

Saturdays: HF Operation Demo & Introduction: Join Carl (N2VQO) in the Radio Room for a demonstration and hands-on instruction of HF operation using the ICOM 7300. The session is geared towards Technicians upgrading to General Operations but is open to all interested in HF operation. Check the calendar to confirm Carl's availability.

Third Saturday of the Month 12pm: License Testing: It's easy to get started in Amateur Radio! A straightforward multiple-choice exam will test your basic understanding of the fundamentals of radio and FCC rules! Preregister with David Morrill. VE Coordinator Phone: 623-680-5011 cell or email: N7TWT@cox.net

Monday Apr 20 Noon: Working Satellites with Ham Radio: This class is for Hams (Technician class or higher) interested in working satellites for the first time. You will learn the basic principles of amateur radio satellite operation, how to select the appropriate equipment for a basic satellite station, and how to use resources with smart phone apps and online software to predict satellite passes. You'll also learn how to compensate for the Doppler effect on satellite signals, successfully receive signals and make contacts on FM satellites, and log and confirm satellite contacts.

ONE SPOT LEFT! Sunday Apr 26 Noon: Workshop - NanoVNA Practical Testing: This class is a continuation of the NanoVNA-101 class lecture and is intended for those who have attended the NanoVNA-101 class or have experience with the NanoVNA. This is a practical hands-on class where participants will perform the following, using the NanoVNA:

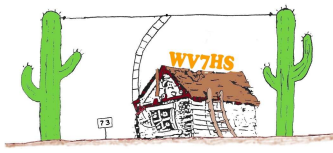
- **Antennas:** Perform an antenna sweep and align to a specific frequency. Impedance, Resonant Frequency, SWR and return loss will be measured, documented and interpreted.
- **Coax:** Coax will be swept to determine length, impedance, Loss will be measured. Documented results will be evaluated for serviceability.
- **Baluns:** Perform a BALUN sweep to determine impedance and SWR. Documented results will be evaluated for serviceability.
- **Filter Sweep:** A bandpass filter will be swept to check alignment (Pass Frequency), Impedance, SWR, Insertion Loss and Out of Band Rejection. Documented results will be evaluated for filter performance.
- **Manual Tuner:** A manual tuner will be used to achieve resonance and low SWR on an external antenna. Impedance, Resonant Frequency, SWR and Return Loss will be measured, documented and interpreted.

Prerequisite – NanoVNA-101 or NanoVNA Proficiency. Class is 3 hours. Please bring your NanoVNA. Limit of 5 Students – sign up early!. (Observers welcome)

Monday Apr 27 Noon: Making Contacts with Fusion & Wires X: Learn how to get the most out of your Yaesu Fusion Radio! We will learn the difference between Fusion, Wires X, and YSF. You'll learn how to use the C4FM mode on your Yaesu radio on a repeater or with a HotSpot.

Monday May 4 9am: Antenna Solutions for HOAs: A course focusing on small lot solutions for antennas for HOA-restricted situations. For HF, VHF/UHF, and Satellite antennas. Commercial and DIY solutions discussed.

Monday May 11 9am: Introduction to DMR: The West Valley Ham Shack Repeater (WV7HS) now has DMR Brandmeister capability. Come learn how to use this new feature! Do you have a new DMR radio and you want to take advantage of all that extra capability? This class will help you get started on DMR Brandmeister. Although we will not cover specific radios, we can help you make sense of the radio you have. Or maybe you just want to see what DMR is all about and you haven't purchased a DMR radio yet!



WVHS Events

Monday May 18 9am: Portable backup Solar Generation Systems for Hams: This class teaches all that you need to know to purchase the correct solar generation components to suit your needs and to assemble your own solar generation system. The class first discusses what your electrical demand requirements are, both for radio and for other support gear. Once demand is determined, a battery of proper Amp hour capacity and type can be selected to provide service between recharge cycles. We then discuss photovoltaic panel designs and calculate the Watt rating required to provide electrical demand, plus charging demand during daylight hours. Last, we tie the system together by discussing charge controllers, battery boxes, interconnect wiring, connector options, circuit breakers and inverters.

This system is primarily intended to power your ham radio gear and ancillary equipment such as antenna tuners, lights and laptops off-grid. This is a 3-hour class

Monday Jun 15 9am Portable Antenna Systems in the Field: Would you like a portable, compact and versatile antenna system for your EMCOMM go-kit? Or maybe you enjoy POTA or SOTA? Or perhaps you would just like to know more about portable systems similar to the Buddipole. If so, a portable antenna system might be the antenna system for you! These high performing antennas can be mounted on a tripod, tabletop, balcony and more!

This class first explores Buddipole purchase options, parts and the multitude of add on options for what is truly the Swiss Army Knife of antennas. We will examine the antenna configurations possible with the Buddipole and similar antennas, including Vertical, Horizontal Dipole, Yagi, Vertical Dipole "L" and Vee. Some antenna theory relating to antenna configuration will help to understand the strength and weaknesses of these configurations. Once the best configuration for the field application is determined, a discussion will follow about final assembly, antenna tuning and radial configuration requirements. Some low-level discussion about antenna concepts such as SWR and resonance will round out the class with that perfect tune in its operational environment.

SUNDAY Jun 21 9am: Discovering your Technician Privileges: Now that you have your Technician license do you know what you can do with it? You can still talk all over the country, or even all over the world with the right gear and tools. In this class, we will help you get the most out of your technician license. This class is perfect for new Hams or even hams who have had their technician license for years but haven't ventured out beyond the local repeater.