

RSGB 2026 Convention

Lecture summaries and presenter biographies

Sunday 11 October

Lecture room 1 – Learn

HF and VHF trophies presentations

Chris Tran, GM3WOJ

The future of contesting

A wide-ranging summary of contesting, from historical times through the present and into the future....

Licensed at age 16, Chris GM3WOJ/GM2V entered his first HF contest in 1971. He has entered many HF and VHF contests since. Chris wrote the 'Contesting' column in RadCom for two years, is currently a Corresponding Member of the RSGB HF Contest Committee and a founder member of the UKEICC and the GM7V Contest Group.

Heather Nickalls, M0HMO and Brian Coleman, G4NNS

An update on the latest developments in the microwave community

Here we will highlight some of the recent advances in the Amateur Microwave community including Radio Astronomy at 22GHz, the latest 122 GHz, 134 GHz and 241 GHz successes, the Wavelab 24 GHz transceivers, distance records (who says microwaves are only line of sight!) and our latest Microwave Beacons. We will also do an update on what the UKuG can offer its members including Loan transceivers for most of the microwave bands and the free components service.

Heather, M0HMO is currently secretary of the UK Microwave Group, secretary of the Riff Raff Contest Group, UK Microwave Group representative on the RSGB Spectrum Forum, Chair of the Marches Astronomy Group and holds committee posts of Salop Amateur Radio Society and Shropshire Astronomical Society. When not on zoom calls, Heather enjoys RTTY, VHF and Microwave contesting, radio meteor detecting, building electronics, writing software, staring through telescopes and cameras, tracking satellites and restoring old cars.

First licenced as G8AZU in 1967, Brian has always been interested in UHF and microwaves. Acquisition of a 3.7m dish prompted a move into EME and radio astronomy. His interest in meteors started during events he organised for British Science and Engineering week. With a waterfall display showing echoes from the Graves radar on 143.050MHz he noted that young people of all ages were fascinated by this use of radio.

Together with a team, and with the support of the RSGB they built the GB3MBA meteor beacon to provide UK coverage of meteor events over the UK and went on to design, build and deploy a network of six software defined receivers streaming their data to a central server thus creating a radar system for research into meteors and the ionosphere.



Steve Nichols, G0KYA

The 12 August 2026 solar eclipse and its effects on HF propagation

On 12 August 2026, a solar eclipse passed over the UK, creating almost 90% obscuration of the Sun. Experiments were devised to look at its effects on the ionosphere, including two HF contests, WSPR usage and monitoring of both UK and African medium wave signals. This presentation looks at the results and conclusions.

Steve Nichols, G0KYA is Chairman of the RSGB Propagation Studies Committee. He regularly writes for RadCom and wrote the RSGB book "Radio Propagation Explained". He graduated with a BSc in Physics and is a professional journalist, specialising in aviation and communications technology.

Lecture room 2 – Connect

Patrick Wood, 2E0IFB

LEO satellites

The space above our heads is changing rapidly. Low Earth Orbit is becoming increasingly crowded as thousands of new satellites are launched to support global communications, Earth observation and emerging commercial services. This presentation explores the challenges of orbital congestion and space debris, how the growth of large satellite constellations is reshaping the LEO environment, and the impact this is having on amateur radio and amateur satellite operations. Patrick will also look at the current state of amateur radio satellites and consider what the future may hold for radio amateurs in the new space age.

Patrick Wood BEng CEng FIET FRAeS retired in 2025 after a 38-year career in the aerospace, defence, and space sectors, with over 30 years dedicated to the space sector. He has worked in some of the most iconic space companies in the UK and Europe, including CEO of Surrey Satellite Technology Limited, SVP and GM Space Systems UK at Airbus Defence and Space with roles in programmes, engineering and AIT, and as the UK Head of Space at Lockheed Martin Space.

His most notable role was leading the UK Skynet 5 MilSatCom programme, overseeing the delivery in orbit of the first three satellites of the four-satellite GEO constellation, and being responsible for the prime system, space, and ground infrastructure deliveries.

Patrick is a keen radio amateur and operates as 2E0IFB. He is a member of the RSGB Board of Directors and a member of AMSAT-UK. He is a Fellow of both the IET and RAeS and a Fellow of the UKSpace Trade Association. Additionally, he is a regular volunteer steward at Bletchley Park and the RSGB National Radio Centre, also based at Bletchley Park.

Paul Marks, G8FVK

A modular approach to construction

The talk is about Paul's approach to modular design of amateur radio equipment, particularly QRP HF and VHF gear, using readily available circuit boards and modules such as the AD831 RF mixer module.

Paul believes amateur radio is a 'broad church'; some amateurs are interested exclusively in contesting, others like portable operation, many enjoy "rag-chewing" and some still enjoy designing and constructing their own equipment. Commercial equipment is now very sophisticated and complex and of course expensive! Paul believes that there is no greater thrill than making a piece of equipment such as a receiver, transmitter or transceiver and having QSOs both locally and internationally. Some constructors make kits, and there are many excellent ones around, whilst others design and make equipment from first principles using the necessary components and fabricate their own PCBs.

Several years ago, Paul developed his thoughts on modular construction, which some might regard as a halfway house between making a kit and construction from first principles. In this talk, he will stress the need to understand radio design or architecture and then select some prefabricated modules to realise your goal. He will describe his experience using the AD831 mixer module in the construction of a direct conversion communications receiver as well as a SSB generator. This type of construction can save considerable amounts of time and get you on the air very cheaply.

Paul Marks was first licensed in 1972 as G8FVK. At that time, he made his own equipment to operate on 2m and 7cm. He also modified old public service transceivers for the VHF bands. His first major construction project was making the G2DAF receiver when he was in the 6th form at school. He is one of the columnists for the RadCom VHF/UHF Column and is editor of RadCom Plus. Paul also operates as SV8/G8FVK from Katelios on the Ionian island of Kefalonia. His interests in design and construction have continued and he is especially interested in designing QRP gear. He has studied physics and has had two rewarding careers, firstly as a consultant neurosurgeon and secondly as H.M. Senior Coroner. He retired from the bench in May 2026 but continues academic work as Honorary Professor of Medical Jurisprudence at the Hull York Medical School. He lives in rural North Yorkshire with his wife Julie and keeps cows.

Simon Harris, G4WQG and Dom Wilkinson, M9WHQ

Outreach: inspiration and tips for success

Learn how to connect with new audiences and how to deliver successful outreach activity. Simon and Dom will share case studies that will leave you inspired, including some of the achievements of the RSGB Outreach Team from the last few years. Dom will also share some of the successes that his local club, Swindon and District Club, have had with its own activity. They will show you how to replicate these with your own club or society and how easy it is for you/groups/clubs to organise and take part in positive outreach opportunities such as JOTA/JOTI, YOTA, Scouts and Girlguiding etc.

Simon, G4WQG gained his Full licence in 1983 at the age of 18 whilst training to be a Radio Officer in the Merchant Navy. He enjoys all aspects of radio communication, from HF operation to experimenting with new technologies like QO100 and more. He is passionate about promoting amateur radio within the community. His enthusiasm for technical innovation and lifelong learning has made him keen to give something back to the hobby by attracting new people. Professionally, Simon has built a successful career in technology and engineering within the RF telecoms field. His professional experience, combined with his passion for radio communications, reflects a lifelong commitment to advancing technology, sharing knowledge, and inspiring others with the possibilities of wireless communication. Simon serves as the Regional Representative for Area 10, is a member of the RSGB Outreach team, RSGB National Radio Centre Volunteer and STEM Ambassador.

Dom, M9WHQ became interested in radio when in the Air Training Corp at the age of 12. His first job was working as an apprentice with Allweld Engineering building amateur radio lattice towers and masts before joining the RAF as a Telecommunications Operator at the age of 17, where he learnt CW to 28WPM. He finally got around to obtaining his Licence ten years ago in 2016. Dom has had an interesting career from his service in the RAF, travelling around the globe, to his move into IT working as a consultant, which included four years working in Libya. He is now a Senior Network Consultant for one of the UK's largest service providers. He has an enthusiasm for constantly learning and is always tinkering with a new technology or project. He enjoys all aspects of amateur radio, particularly building his own electronic projects, antenna experimentation and chasing DX on all modes, especially on the HF bands. He also holds his Private Pilot's Licence and often combines the two hobbies working aeronautical mobile from his aircraft. As well as being the Chairman of the Swindon and District Amateur Radio Club, he is also an active member of the RSGB Outreach Team and additionally is a STEM Ambassador. He uses all three roles to actively promote amateur radio to people of all ages and from all walks of life. He is extremely passionate about the hobby and enjoys sharing his knowledge with others, frequently presenting talks to local clubs, as well as running online training sessions. He aims to excite and inspire people with his passion, to encourage them to take up the hobby and then push their comfort boundaries to progress further into the hobby.

Lyndsay Latimer, M6YMB

Pioneering women of British amateur radio

The Pioneering British Women of Amateur Radio - An insight into some of our earliest British YL operators and the remarkable people they were. Based on the June 2026 RadCom article of the same title.

Lyndsay has been a Foundation Licence holder since 2017 and is, among other things, an art historian and writer. She became interested in the history of women's amateur radio in general after a conversation online left her wondering who the first actual YL in the world was. Where did that term come from and who coined it? Well, she found her initial answers and they provided more questions. To which she then found the answers, along with information about the very much forgotten First Ladies of British Amateur Radio (and the not-so-forgotten). It was a rabbit hole without end, and she leapt into it quite happily. Lyndsay is one of the team members behind the popular special events British Inland Waterways on the Air, Mills on the Air, International Museums Weekends and International Air Ambulance Week. She is rarely on the radio unless it is for event weekends, but you can always find her online.

Guy Plunkett, M0GUY

Born in the shack: How Topbytes turned humble beginnings into lasting success

Every good tale starts somewhere unglamorous. This one starts on a desk in the corner of a spare room, with a soldering iron, an ESP and no business plan whatsoever. In this talk Guy tells the story of TopBytes. A licence gained during lockdown led to building a DMR network for RAYNET. Leaving a 25-year career in cybersecurity left a gap, and the gap filled up with bench projects – among them a morse trainer, built simply because he couldn't find one he

liked. Within months it was a product, and the projects had become a company. It is an honest account of the journey from hobbyist to manufacturer: the moment a project stops being a project, what changes the first time somebody pays you for one, and the distinctly unromantic bits nobody warns you about – certification and compliance, sourcing components that stay in stock, firmware you now have to support for years, and customers who quite reasonably expect the thing to work. Whether you have an idea gathering dust on the bench or you are simply curious about how a hobby becomes a business, you will come away with a realistic picture of what that leap actually involves.

Guy Plunkett, M0GUY has been around radio for rather longer than his call sign suggests. He was the student radio station engineer at the University of Kent in the 1990s, but never quite got round to sitting the licence exam – until lockdown moved exams online in 2020. He passed his Foundation licence exam in the April and Full licence exam by the November.

His day job was in security: 25 years in networking and information security, most recently as Principal Technical Instructor at FireEye and then Trellix. In 2024, he left for a change and spent a while working out what came next. He filled the gap with hobby projects, one of which was a Morse trainer. By November that year the hobby projects had a company name on them - TopBytes Ltd - which now makes the Morse Trainer, sold through Martin Lynch & Sons, along with the DX Spotter and DX Spotter Pro.

He also volunteers on RAYNET-UK's technical team building out a DMR network, as a Regional Technical Officer for St John Ambulance, and at the RSGB National Radio Centre.

Lecture room 3 – Inspire

Paul Whiting, G4YQC

Mapping the Galaxy using neutral hydrogen emission

Paul will give a brief introduction and history of the key players in radio astronomy. He will then go on to describe how the 21cm neutral hydrogen (HI) emission line can be used to map the Milky Way galaxy. He will also explain how this can be done from the back garden using inexpensive equipment.

After seven years as a perpetual student at the University of Birmingham, Paul became a research scientist at BT Research Laboratories in Suffolk for 30 years. After taking early retirement, he obtained another degree, this time in astrophysics and is now an outreach astronomer.

Being into both astronomy and radio, it was only natural that his specific interest is in radio astronomy. Paul says that as an Outreach Astronomer, he gives talks to 'whoever will listen'. He is a cruise lecturer and specialist holiday guide/host. He is also "Astronomer in Residence" at a number of glamping sites in Suffolk.

He is a STEM Ambassador and a trustee/director of Bawdsey Radar Trust, who operate the Bawdsey Radar Museum, the home of British radar.

Ian Henry, G0LFT

Making the invisible visible: understanding your SDR through IQ visualisation

IQ data sits at the heart of every modern SDR, yet it's usually presented as an equation rather than something you can picture. This session builds I and Q up visually and with minimal mathematics: why a single measurement of a wave is ambiguous, how quadrature resolves it, and what real signals look like on an IQ plot. Examples run from a bare carrier through CW, AM, FM and SSB to digital modes like RTTY, FT8, PSK and QAM.

Ian Henry, G0LFT, is a radio amateur with a PhD in Genetics and over 15 years in DNA sequencing and computational biology. In his day job he leads data science for translational medicine in the healthcare sector. He writes for RadCom on the engineering behind amateur radio and is a member of the Cambridge and District Amateur Radio Club (CDARC).

Andy Carpenter, M6TMU

Hunting the QRM: An SDR field guide

Unwanted interference can turn even the best-equipped radio shack into a frustrating place. This practical talk explores how software-defined radio (SDR) can help us see, identify and track down the signals spoiling our bands. Using spectrum displays, waterfalls, recordings and portable receiving equipment, we'll examine the characteristic signatures of common interference sources and follow the process from initial detection to locating the culprit. Along the way, we'll consider useful techniques, common pitfalls and examples of real-world interference hunting. Whether the noise originates inside your own shack, elsewhere in the home or further afield, this session will offer practical ideas for turning mysterious QRM into visible, understandable - and hopefully solvable - clues.

Andy, M6TMU is one of the co-founders of SDRplay Limited, a company providing SDR receivers for the last 12 years to both the amateur radio and professional markets. Prior to that he worked in the semiconductor field since 1988 at LSI Logic, Analog Devices and then some UK start-ups. Despite working with the amateur radio community for all these years, Andy wasn't licensed... until this year when he sat and passed his Foundation licence exam. He attends a number of radio rallies in various parts of the world and really enjoys engaging with the radio community.

Steven Dodd, M0SNZ

Over-the-air intelligence: training and deploying a machine-learning modulation classifier in Pycom

Building on last year's "[Making connections with DIY amateur radio software](#)", this session explores Pycom's Automatic Modulation Classification (AMC) capability. Using a scope-based CNN-Patch neural network, Pycom automatically detects signals in the waterfall display and classifies them – identifying modes such as CW, FT8, FM, SSB, Digital modes and more – complete with confidence scoring. The talk covers the full workflow: how the system works under the hood, practical techniques for capturing and labelling training data using a second radio for realistic over-the-air examples, fine-tuning models, and seamlessly integrating this AI intelligence into your everyday station operations. Whether you're interested in AMC, ML, or simply pushing the boundaries of DIY amateur radio software, this session will show how Python and machine learning can bring new levels of intelligence to your shack.

Steven has been hooked on technology since he was a child in the 80s and spent most of his career in IT from before the start of the Internet boom in the late 90s. Computers and electronics gravitated him towards amateur radio where he enjoys many aspects of the

hobby. This includes creating solutions for various platforms, such as an ATmega based RTTY HAB tracker, a budget antenna rotator controller and full featured SDR control software for his transceiver.

John Carter, N6YU

The spec is the new schematic: Reproducible station software with spec-driven development

This talk takes a bandmap – a spot-fed display now covering both RBN and POTA spots – and uses it to show what spec-driven development (SDD) brings to homebrew software. A construction article gives you a schematic, component values, and an alignment procedure: everything needed to reproduce the build. SDD treats the spec as the software equivalent of the schematic. Using the bandmap as a worked example, you'll see the spec that drives it, and how writing the spec first keeps AI-generated code honest. By the end you'll know what a good spec contains, how to get started, why it beats vibe coding, and how to apply it to your own projects.

John, N6YU is an experimentalist who enjoys low-power CW operation on HF – casual contesting from Menlo Park in Silicon Valley. Trained as an electrical engineer, he designs gear and antennas for the hobby and characterises their performance and has carried that same build-and-measure discipline into writing his own station software. Earlier in his career he was a Chief Engineer at BOSE and one of the inventors of the Bose Noise Cancelling Headphones. He holds an MS in electrical engineering from MIT.