



## Convention 2024 lecture summaries and presenter biographies: Sunday

### Lecture Room 1 – Getting started in amateur radio

#### HF and VHF Awards Presentations

#### Receiving live TV from the ISS – Noel Matthews, G8GTZ

Noel Matthews, G8GTZ will give an overview of amateur radio activity from the International Space Station. He will describe in detail the live amateur TV transmissions, which are due to start within the next six months, and how to receive them.

*Noel Matthews, G8GTZ has always been interested in the microwave bands, having never operated on the HF bands! He is also a keen amateur television operator, has been chair / secretary of the British Amateur TV Club for the last 10 years and operates home constructed equipment on all bands from 50MHz to 122GHz.*

#### Beginners' 3D printing for amateur radio – Tom Wardill, 2E0JJI

3D Printing is a powerful tool, and one that has become increasingly accessible in recent years. This presentation is a brief overview of how to get started and where it can be useful in your life as an amateur radio enthusiast. Tom will cover as much as possible, including machines, software, tools and where to find things. He aims to leave you in a position to learn more and get yourself started.

*Hailing from Sheffield, Tom is new to amateur radio, but has been making things his entire life, and has been collecting hobbies for just about as long. Anything from packrafting to high altitude balloons to sewing to Adventure Racing. Enthusiastic about things, terrible at finishing projects.*

#### Solar Cycle 25: prediction v reality – Steve Nichols, G0KYA

This talk will look at how Solar Cycle 25 has panned out, what have we learned and what the highlights have been so far.

*Steve Nichols, G0KYA is the chairman of the Radio Society of Great Britain's Propagation Studies Committee. His interest lies in HF and HF propagation tools.*



## Lecture Room 2 – Operating / General

### **QRP: fun or folly? – Prof Dr Bruce Macaulay, G4ABX**

This presentation will review several aspects of the QRP hobby including, rigs, antennas, batteries, operating (including digital modes, the Raspberry pi and portable operation) sustenance (when out portable) and a few 'tips and tricks'.

The talk will include a variety of photos, videos and physical products, which will also be available to view after the presentation. The videos used are also available on Bruce's YouTube channel, which can be found via his website: [www.g4abx.co.uk](http://www.g4abx.co.uk). There are also links to many other QRP and radio resources on his website.

*Prof Dr Bruce Macaulay was born in 1954 in Paris and discovered radio at the age of seven, when his grandfather gave him an AR88 Receiver. He used it to listen to amateur radio operators that he discovered on 160M.*

*In 1973 he went to Leicester Polytechnic as a Marconi sponsored student to study a degree in Electronic Engineering. It was here he fell under the tutelage of Bob Titterington, G3ORY and the DeMontfort University Amateur Radio Society, DMUARS - of which he is still a member and operates competitions for.*

*Having discovered his radio craft whilst working for Eddystone Radio, he then moved on to the automotive industry as Triumphs' first 'Principal Electronics Engineer', and later for JRT, Land Rover, Rover Group and BMW rising to the role of Director for Research and Pre-Development whilst based in Munich. He was awarded his Doctor of Technology in 1997 and became a Visiting Professor at DeMontfort University in 2010.*

### **Mapping the Milky Way's arms and demonstrating Dark Matter from your garden – Dr Andrew Martyn Thornett, M6THO**

Would you like to replicate the science behind much of the astronomy headlines? This talk will tell you how to do this for around £200 using readily available off-the-shelf components. No electronics or amateur radio experience required!

*Dr Andrew Thornett is a General Medical Practitioner in Birmingham with an eclectic interest and passion for all things astronomy. He is a member of the BAA Radio Astronomy Group and Society of Amateur Radio Astronomers in the USA, and of Rosliston Astronomy Group in Derbyshire, as well as the Astronomical Society of Penang in Malaysia.*

### **Hearing my vision: 'Pushing disabilities to the limit' – Nigel Limb, M7FFU**

An insightful, raw, gritty and heartfelt story of one man's fight to regain his ordinary life and how his passion for amateur radio has helped in his recovery from a motorbike accident that changed his life. Be prepared to be inspired, laugh and possibly cry as Nigel recounts his extraordinary existence.

*Nigel Limb aka Blindblokeracing is a UK Motorcycle Drag Racing Record Holder from Lincolnshire. Nigel became Partially Blind as the result of a motorsport accident in 2015. Despite suffering major brain damage and sight loss, Nigel has rebuilt his life by pushing his disabilities to the limit and now enjoys public speaking nationwide.*

## **WSJT and WSJTX operations from a number of interesting locations – Ross Ballantyne, VK1UN/VK8UN/EX0AA/6O0O/G6BTE**

Ross will talk about his FDIM 2024 presentation “Stealth operations from hotel rooms and other unlikely QTHes”. He will also be embellishing on some recent innovations he has done on tuners. In particular, examples of operations and results, equipment and gear needed, and a systematised approach to optimisation of QRP very portable operations.

*Ross has studied subjects including medicine, languages, linguistics, computer science and international law. He has had multiple interesting career paths including, the Civil Service in Australia and as a Customs Officer, as well as a number of United Nations postings to Cambodia, South Africa, Bosnia, Iraq, Western Sahara, East Timor, Afghanistan, Nigeria and Pakistan.*

*He first became licensed in Australia in 1978 with VK3YKX, and in March 2008 he became hooked on WSPR. Whilst on mission, as well as travelling through countries, he has had the opportunity to operate in many countries. He is now mostly based in Bishkek, Kyrgyzstan with a ring of 5000m altitude mountains surrounding him. In addition, Ross has held T61AA, 4W6UN, custodian of 4U1ET, CN2UN, S07UN, 9A9UN, T9/9A9UN, C91UN, XU0UN and reciprocal permits for VR2 (HKG) and Denmark.*

## **Digital radio: a beginners' guide – Joe Chester, M1MWD**

During the presentation Joe will give an introduction to digital radio. He will use his knowledge and experience that he has developed over the past few years to answer some of the myriad of questions he has been asked about digital radio. He will also debunk some of the confusing words and phrases that surround the subject and explain as simply as he can why there are multiple names for what are essentially the same thing.

The presentation will discuss the Internet, and about systems and servers, as well as how digital radio works. Joe will also address the two most frequently asked questions - where do I start, and who do I call?

*Joe Chester, M1MWD, obtained his licence in 1984 and is a frequent contributor to Practical Wireless. Recently he did a series of articles about Marconi's earliest experiments, and another focused on the small station. Professionally he was an academic for 30 years and worked on the early development of the internet. He has also been a volunteer at the RSGB National Radio Centre for three years.*

## **Lecture Room 3 – Technical / General**

### **The NanoVNA in and around the Shack – Bryan Harber, G8DKK**

The presentation will include an overview of network analysis, nanoVNA set-up, calibration, VSWR measurement, distance to fault, gain/loss and simple Smith charts. Some screen trace viewing software will also be shown. Technology permitting, Bryan hopes to be able to show some live demos of practical set-ups, calibrations and measurements.

*Bryan, G8DKK obtained his licence in 1970, and became a member of the Radio of Society of Great Britain three months later. He currently teaches Foundation and Intermediate courses online.*



*His interest lies mainly in VHF and up operation and construction, although he does do some HF operation, although spends more time listening. He is currently operational on bands from 40m to 13cm plus 10GHz and 24GHz.*

*Now retired, during his career Bryan was a professional RF and Microwave measurements engineer for 45 years. He was also involved with VNAs professionally as an applications engineer, and later a Product Manager for scalar and vector network analysers and spectrum analysers.*

### **Tropo, Rain Scatter and Sporadic-E: what's the forecast? – Jim Bacon, G3YLA**

Jim Bacon, G3YLA, will join us for a look at three propagation modes which are affected by weather. This will include Tropo and how changing weather patterns might affect our chances of big openings, Sporadic-E insights from the 2024 season for dealing with 2025 and finally how to deal with Rain Scatter weather elements and when to expect them.

*Licensed in 1969, Jim has always regarded CW as one of his main interests in amateur radio, second only to his interest in propagation. As a recently retired meteorologist, it's probably obvious why weather has been the driving force behind Jim's interest in propagation and the more he explores the more important that link becomes!*

### **HamSCI: Ham Radio Science Citizen Investigation - connecting communities – Prof Gwyn Griffiths, G3ZIL**

Ham Radio Science Citizen Investigation (HamSCI) is a US-led, globally active, collective that enables university researchers to collaborate with radio amateurs in scientific investigations. Supported as a Citizen Science project by NASA and other funding agencies HamSCI's activities cover equipment design and build, coding and operating, and analysis of information on radio propagation. This talk outlines these HamSCI activities, focussing on activities during the 2023 and 2024 eclipses, with examples of his own contributions using HF band WSPR and FST4W modes. HamSCI is friendly and supportive group. Its online forum, and several weekly Zoom events, are open to all with an interest in radio science.

*Gwyn was first licenced as GW3ZIL in 1970 aged 15. Inactive for many years he returned to amateur radio in 2012 after a career developing technology for marine science, retiring as Chief Technologist at the UK National Oceanography Centre. He discovered WSPR as a means of investigating HF propagation, but, more importantly, he fell in with clusters of like-minded amateurs. He has been involved with HamSCI since 2020, presenting at each of its annual workshops, working with students and young researchers, and contributing to magazine and scientific journal articles. He is a member of the Radio of Society of Great Britain Propagation Studies Committee and in 2024 was honoured with the Society's Les Barclay award for his propagation research.*

### **Radar: the eyes of the few – Graham Murchie, G4FSG**

The talk will cover a brief history of early radar, the events leading up to the development of a viable system and the establishment of the world's first operational radar station at Bawdsey. It focuses on the people involved and the alternatives considered together with the impact on the Battle of Britain.



*Graham Murchie, G4FSG, operates on VHF and microwaves with most activity on 6m, 4m and 2m. He was a member of the RSGB Board for five years, four of which he was Chairman of the Board. He also chaired the RSGB Convention committee for six years. He has been a Trustee at Bawdsey Radar Trust for five years, one of which was as Chair of the Board.*

### **It's a WebSDR, Jim, but it's on 24GHz – Dr John Worsnop, G4BAO**

The presentation will cover aspects and the history of, propagation studies across the North Sea at 24GHz. It will also look at what's involved in designing, implementing and maintaining a remote 24GHz WebSDR receiver to run 24/7 using the freeware OpenwebRX program on a Raspberry Pi, with reference to the new Kent WebSDR in Margate.

*Chartered Engineer, former wage slave, radio amateur, Moonbouncer, RadCom GHz bands columnist, Vice Chairman of the RSGB Propagation Studies Committee, radio propagation nerd and RF design nut.*