



4th ANNUAL TECHCON

West Central Florida Section Technical Conference

**SATURDAY FEBRUARY 24, 2018
LIST OF PRESENTATIONS**

THE FUTURE OF AMATEUR RADIO TRANSCEIVERS - BOB ALLSON WB1GCM - ARRL LAB

So, what's happening with transceivers these days? You may be familiar with traditional transceivers that use analog conversion methods for reception. However, there are many new transceivers that use digital architecture. How do they differ performance wise? Are they any good? ARRL Assistant Lab Manager Bob Allison, WB1GCM will explain. Suitable for beginners.

QST PRODUCT REVIEW; WHAT DO ALL THOSE NUMBERS MEAN? - BOB ALLISON WB1GCM

The most frequently asked question the ARRL Lab is asked is, "What radio should I buy?" Bob Allison, WB1GCM, ARRL Assistant Lab Manager and Test Engineer is not permitted to answer that question, but he can certainly point you in the right direction. He will explain the key transmitting and receiving tests that are performed at the Lab and what all those numbers mean that are shown in QST Product Review articles. Terms such as Two-tone Third Order Intermodulation Distortion Dynamic Range, Blocking Gain Compression Dynamic Range and Reciprocal Mixing Dynamic Range can be intimidating or confusing. Bob will explain them in simple terms, as well as some of the transmitting tests. Why is low Phase Noise Important? Bob will explain and in an entertaining way. Suitable for beginners.

TRANSMITTER MAPPING AND TSB-88- BRYAN FIELDS W9CR

Bryan W9CR will explain in this presentation how to map out FM two way transmitter service coverage and how the U.S. Telecommunications Industry Association TSB-88 standard relates to getting good service out of repeaters.

INTRODUCTION TO THE BASICS OF FORWARD ERROR CORRECTION - DAVID BIRNBAUM K2LYV

FT8 is one of the newest digital modes in amateur radio. Dave K2LYV in this presentation will explain how the encoding of FT8 makes this mode so robust in the worst of band conditions.

INTRODUCTION TO THE RASPBERRY PI - DARRELL DAVIS KT4WX

In this presentation new for 2018, Darrell KT4WX will show you what the Raspberry PI is and a basic overview of the Raspberry PI and products currently available. At the end of the presentation, you will be show how to get a distribution of Raspbian Linux up and running on the Rapsberry PI for the first time.



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INTRODUCTION TO THE PICAXE AND ARDUINO - DARRELL DAVIS KT4WX

What is a PICAXE? The PICAXE is a great microcontrollers for beginners to start out with. The PICAXE will be described and what is needed to use it in your radio projects. Updated information on the new PICAXE 6 and Blockly software. The Arduino is becoming very popular in amateur radio projects. The Arduino basics will be explained and the Arduino series will be overviewed and what is needed to use it in your radio projects.

MICROCONTROLLER PROGRAMMING TECHNIQUES - DARRELL DAVIS KT4WX

Darrell KT4WX will show you some of the most commonly used to interface microcontrollers to the outside world. The techniques are similar across many families of microcontrollers.

TOOLS AND TEST GEAR FOR AMATEUR RADIO - GEOFF HAINES N1GY

Geoff N1GY will show you how what kind of tools and other gear you will need to setup your first workbench to do repairs and new construction projects.

PROPAGATION IN LOW SUNSPOTS AND HOW THE SUN AFFECTS OUR BANDS - LU ROMERO W4LT

Lu W4LT will show you in this presentation how sunspots affect propagation on the various HF bands and the best way to use propagation conditions to your advantage.

RAPID FIRE SESSION: In a 50 minute time slot, we will have three 15 minutes presentations that are too short for a 50 minute time slot

MICROCONTROLLERS BASIC - Mike Hembrey KV0OOM

Mike KV0OOM will describe a few basic projects that can be implemented with a PICAXE Microcontroller.

FURTHER THOUGHTS ON LOADED TWO BAND DIPOLES - Dave Birnbaum K2LYV

Dave K2LYV will follow up his presentation he did on a two band custom trapped dipole with some additional thoughts on trapped antennas.

WL2K DEMONSTRATION - Jim Stewart W4XDS

Jim W4XDS will give a hands on demonstration on how to setup and use a portable WL2K station for use in any situation.