2016 Huntsville Hamfest Forum Listing

8-3-2016

ARRL / IARU

- **ARRL Update**
  Bob Inderbitzen, NQ1R, ARRL Marketing Manager

  Bob updates us on the ARRL at the beginning of its second century. The focus of the presentation is the future of the ARRL and amateur radio in general.

- **"Using Electronic Media to Communicate with the Ham Community and the General Public"**
  Ed Tyler, N4EDT, Public information Coordinator, Alabama Section

  This will be an open presentation and discussion: all interested hams are welcome. Topics to be covered are how to structure electronic media and encourage participation and contributions.

- **"Status of the 60m (5 MHz) Band"**
  Larry Price, W4RA, IARU & ARRL President Emeritus

  ARRL and IARU managed to get 60 meters added to the International Radio Regulations at the World Radio Conference last year: now all we need is for the FCC to act in a responsible manner and implement new frequencies into the US regulations. Come to the meeting on Saturday and hear more about the matter."

- **ARRL Southeasteren Division Meeting**
  Doug Rehman, K4AC, Southeastern Division Director
  Mike Lee, AA6ML, Southeastern Division Vice Director

  Current events and matters of importance to all ARRL members in the Southeastern Division.

- **Alabama Section Meeting**
  JVann Martin, W4JVM, Alabama Section Manager

  Our new section manager JVann will review ARRL activities and initiatives in the Alabama section.

- **Alabama Repeater Council Forum**
  Dennis Littleton, K4DL, Vice President, Alabama Repeater Council

  A forum for repeater owners and users alike: find out what's happening with the coordination of new analog and digital repeater systems in Alabama!

- **A Tour of ARRL Headquarters**
  Bob Inderbitzen, NQ1R, ARRL Marketing Manager

  We're all familiar with the "W1AW Building", icon of ARRL Headquarters. Let's find out what's inside, with NQ1R as our tour guide!

Education

- **"EDUCOM: Education through Communication"**
  Joe Fairclough, WB2JKJ

  Our *EDUCOM* forum will detail how you can take ham radio back to your school and introduce it as the most effective teaching tool ever.

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- **YL Forums**

  Catherine Andrews, AC4YL, District 4 Chairwoman, YLRL

  Forum 1 (1400-1500): Women in Ham Radio Then and Now

  In this forum, we will review a brief history on women in wireless operating from its beginning and moving forward to YL activity in ham radio in the present and beyond.

  Forum 2 (1500-1600): Ham Radio Operating Hints, Tips, and FAQs

  For the newly licensed to the well-versed, we will have some hints and tips for everyone including: operating on 2M Repeaters, SSB Phone, Echolink, working pile-ups, contesting, and more! Bring your tips and questions too!

Public Service/EmComm

- **Alabama ARES Forum**

  Moderator: Hub Harvey, N4HUB, Assistant Alabama Section Manager

- **SKYWARN Forum**

  Robert Boyd, Senior Forecaster, NWS-Huntsville

  The National Weather Service in Huntsville invites all qualified ham radio operators interested in learning how to report critical life-saving severe weather information, to participate in a local SKYWARN forum that will focus on maintaining the strong relationship between the NWS and the area Ham community. This will include a brief presentation on the latest NWS/HAM procedures during severe weather -- highlighting the importance of strong ham radio operator participation to enhance the NWS warning decision making process. Please stop by and find out how you can join the growing storm spotter team!

- **Tri-Service MARS meeting and Alabama state MARS meeting (2 hours)**

  Bob Glasscock, AAA4AL, Alabama/Mississippi State MARS Director
  Jim Hamilton, AAA4RD, Army MARS Region 4 Director
  Bruce Nebergall, AFN4SE, Director, USAF MARS SE Division
  John Briscoe, Jr. AAA4R7, Army MARS Region 4 Training Officer

  The current status of the MARS program and future areas of service will be discussed.

Technical

- **"Lightning Research at NASA's Marshall Spaceflight Center"**

  Dr. Monte Bateman, WB5ZRX, Thunderstorm Physicist

  NASA's Marshall Spaceflight Center is 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. Some recent findings will be presented, including how we solved a nearly 100-year old puzzle about the daily variation in the Earth's global electric circuit (basically a leaky capacitor). Also, come hear about instruments being developed right here in Huntsville that will add lightning information to the GOES daily satellite photo loops, and its "little brother" that is headed to the International Space Station.

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- **"Lightning Protection for the Radio Amateur"**
  Dr. Monte Bateman, WB5RZX, Thunderstorm Physicist, NASA/Marshall Space Flight Center

  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!

- **"What is the Near Field?**
  Dr. Hans Schantz, KC5VLD

  This talk explains the near field, taking waves propagating along transmission lines as a starting point. Understanding a few basic concepts like field impedance and energy velocity makes the mysteries of antenna behavior more comprehensible.

- **AMSAT 2016 Forum**
  John Kludt, K4SQC, AMSAT Area Coordinator

  This year's AMSAT forum will focus on the skills, techniques and equipment needed to successfully use the current crop of amateur radio carrying satellites. In addition we will be discussion upcoming launches and future opportunities.

- **"D-STAR Innovations"**
  Ron Shaffer, W4VM, John Davis, WB4QDX, Ed Woodrick, WA4YIH

  Join D-STAR and other enthusiasts of digital voice technologies from around the Southeast for the latest news and get the scoop on the latest devices for D-STAR and other digital modes. The forum will feature and demonstrate the latest in multi-mode devices from around the world including DV Dongle, DV Access Points, hotspots and new devices that connect to the Raspberry Pi and other devices to provide worldwide communications on VHF and UHF radios

- **"Amateur Radio Pico Ballooning"**
  Bill Brown, WB8ELK

  How to track a foil party balloon with a solar-powered micro-miniature APRS transmitter as it flies around the world.

- **"Receiver Audio"**
  Bob DePierre, K8KI

  Distortion in HF Receiver Audio: Have you ever found the audio in your HF rig to be tiring or harsh after listening for a while. Audio distortion is usually the problem. Strangely audio specs haven't changed in 50 years, but you'd think we'd be doing a lot better. I have measurements on a number of popular new and old rigs. If yours is one of them, wouldn't you like to find out how it stacks up?

- **"The One-Day Polar Mount for Space Tracking"**
  Ben Lowe, K4QF

  This presentation describes an easy method for building a polar mount in one day. It also addresses the orbital science that is the basis of a polar mount for tracking the moon, the sun, and other space objects, and it describes how to align your polar mount for angular accuracy.

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- **"FLEX-6000 for DXing and Contesting"**
  Stephen Hicks, N5AC, VP Engineering, FlexRadio Systems

  We will discuss specific advantages of using a direct sampling radio, and more specifically the FELX-6000, for chasing DX and contesting. Review of the performance benefits, key functional differences, and methodology for working DX will be covered as will key advantages for the contester including

  1. Ease of setup and reconfiguration
  2. Current and future integration capabilities for M/1, M/2, and M/M station configurations
  3. Workflow optimizations between the FLEX-6000 and logging software,
  4. Capabilities and techniques for increasing rate.

- **"The Technology Behind the K3S and Our Other New Products"**
  David Shoaf, KG6IRW, Elecraft

  David will describe the current Elecraft product line.

- **"Kit Building for Success"**
  Joe Eisenberg, K0NEB

  Joe Eisenberg, licensed since 1969, puts on kit building forums all over the country as well as live, hands-on group kit building experience, one of which is featured in the ARRL's *The DIY Magic of Amateur Radio* video. He currently writes the Kit Building column for CQ Magazine.

  This forum covers the right tools to use to assemble your kits, as well as the best ways to organize your parts and handle kits with little or no instruction. He will also go over ways to make your kit building time more enjoyable and with less change of error.

Operating

- **Gordon West Instructor Academy**
  Gordon West, WB6NOA

  Join Gordo as an elmer, instructor, or Scout Radio Merit Badge leader to learn new techniques to teaching ham radio. Gordo will present lots of live demos, plus free instructor guides, patch, and graduation certificates for all in the class. Lear how to score instructor free PowerPoints, developed to follow each of Gordo's W5YI books.

- **"Getting Started with Amateur Digital Modes"**
  Sholto Fisher, West Mountain Radio

  This session will start with a review of the history and benefits of digital modes. The popular modes will be covered along with what those modes are best used for (DX, contesting, rag-chewing, traffic, emcomm, nbems, email…) The attendee will learn about what hardware and software is required along with basic operating instructions for the popular programs such as HRD/DM-780, Fldigi, MultiPSK, and RMS Express. This session will include illustrations and audio samples of common digital transmissions.

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- **<u>QRP Multi-Forum</u> (3 hours)**
  Moderator: Craig Behrens, NM4T

  1. "Arduino – The Next Generation", Glen Popiel, KW5GP

     Since its introduction in 2005, the Arduino has come a long way and now includes many new variants and interface options useful in home and amateur radio applications. Join Glen Popiel, KW5GP, author of ARRL's book, "Arduino for Ham Radio" as he introduces and discusses new projects leveraging these new powerful, inexpensive, and easy-to-use members of the Arduino family and how you can create your own feature-rich Arduino-based projects for your home and ham shack

  2. "Experience National Parks On The Air", Greg Lane, N4KGL

     Throughout 2016, Amateur Radio will be helping the National Park Service celebrate their 100th anniversary. Hams from across the country will activate NPS units, promote the National Park Service and showcase Amateur Radio to the public. In this forum, I will share some NPOTA operating experiences and answer your questions. Planning, equipment and interacting with the NPS will be addressed. Also learn about the Five Star Activator Bonus.

  3. "Vehicle-Based Portable Radio Field Operations", Craig Behrens, NM4T

     Craig explores how your mobile vehicles can become and ideal platform to get you on the road to great amateur radio adventures.

- **<u>"Shocking Stores from the Heart – How the Cardiac Defbrillator Came to Be"</u>**
  Dr. Jerry Brown, N4EO

  Sudden death by lightning was observed by the ancients. Man-made high voltages and currents came into being after Alessandro Volta's "voltaic pile" batteries. Man-made shocks can kill: "recovery" by application of "countershocks" remained a poorly-understood phenomenon until just after World War II. The stories of shocks and countershocks need to be told to the ham community!

- **<u>Contesting Multi-Forum</u> (3 hours)**
  Moderator: **Tim Wininger, AB4B, President, Alabama Contest Group**

  1. "Contesting 101 + Q&A" by Tim Wininger, AB4B
     Introduction to competition (Radiosport) in Amateur Radio today, with a fast-paced Q&A session to boot.

  2. "Simplify Your Contest Station" by Craig Thompson, K9CT
     Station design, layout and ergonomics of contest stations will be discussed plus implementation of cutting-edge technology.

  3. "VHF/UFH Contesting – Portable Style" by Chris Arthur, NV4B
     The ins-and-outs and dos-and-don'ts of portable VHF/UHF contesting from experience in the field.