2024 Huntsville Hamfest Forum List

As of 7/20/2024

ARRL

ARRL Membership Forum - Mikey Baker, N4MB, ARRL Director — Southeastern Division

ARRL is the National Association for Amateur Radio®. No other organization works harder to promote and protect amateur radio! At this session, you'll hear from representatives on several key areas of membership interest including ARRL initiatives to engage more youth in amateur radio, free ARRL membership for students, volunteer efforts and opportunities throughout the Southeastern Division, and an update on the 2026 ARRL National Convention which will hosted by the Huntsville Hamfest. Participants will include ARRL President Rick Roderick, K5UR, and Director of Marketing and Innovation Bob Inderbitzen, NQ1R. Members and prospective members are all welcome!

Alabama Section and ARES – Denis Littleton, K4DL

Vendors

Elecraft Update with Q&A - Including the K4 and its Latest Features and Updates

Eric Swartz, WA6HHQ, is Elecraft's Chief Operating Officer, a co-designer of Elecraft's K4, K3S, K2, and other Elecraft products, He co-founded Elecraft in 1998 with Wayne Burdick, N6KR. Licensed for over 51 years, his early interest in Amateur Radio led him to a career in electronic design and management. In his forum Eric will provide an update on the K4, including the K4/0 and the remote system. There will be a Q and A at the end!

The Connections of WiRES-X- John Kruk, N9UPC, Yaesu National Sales Manager

Join Yaesu as they discuss the connections you need for WiRES-X between your HRI-200 or for PDN/HRI operation. This class will help educate people on what is needed to experience the full aspects of WiRES-X.

The WiRES-X Software - John Kruk, N9UPC, Yaesu National Sales Manager

Join Yaesu as they discuss the usage of WiRES-X software for the beginning user. This class will help educate people on how to select rooms, nodes, and provide some simple operations.

Organizations

Alabama Repeater Council - Grady Evans, W4GLE

Joint MARS Meeting

Technical Forums

Youtubers Group

Come and meet some of your favorite YouTube ham radio celebrities. Many of the people you

watch every week will be present at this meet and greet panel forum to talk about their channels and answer your questions.

Lightning Research in Huntsville – Monte Bateman, PhD, WB5RZX

NASA's Marshall Space Flight Center and the University of Alabama in Huntsville (UAH) are home to one of the top lightning research groups in the world. We study basic physics of the lightning process, its relationship to storm severity, and help with lightning protection for our nation's space program. In addition to basic and applied science, we also design and build cutting-edge instrumentation that allows us to make unique measurements to study thunderstorms. We now have multiple Geostationary Lightning Mappers (GLMs) in orbit, on the GOES satellites, including the newest GOES-19. This gives us lightning mapper coverage over nearly half the Earth. The GLMs were developed here in Huntsville; they add lightning information to the GOES satellite photo loop images and are becoming important in weather forecasting and warning. We also have the Lightning Imaging Sensor (LIS) aboard the ISS, and it has been working well now for over 3 years. Come see the state-of-the-art in lightning measurements and how much of it comes from Huntsville!

Lightning Protection for Hams – Monte Bateman, PhD, WB5RZX

Protect your shack and your tower! With a lot of anecdotal grounding discussions generating more heat than light, here's a solid approach to the best protection practices and the theory behind how and why they work. Learn how a lightning flash occurs and how to convince it to go elsewhere!

Kit Building Techniques for Success – Joe Eisenberg, K0NEB

A look at the best tools and techniques to help beginners through experienced builders have the best chance at success when building a kit. Joe will go over low-cost tools and the correct type of solder to use, how to sort and identify your parts, and will touch on things he has found available at the hamfest.

Operating 10 GHz Microwave – Ben Lowe, K4QF

Interested in getting your feet wet operating the microwave bands? This forum will cover how to effectively operate in the 10 GHz band. This forum will also show how 10 GHz stations are built.

Beyond 10 GHz – Ben Lowe, K4QF

This forum will cover how to get involved with 24, 47, and 78 GHz. Many microwave operators stop at 10 GHz, but there is way more room to operate on the higher bands. Test equipment will be on site for those wanting to do station checks.

Close Encounters of the Microcontroller Kind – Glen Popiel, KW5GP

Join ARRL author Glen Popiel, KW5GP, in an all-new presentation as he demonstrates advanced projects and design concepts with the Arduino and other microcontrollers. Learn just how much fun you can have creating your own microcontroller-based projects for your ham shack, family, and friends.

BalloonSats – Bill Brown, WB8ELK

Bill is one of the knowledgeable experts in balloon launched ham radio. This forum will discuss how Bill accomplishes taking amateur radio to new heights on high altitude balloons. Weather permitting there will be a live balloon launch following this forum.

Radio Astronomy from the Moon – Dr. Heidi Haviland, KK6SZW

This forum will discuss using radio waves for astronomy and how to do radio astronomy on the

surface of the Moon. It will also cover recent and planned Moon missions, including commercial missions.

Adult Soldering 101 – Matthew Sager, KI4AJZ, and Kevin Hibbs, KG4TEI

Want to get into kit building but don't know where to start? Then this class is for you. This class will cover more than which end of the soldering iron to hold and give you tips on how to be successful assembling kits. During the glass the students will build a kit to take home with them. Three sessions of the class will be offered, one with an SMD kit, and two with a through hole kit. If interested please sign up at the information booth. This is a first come, first serve event with limited space.

Calibrate Your Bird Model 43 Wattmeter - John Stensby, Ph.D, N5DF

Want to get the most accurate measurements possible from your Bird Wattmeter? Join John, N5DF, as he explains how to calibrate your wattmeter.

Winter Field Day Forum – Marvin Turner, WØMET, Winter Field Day President

This forum will cover Winter Field Day and how to get involved with this great operating activity. Learn how you and your club can participate in this yearly event to hone your operating skills and get radio active.

Solar Activity: By the Numbers – Rob Suggs, PhD, NN4NT

F10.7, Kp, solar wind speed, Bz, what are all those numbers and why should a ham care? NASA scientist Rob Suggs will discuss space weather parameters and what they mean in terms of HF propagation. Some background on space weather affects on ionospheric conditions and the anatomy of a solar storm will be provided. Solar cycle 25 is turning out to be great fun for DXing so come hear how it is progressing and how you can find all those numbers and use them to make the most of it.

You can't work 'em if you can't hear 'em – Jay Slough, K4ZLE

Whether you are a contester, DXer, rag chewer, net operator, or engage in almost any other facet of our hobby, there are times when you wish you could hear the other station just a little bit better. This presentation is for you. We will examine some techniques to make that happen – from proper adjustment of the basic controls on your receiver/transceiver to external devices such as noise canceling units, external antennas, diversity reception and more.

National Weather Service and Skywarn – Robert Boyd, KC5ZJO

Senior forecaster, Robert Boyd will be discussing how the NWS uses ham radio operators and the SKYWARN program to enhance their forecast. If you participate in weather nets or provide storm spotting this will be a great forum to attend.

Uses for WSPR mode technology – Martin Buehring, KB4MG

This session explores the origins and basic characteristics of the WSPR (Weak Signal Propagation and Reporting) protocol and how amateur operators can use this for different applications. We will explore the numerous ways you can send and receive WSPR signals and use this information to assess basic propagation, test and compare antennas, and see the effects of day and night propagation, and effects of space weather. Some advanced applications will also be mentioned for using WSPR in amateur balloon launches and tracking. Finally, we will look at kits and ways to homebrew your personal WSPR systems.

Beginning Morse Code – Keith Ford, K4KEF & Jerry Poplin, KF4BOE

Think you might be interested in learning morse code? Join us as we discuss the fun you can have and resources that can help (or hurt) on your journey. Some of the things we will discuss:

Koch vs Farnsworth, straight key vs iambic paddles, keyers, decoders, CW, Morserino32, QRP, POTA/SOTA/IOTA, Long Island CW Club, LCWO, phone apps, and more.

Calibrating a Bird Model 43 Wattmeter – John Stensby, Ph.D, N5DF

One of the most common tools in an amateur's arsenal is good wattmeter. The de facto standard for many years has been the Bird Model 43. John Stensby will present about how to calibrate this meter for the best performance.

Radio Astronomy from the Moon – Hiedi Haviland, Ph.D, KK6SZW

We discuss using radio waves for astronomy and how to do radio astronomy on the surface of the Moon. We will discuss recent and planned Moon missions, including commercial missions.

The Many Myths of SWR – Bob DePierre, K8KI

Description: How many explanations have you heard regarding losses due to SWR, let alone all the damage it can do to your rig. Let's try it with some math from the ARRL Handbook (not too hard). You may be surprised at some of the conclusions.

Understanding Quantum Entanglement – Hans G. Schantz, Ph.D., KC5VLD

Quantum entanglement occurs when two particles become interconnected in such a way that the state of one particle instantly influences the state of the other, regardless of the distance separating them. This phenomenon was famously described by Albert Einstein as "spooky action at a distance." Applications include Quantum Key Distribution (QKD) and ultra-secure quantum communication. Challenges include maintaining entanglement over long distances and dealing with decoherence (loss of quantum coherence). Although the cost and complexity of quantum communications currently limit the ability of amateur radio operators to exploit this emerging technology, amateur radio operators should keep informed and see if advanced concepts can inspire new ideas and innovative approaches within amateur radio practice.

Chatting with the Space Station - ASCTE ARISS Contact – Chris Brown, PH.D., W9SBS

In February, 2024, the Alabama School of Cyber Technology and Engineering (ASCTE) conducted a live radio contact with the International Space Station through the ARISS program. This talk will discuss how to apply for a contact, how to complete paperwork and technical requirements, and how to conduct the program. We will conclude with a video of our contact with an ISS astronaut.

Introduction to Roving - Taking Your VHF Contest Show on the Road – Christopher Aurther, K4VB

Those of us not blessed with mountaintop locations, towers, and stacks of Yagis might think we have no way to compete in VHF contests, but there is a way: roving! By taking rigs and antennas to a mountain or hilltop, one can experience a whole new dimension of VHF, UHF, and microwave operating. Join Chris Arthur, NV4B as he introduces VHF contesting, gives tips for building an effective rover station, and shares stories and pictures of roves past to inspire you on your VHF contesting journey.

APRS – Tim Cunningham, N8DEU

Learn the basics of the of the Automated Packet Radio System, better know as APRS. We will discuss various APRS hardware and software configurations. Learn how APRS is an integrated automatic weather reporting network with automated weather stations and NWS weather bulletins. Join us to be a part of sharing ideas to expand the knowledge.

AMSAT Forum – Tim Cunningham, N8DEU

Learn what is new in the world of amateur radio satellites and how we deal with constantly moving satellites and the effects of Doppler Shift in real time. Learn how to determine if a satellite is actively working. Understand how easy it can be to operate on the Amateur Radio Satellites with minimal equipment. Join us to be a part in sharing ideas to expand the knowledge.

More 2024 Huntsville Hamfest forums are already in the works. Please check back soon for updates.