU Monitoring System (IARUMS) Region 1 newsletter reports in June they received a new unknown signal in the 15m band. It was on 21003.5 kHz for several days with long-lasting transmissions, and also received several times around 21122 kHz

The newsletter says:

Although it is probably a radar transmission, as we cannot officially confirm it, we report it as an unknown signal, XXX. TDoA radiolocations taken seem to show the area of Iran for this signal.

The International Amateur Radio Union Monitoring System (IARUMS) Region 1 June 2022 newsletter can be read at

<https://www.iaru-r1.org/wp-content/uploads/2022/07/IARUMS-R1-Newsletter-2022-06.pdf>

Recordings of military transmissions can be found on the Signal Identification Guide Wiki at

<https://www.sigidwiki.com/wiki/Category:Military>

Monitor the short wave bands on-line with a web based SDR receiver at

<http://www.websdr.org/>

IARU Monitoring System (IARUMS)

<https://www.iarums-r1.org/>

## ILLW on track for 25th

200 entries have just clicked over for the 25<sup>th</sup> anniversary of this popular fun event held every year on the 3<sup>rd</sup> weekend in August.

Despite Covid 365 entrants registered last year down around 100 from the usual number. Germany, Australia, the USA and the UK have the most entries but it's good to see entries from smaller countries such as Barbados, Cyprus, Isle of Man, Malta, Trinidad & Tobago.

Entrants are reminded that the objective of the weekend is to have fun and at the same time highlight the plight of lighthouses that suffer from lack of care and maintenance. Showing the public all about Ham radio is also a side benefit. Amassing heaps of contacts as in a contest is certainly discouraged.

The first year the event was held was 1998 and there is a list of participants on the web site. Some of those stations have been in the event every year or close to it. Congratulations go to the two founders Mike GM4SUC and John GM400U for creating this event. Both were members of the Ayr Amateur Radio Group at that time and I am sure they had no idea what would become of their creation. The history of the event is also on the web site.

Come and join the fun and introduce yourself to lighthouses.

Kevin VK2CE and Ted W8TTS

<https://illw.net>



## TM59LH - ILLW 2022

The 'Radio Club F8KGS' will be participating for the very first time in the ILLW - International Lighthouse Lightship Weekend 2022 from Dunkirk, France.

A special callsign has been issued to us: TM59LH.

We will be activating a brand new ILLW reference, the Sandettie Light Vessel (FR0036).

This vessel was taken out of service in 1989 and is currently moored in Dunkirk Harbour as a museum ship and is open to the public.

Space in this vessel is limited but we will try to be active on all modes and all bands.

If you are close to the area and interested in this activation, do not hesitate to stop by to visit and operate our station.

Looking forward to contacting you during this activation, see you on our log!

73, Francisco - F4VSE / CT7AJM

# Ten amateur radio CubeSats deployed from ISS

On July 21, 2022, during a spacewalk by Samantha Cristoforetti IZ0UDF and Oleg Artemyev, 10 amateur radio CubeSats were deployed from the International Space Station

On his website Dmitry Pashkov R4UAB reports:

On July 21, 2022, during extravehicular activities (VKD-54), Russian cosmonaut Oleg Artemyev deployed ten Russian small spacecraft (MKA) - SWSU-55 No. 1 & R-390 (SWSU No. 5), SWSU-55 No. 2 (SWSU No. 6), SWSU-55 No. 3 (SWSU No. 7), SWSU-55 No. 4 (SWSU No. 8), SWSU-55 No. 5 (SWSU No. 9), SWSU-55 No. 6 (SWSU No. 10), SWSU-55 No. 7 & R-390 (SWSU No. 11), SWSU-55 No. 8 (SWSU No. 12), "Tsiolkovsky-Ryazan 1" and "Tsiolkovsky-Ryazan 2" according to the program of the space experiment "Radioskaf".

The SWSU series satellites were developed at the Research Institute of Space Instrumentation (part of Roscosmos) and radio-electronic systems of southwestern State University (SWSU). The main developer of the SWSU series satellites is Egor Shilenkov (UB3WCL), Candidate of Technical Sciences, Director of the Center for Space Instrumentation, Advanced Research and Development of Southwestern State University.

The mission of the SWSU series satellites is to create a peer-to-peer information network. Within the network, retransmission and parallel transmission to the ground monitoring point are organized.

- Study of the Earth's magnetic field.
- measurement of the noise of the radio broadcast in outer space.
- transmission of photos (SSTV) and voice messages (AUDIO) to radio amateurs around the world. For each satellite, a personal phrase will be selected, which is translated into 8 different languages.

The Tsiolkovsky-Ryazan 1/2 satellites have special radio transmitting equipment designed to perform the scientific task of calibrating the sensitivity of radio telescopes of the Pushchino Radio Astronomy Observatory of the AstroSpace Center of the Lebedev Physical Institute of the Russian Academy of Sciences (PRAO ACC FIAN, [www.prao.ru](http://www.prao.ru)). Also, these satellites can emit specialized radio signals to study the effects of the propagation of radio waves through the ionosphere using radio receiving equipment, which is supposed to be manufactured at the RSRTU and used as part of the radio telescopes of the PRAO ACC FIAN.

The Radioskaf space experiment is carried out within the framework of the student program on space education of the youth of Russia and implements projects for the development, training and launch of experimental ultra-small spacecraft for various purposes in the process of extravehicular activities of cosmonauts. The director of the experiment "Radioskaf" is RSC Energia named after "S.P. Korolev".

Frequency SWSU-55 No1 & R-390 (SWSU No5)

- Call Sign: RS10S
- Telemetry: 437.050 MHz 1200 bps . AX25 AFSK;
- Payload: 437.050 MHz 1200/2400/4800 bps . AX25 AFSK, SSTV, AUDIO, TEXT;

#### Frequency SWSU-55 No2 (SWSU No6)

- Call Sign: RS11S
- Telemetry: 437.050MHz 1200 bps. AX25 AFSK;
- Payload: 437.062 MHz 1200/2400/4800 bps . AX25 AFSK, SSTV, AUDIO, TEXT;

#### Frequency SWSU-55 No3 (SWSU No7)

- Call Sign: RS1S
- Telemetry: 437.050 MHz 1200 bps . AX25 AFSK;
- Payload: 437.075 MHz 1200/2400/4800 bps . AX25 AFSK, SSTV, AUDIO, TEXT;

#### Frequency SWSU-55 No4 (SWSU No8)

- Call Sign: RS2S
- Telemetry: 437.050 MHz 1200 bps . AX25 AFSK;
- Payload: 437.082 MHz 1200/2400/4800 bps . AX25 AFSK, SSTV, AUDIO, TEXT;

#### Frequency SWSU-55 (SWSU No9)

- Call Sign: RS3S
- Telemetry: 437.050 MHz 1200 bps . AX25 AFSK;
- Payload: 437.100 MHz 1200/2400/4800 bps . AX25 AFSK, SSTV, AUDIO, TEXT;

#### Frequency SWSU-55 No6 (SWSU No10)

- Call Sign: RS4S
- Telemetry: 437.050 MHz 1200 bps . AX25 AFSK;
- Payload: 437.087 MHz 1200/2400/4800 bps . AX25 AFSK, SSTV, AUDIO, TEXT;

#### Frequency SWSU-55 No7 & R-390 (SWSU No11)

- Call Sign: RS5S
- Telemetry: 437.050 MHz 1200 bps . AX25 AFSK;
- Payload: 437.1125 MHz 1200/2400/4800 bps . AX25 AFSK, SSTV, AUDIO, TEXT;

#### Frequency SWSU-55 No8 (SWSU No12)

- Call Sign: RS6S
- Telemetry: 437.050 MHz 1200 bps . AX25 AFSK;
- Payload: 437.000 MHz 1200/2400/4800 bps . AX25 AFSK, SSTV, AUDIO, TEXT;

#### Frequency Tsiolkovsky-Ryazan 1

- Call Sign: RS9S
- Telemetry: 437.050 MHz 1200 bps . AX25 AFSK;
- Payload: 437.025 MHz 1200 bps . AX25 AFSK, SSTV, AUDIO, TEXT;

#### Frequency Tsiolkovsky-Ryazan 2

- Call Sign: RS12S
- Telemetry: 437.050 MHz 1200 bps . AX25 AFSK;
- Payload: 437.0125 MHz 1200 bps . AX25 AFSK, SSTV, AUDIO, TEXT;

Watch TV News item about the CubeSats with Sergey Samburov RV3DR

Broadcast Feb 2022 - enable YouTube Closed Captions, Auto-translate

<https://www.youtube.com/watch?v=pmLe2JdFjM4>

Source R4UAB <https://r4uab.ru/2022/07/21/kosmonavt-oleg-artemev-s-borta-mks-zapustil-rossijskie-sputniki-po-programme-ke-radioskaf/>

<https://twitter.com/R4UAB>

## **Electrical engineers on brink of extinction**

Rupert Goodwins GM6HVY writes on The Register that electrical engineers are on the brink of extinction threatening the entire tech ecosystem

While computer science course take-up had gone up by over 90 percent in the past 50 years, electrical engineering (EE) had declined by the same amount. The electronics graduate has become rarer than an Intel-based smartphone.

That part of the technology industry which makes actual things has always been divided between hardies and softies, soldering iron versus compiler, oscilloscope versus debugger. But the balance is lost. Something is very wrong at the heart of our technology creation supply chain. Where have all the hardies gone?

Read his article at

[https://www.theregister.com/2022/07/18/electrical\\_engineers\\_extinction/](https://www.theregister.com/2022/07/18/electrical_engineers_extinction/)

## **Cinema film has CW message**

Laurence gm4dma writes to tell us:

The recently released praised biographical film 'Explorer' of Sir Ran Fiennes life has a fair number of clips of HF radio operations, with his late Wife, Ginny, and Laurence (Flo) GM4DMA now KL7L included ; HF comms were a mainstay of many of their expeditions from the early 70's thru 2000's.

Amateur radio operations took place including successful 144/50MHz High latitude AuEs experimentation. The trailer for the film has a short CW message to be decoded

The film is being shown at selected cinemas in the UK and will be available via other methods in August

<https://www.explorer-movie.com/home/>

## Amateur radio operators are vital unsung heroes

Amateur radio operators have a long and storied history across the globe and are often referred to as 'ham' radio operators. Defined as a 'duly authorized person interested in radioelectric practice with a purely personal aim and without pecuniary interest (either direct or monetary or other similar reward) and differentiated from commercial broadcasting, public safety (such as police or fire), or professional two-way radio services (such as maritime, aviation and taxis or the like).'

But that strict definition belies an important truth, especially in these internet dependent times so amply demonstrated by the recent Rogers blackout. The ham radio operators are not internet dependent and function even when all other means of communication have failed. As such ham radio operators, like those members of the Manitoulin Amateur Radio Club who held their annual general meeting at Little Current's Low Island Park this past weekend, form a volunteer backbone communication system intricately linked with local emergency services when catastrophe strikes. As such, they are the unsung heroes of disasters not yet happened.

Normally, ham radio operators are a deceptively solitary lot, often sequestered in a hidden back room in the family home, usually somewhat older (something they would very gladly ameliorate if given the chance to engage a younger crew).

Many cut their teeth on crystal radio sets once found in the back pages of Popular Mechanics and other hobby magazines, spending hours of dogged concentration wiring up tiny components under magnifying glass to finally jump for joy as the buzzing sounds of Morse Code's dots and dashes could be faintly heard—gradually moving up the technological ladder to tinny voices. For many of those pre-digital “nerds” ham radio operation became a lifelong passion, and many ham radio operators can be identified by the call signs that appear on their custom vehicle licence plates, the vessel names on their boats floating in the marina or a plethora of T-shirts, coats or baseball caps.

Today's amateur radio sets are as far away from those early hobby kits as a soapbox racer is from a Formula One race car and just about any operator can chat for hours on the nuances of atmospheric skips and the influence of sunspots, if you let them. But make no mistake, these seeming relics of a bygone age contain within their skillset the ability to link the world.

You can read the full story at:

<https://www.manitoulin.com/amateur-radio-operators-are-vital-unsung-heroes/>

## 144/430 MHz bands to be used for PMR during 2024 Olympics

France's National Frequency Agency ANFR has announced the amateur radio 144 and 430 MHz bands will be used for PMR voice comms, 1240 MHz for PMSE and 2.3 GHz for video links during the 2024 Olympic and Paralympic Games

A translation of the ANFR announcement says:

The France is preparing to host the Olympic and Paralympic Games (OLYMPIC Games) in Paris in 2024.

The National Frequency Agency is in charge of drawing up the frequency plan and allocating frequencies for the Games.

To this end, it worked with all the assignees to assess the amount of spectrum needed for the organization and global dissemination of the Games. In this context, bands not primarily devoted to PMR, PMSE audio and video uses and to score and time management have been identified, as in previous editions of the summer JOP, in order to meet the consequent need for spectral resources.

ARCEP, assignee of the band 144 – 146 MHz has thus authorized, during the JOP which will take place from 26 July to 11 August and then from 28 August to 8 September 2024, that it can be used by the official broadcaster of the Games and its service providers, among other stakeholders. The band will thus accommodate the PMR voice service (walkie-talkie) in simplex pipes of 6.25 and 12.5 kHz, up to 1 W. This use of the strip by the Paris JOP has been authorized on the sites of competitions and non-competitions, about forty sites located mainly in metropolitan France, on the Territory of the Paris region (Paris, Elancourt, Versailles, Saint-Quentin-en-Yvelines, Saint Denis, Le Bourget, La Courneuve, Clichy Sous-Bois, Villepinte, Vaires-sur-Marne), but also in the provinces of Lille, Lyon, Saint-Etienne, Marseille, Nice, Bordeaux, Châteauroux and Nantes. Events will also take place in French Polynesia at the Teahupoo site.

In addition, on these sites, the frequencies of the band 430 – 440 MHz will also be used to accommodate the PMR voice (walkie-talkie) service in simplex pipe of 6.25 and 12.5 kHz, up to 1 W.

The band 1240 – 1260 MHz, open to amateur service on a secondary basis, will accommodate PMSE Audio equipment with a power of less than or equal to 50 mW and a pipeline of less than or equal to 200 kHz.

Finally, in the bands between 2300 – 2483.5 MHz, part of which is also open to amateur service on a secondary basis, mobile video links up to 10 W for a maximum channel of 20 MHz will be deployed.

The frequencies will be made available to the Organising Committee of the Paris 2024 Olympic Games during the period from one month before the Opening Ceremony of the Olympic Games to one week after the Closing Ceremony of the Paralympic Games, from 26 June to 15 September 2024. In order for them to be usable in good conditions, it seems essential to us that in the vicinity of the sites, their use by radio amateurs is moderated during this period. We rely on all members of the amateur radio community to do this.

ANFR Announcement

<https://www.anfr.fr/licences-et-autorisations/radioamateurs/actualites/actualite/actualites/utilisation-du-spectre-des-frequences-dans-le-cadre-des-jeux-olympiques-et-paralympiques-de-paris-2024/>

## New radio hams in Éire

IRTS News reports 12 people passed the amateur radio exam held on July 9 at the Maldron Hotel, Whitestown Way, Tallaght, Dublin

They say:

On Wednesday, Rafal, EI6LA wrote on [irts.groups.io](https://groups.io/g/IRTS/topics): "I am delighted to share that as of now we have 12 fresh exam passes from amongst the attendees of NSWLC Class Echo:

Andreas, EI9IOB, Artur, EI9IKB, Brian, EI1925 waiting to apply for licence, Domhnall, EI9IMB, Eamonn, EI7LC, Gerard, EI9IQB, Kevin EI9IVB (former NSWLC attendee), Oisín EI1916 - waiting to apply for licence, Omar, waiting for call sign Paraic, EI9IRB, Paul, EI9ISB and Thomas, EI9IPB

There are, unfortunately, 5 members who have not made it this time that we know of. A good few members had to delay their exam due to Covid, and a few plan to take the next one.

Congratulations to everyone, those who have passed, and those who have studied hard but who may need a little more time to succeed later this year. Well done everyone! I will post here again if I hear of any more passes or new call signs from NSWLC."

See <https://groups.io/g/IRTS/topics>

Source IRTS News

<https://www.irts.ie/cgi/showarchive.cgi?220724.txt>

The IRTS paper-based 60 question HAREC exam is only held twice a year, on passing you can get a licence that permits up to 1 kW output. The exam syllabus is at

[https://www.irts.ie/dnloads/IRTS\\_HAREC\\_Exam\\_Syllabus.pdf](https://www.irts.ie/dnloads/IRTS_HAREC_Exam_Syllabus.pdf)

## Ofcom Amateur Radio Callsign Database

The latest version of the Ofcom amateur radio callsign database is always available on their Open Data page

The spreadsheet contains over 151,000 callsigns from the United Kingdom and Crown Dependencies and is in the Spectrum section of the Open Data page.

Amateur Radio callsign database as at July 26, 2022

[https://www.ofcom.org.uk/\\_\\_data/assets/file/0032/239099/amateur-callsigns.csv](https://www.ofcom.org.uk/__data/assets/file/0032/239099/amateur-callsigns.csv)

Ofcom Open Data page

<https://www.ofcom.org.uk/research-and-data/data/opendata>

Ofcom's database of Forbidden amateur radio callsign suffixes is available at

[https://www.dropbox.com/s/o1vdzd7tr274mxv/2019\\_UK\\_Forbidden\\_Amateur\\_Radio\\_Suffixes.csv](https://www.dropbox.com/s/o1vdzd7tr274mxv/2019_UK_Forbidden_Amateur_Radio_Suffixes.csv)

## Russia to pull out of International Space Station

BBC News report that Russia says it will withdraw from the International Space Station (ISS) after 2024 and build its own station instead.

The US and Russia, along with other partners, have successfully worked together on the ISS since 1998. But relations have soured since Russia invaded Ukraine, and Russia previously threatened to quit the project because of Western sanctions against it.

Nasa said it had not yet received any official notice of Russia's intention to withdraw from the programme.

The ISS - a joint project involving five space agencies - has been in orbit around Earth since 1998 and has been used to conduct thousands of scientific experiments. It is approved to operate until 2024, but the US wants to extend that for six more years with the agreement of all partners.

At a meeting with Russia's President Vladimir Putin, Mr Borisov said Roskosmos would fulfil its obligations to its partners, but the decision had been taken to quit the project after 2024.

"I think that by this time we will start putting together a Russian orbital station," Mr Borisov said, adding that the new station was his agency's top priority.

"Good," replied Mr Putin.

It is not immediately clear what the decision means for the future of the ISS, and the US space agency Nasa says it has not received any formal notice from Russia of its plans.

Former ISS commander and retired US astronaut Dr Leroy Chiao believes it is unlikely Russia will decide to leave the project.

"I think this is posturing by the Russians. They don't have the money to build their own station and it would take several years to do it. They've got nothing else if they go this route," he told the BBC.

Read more at BBC News

[Russia to pull out of International Space Station - BBC News](#)

## Clacton Radio Club G3CRC closes down

Club meetings were forced to cease in 2019 due to pandemic but the monthly meetings resumed on Monday, April 11, 2022 at the Plough Corner Village Hall. The last meeting held was on July 11.

An announcement posted on the club's website on July 25 says:

*"I would like to thank the members that have been to the club over the last few times.*

*Your support was appreciated and it was nice to meet you all.*

*However because of the lack of enthusiasm and low attendance we have decided to close down the club, therefore there will be no more meetings."*

The Clacton Radio Club is believed to date back to at least the 1940's.

The October 1952 issue of Short Wave Magazine carried this report on the Clacton Radio Club:

*"New premises have been acquired at the Queen's Arms, Magdalen Green, and meetings are now held on alternate Fridays.*

*Regular Morse lessons are given and at a recent meeting the Club went on the air with a portable licence and gear supplied by G6AB."*

*It seems the club folded at some point in the 1960's but was re-formed again in 1970. A report in the October 1971 issue of Short Wave Magazine says: "A new Hq. is the gist of the Clacton report; it seems they have a fine place with the Sea Scouts in Sadds Yard, Skelmersdale Road, which is about 100 yards from the main railway station. It is a year since they re-formed, and members now total 41 -which is pretty healthy progress.*

*All are asked to take particular note of the date for the AGM: October 12, at Hq., starting at 1930 promptly."*

Web <https://www.qsl.net/g3crc/>

Facebook <https://www.facebook.com/groups/g3crc/>

## **Portable 7-band End-Fed Half-Wave (EFHW) antenna**

Stephan Schmid HB9EAJ has made available a PDF (in English) describing his portable 7-band End-Fed Half-Wave (EFHW) antenna

This document is about a multi-band shortwave (HF) amateur radio wire antenna that does not need an antenna tuner. The described antenna is based on the widely used end-fed half-wave (EFHW) dipole antenna design, improved for a bigger variety of bands, maximum efficiency and optimized for portable QRP communication.

The antenna system consist of a 20m-long radiator wire with one bypassable loading coil that in sum is resonant on the 60-, 40-, 30-, 20-, 17-, 15- and 10-meter bands, which I have never seen before. A small and efficient broadband transformer is used to match the impedance of this EFHW antenna to a 50Ω coaxial cable.

The document starts with the definition of the described EFHW antenna system, the author's personal portable antenna requirements, the history of choosing and developing the described antenna system and then continues with antenna experiments and their conclusions.

Further, it gives some hints on how to build the proposed antenna system, as well as its compact backup antenna, and shows how to add additional bands to both of them.

Practical technical tips and references to other EFHW websites and documents complete the document.

Download PDF of A Portable 7-Band End-Fed Half-Wave (EFHW) Antenna

[https://hb9sota.ch/wp-content/uploads/2021/08/Portable-7-Band-EFHW\\_HB9EAJ-V1.2.pdf](https://hb9sota.ch/wp-content/uploads/2021/08/Portable-7-Band-EFHW_HB9EAJ-V1.2.pdf)

HB9EAJ site

<https://hb9sota.ch/hb9eaj/>

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