

2023 Huntsville Hamfest Forum List

As of 8/8/2023

ARRL

ARRL Member Forum

Moderator: Mickey Baker, N4MB, ARRL Director — Southeastern Division

Participant: David A. Minster, NA2AA, ARRL CEO

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 about several key areas of membership interest including efforts to ensure ARRL members are supported now, and into the future. Learn more about ARRL's advocacy work to defend spectrum, and to engage the next generation in radio communications and radio technology. Get information about benefits, services, and programs that members rely on to be active in amateur radio. Members and prospective members are all welcome!

ARRL Alabama Section Forum and ARRL Alabama Section Radio Sport Forum – Roger Parsons, KK4UDU & Christopher Arthur, NV4B

This is a special two-part forum. First up is ARRL Alabama Section Manager, Roger Parsons, KK4UDU, who will present an update on things happening in the AL section. Afterwards, Christopher Arthur, NV4B, will be discussing radio sport and how to become involved with contesting.

Alabama Section ARES – Roger Parsons, KK4UDU

Vendors

Using RepeaterBook.com to Help You Better Leverage Your Programmable Radio Investment - Charles F. Adams, Jr., KV4VT, North American Performance Administrator

Now in its 18th year of operation, RepeaterBook.com is amateur radio's most comprehensive, worldwide, free, online repeater directory. As the preeminent global gold standard for ham radio repeater information, RepeaterBook.com can help hams with programmable radios better leverage and enjoy their technology investments. This forum will take a closer, hands-on, look at how to best utilize RepeaterBook.com to help you quickly and easily keep your HF, VHF and UHF repeater portfolios updated and working properly.

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. He received his B.S. in Engineering and Applied Science (Electronics) from Yale University in 1979 and has been involved in a number of successful Silicon Valley startups. Prior to Elecraft, Eric was co-founder and President of Verisys, a test equipment

manufacturer of high-performance protocol analyzers for the computer and mass storage market.

Simply Integrating Your Current HF Radio Station with the FlexRadio Power Genius XL amplifier – Michael Walker, VA3MW

Join us for an exciting presentation on effortlessly harnessing the capabilities of the FlexRadio Power Genius XL Amplifier to enhance your HF radio experience. Learn how to seamlessly integrate the amplifier with HF radios from top OEM vendors like Icom, Kenwood, Yaesu, and others. Additionally, discover the straightforward integration of the Tuner Genius XL and the 4O3A 2x8 antenna switch, streamlining your ham radio station setup. Don't miss this opportunity to simplify and optimize your ham radio station integration by Mike VA3MW. See you there!

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.

APRS – Tim Cunningham, N8DEU

Learn the basics of the of the Automated Packet Radio System, better known 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.

RF Power Amplifiers– Larry Savage, WA4CAX

This presentation will provide detailed information and a critique of the currently available commercial amplifiers. Larry will also provide some basic theory of LDMOS RF amplifiers. He will have hardware components of amplifiers that he has designed and built for the forum participants to review.

Lighting 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 2 Geostationary Lightning Mappers (GLMs) in orbit, on both GOES-16 (East) and GOES-17 (West). This gives us lightning mapper coverage over nearly half the Earth. The mapper on GOES-16 has achieved "fully validated" status; the other should be validated this November. 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!

Lighting 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!

Powering Your Fun from The Sun – John Kalotai, N1OLO

John N1OLO will answer question you have about using solar power you POTA, SOTA, or any other "OTA" adventure. Discussions will include: power requirement calculations, picking a panel, and choosing the right controller.

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.

Can you operate ham radio from an electric vehicle? – Rob Suggs, PhD, NN4NT

We all have encountered ignition noise and alternator whine in internal combustion vehicles but what is the RF environment like in an electric vehicle? We'll discuss the basics of EV technology and show some spectrum analyzer and transceiver measurements for HF, VHF and UHF operations from a Hyundai Ioniq 5.

Locating Power Line Noise: A True Story – Mike Rozar, N4CNZ

Many of our stations have suffered the effects of power line noise. Join Mike Rozar as he recounts his experiences researching, building, and using homebrew antennas to locate power line noise at two amateur QTHs. Working closely with the local power company, Mike used Yagi and loop antennas for this project to help Barry Barton, WA4HR, and Bruce Smith, AC4G, with their noise problems. Catch this presentation to hear the whole story as well as some surprising findings from this successful effort.

Operating Procedures for Enhancing Your Microwave Contest Score – Ben Lowe, K4QF

For a microwave contests, a typical operation might be to go roving to a hill top and working 3 or 4 other stations. Since the 10 GHz & Above contest includes two factors for scoring, i.e. station calls worked and distances, this procedure details how to take advantage of the local terrain to greatly increase contest scores by accumulating distances. In the true ham radio spirit, it relies on teaming with numerous stations roving to multiple locations that are selected to maximize scores based on the ARRL rules for this contest, and it also takes advantage of the contest rules that permit multiple contacts with the same stations as long as they move at least 10 miles from the previous contact.

Two Hearts, One Hobby – Joe (KI4ASK) and Marry Catherine (KI4HHI) Domaleski

Married ham radio operators Joe & Mary Catherine candidly talk about what it's like to experience the hobby as a couple - the fun, the compromises, the challenges, and the rewards. We'll also talk about how to share the hobby with your non-licensed partner. Join us for this fun forum. Women, this forum is especially for you whether you're a ham or not.

Building Projects with Microcontrollers – Glen Popiel, KW5GP

Join ARRL author Glen Popiel, KW5GP, in an all-new presentation as he demonstrates how to build projects with the Arduino and other microcontrollers. Learn just how easy it is to create your own feature-rich microcontroller-based projects for your home and ham shack.

Send an Amateur Radio Balloon around the World– 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.

Current Lunar Missions & Radio Science – Heidi Haviland, PhD, KK6SZW

We will discuss the upcoming lunar missions including NASA's Commercial Lunar Payload Services (CLPS), Artemis, and other space agencies. Then we highlight the radio science instruments flying to the lunar surface.

What Physicists Don't Know About Electromagnetics – Hans Shantz, PhD, KC5VLD

In the 1940s, physicists and engineers alike used Stratton's *Electromagnetic Theory* as their text. They learned about such applied topics as simple antennas, waveguides, arrays, even radio wave propagation over the earth. Today, physicists use Jackson's *Classical Electrodynamics*. There's still material on simple antennas and waveguides, but nothing on arrays and the only practical case of radio wave propagation mentioned is Schumann resonances. Meanwhile radio scientists and electromagnetic engineers have taken Schelkunoff's concept of "impedance" and put it to work in a host of practical applications understanding transmission and reflection of microwave signals. They've worked out link laws that describe what fraction of energy makes it from a transmitter to a receiver, or reflects from a target in a radar system. They've worked out fundamental equations for physical limits on the size and performance of small antennas. What else don't physicists know about electromagnetism? And what implications does it have for our understanding of how the world works? Find out in this talk!

Beginning Morse Code – Keith Ford, K4KEF

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.

POTA Best Practices – Mike Turner, W4OPS

This Q&A panel forum will cover everything to make your POTA experience a success. Topics to be covered include: Go boxes, antennas, batteries, and much more.

POTA General Overview – Mike Turner, W4OPS

Mike will cover general topics about POTA including how to create an account, lucky year statistics and how to navigate the leaderboards and website. If you are new to POTA or just interested in getting started this is a must attend forum.

Introduction to POTA – Jerry Mitchell, KO4JVB

Have you ever wondered what POTA is or how to get involved? This presentation is geared toward beginners and will provide the necessary information to establish a POTA account, hunt active POTA spots and successfully accomplish your own activation.

Georgia State Parks on the Air event – Claude Ray III, AC4SH

The second annual Georgia State Parks on the Air event will be held on the first weekend of April, 6-7, in 2024. During our inaugural event in 2023 we had POTA Activations at 48 Georgia State Parks out of the 50 that are in our program. We've made updates to include classes for Single-Park, Multi-Park and Club activators as well as In-State and Out-of-State hunters. The

entry process is closely tied to the POTA program, and our webpage @ GAPARKS.ORG will calculate the scores using the log files submitted to it.

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 class the students will build a kit to take home with them. Two sessions of the same class will be offered. The first will be hosted by Joe, and the second by Matthew and Kevin. If interested please sign up at the stage. This is a first come, first serve event with limited space.

How to get in the DX station's log as seen from the short end of the pileup – Jay Slough, K4ZLE

Jay, an active DXer from both ends of the pile up, including the CY0S dxpedition, will describe how to get in the DX stations log. Tips from this forum will help you work the all-time new ones and add to your band county count!

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.

Organizations

The Museum of Information Explosion – Bob DePierre K8KI

Signals is a communication technology museum located a mile north of the VBC. It provides a hands-on, immersive experience where guests can explore, interact, and learn about communication technologies throughout history. Displays include many working radios from the spark era through SDRs, including an operational ham radio shack. There are working Regeneratives, Tuned RF, and Superheterodynes, and even a few from Clarence Tuska, co-founder of the ARRL. The museum will open soon to walk-in visitors, but is open today for events and guided tours. This is a must-stop for any hams in the Huntsville area. Would you like to hear more about what we have to offer?

ARDC Grants and 44Net Technology for the Amateur Radio community – Jon Kemper, KA6NVY

The presentation will introduce the ARDC foundation and provide an overview of two key areas. The first being the ARDC grant giving resource with some details about what is applicable and how to apply. The second topic will be an overview of the IPv4 IP address resources available to the ham community for various projects.

Alabama Repeater Council – Dennis Littleton, K4DL

MARS Forum

EDUCOM-Education Thru Communication – Joe Fairclough, WB2JKJ

Join us at our Forum and learn how to bring Amateur Radio to your local school as a teaching tool and a way of bringing excitement and interest to education.