



Most Saturdays: HF Operation Demo and Introduction: Join Carl 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. Walk-in during open hours; no reservation is required. Please check the <u>calendar on the website</u> before your visit to confirm Carl's availability.

SUNDAY Apr 6th <u>1pm</u>: What is GMRS & Why You Should Use It: Learn about the fast-growing General Mobile Radio Service, a segment of the UHF band. Frank K7SD/WRVG584 explains licensing procedures, practical uses, and gives a lay of the land for GMRS in Phoenix, and beyond. See why GMRS is a must for your radio toolbox!

Apr 7th **NOON: Antenna Class 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.

Apr 14th <u>NOON</u>: General Class Electrical Principles (G5): This class covers Sub-element G5, (40 pool questions). Three of the questions will appear on the 35-question General Class test. Topics include resistors, capacitors, and inductors in series and parallel; transformer basics; decibels, power, PEP and RMS values; resonance and impedance. Estimate this to be a 3-hour session. Limited to 8 students. Some math is required.

CLASS IS FULL! NEW! Apr 21st <u>NOON</u>: **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.

SUNDAY ONE SPOT LEFT Apr 27th 1pm: Soldering: Learn by "hands on" use of soldering iron with point-to-point and circuit board soldering practice, a basic class for beginners. Limit upped to 6. Soldering irons are available for use.

Apr 28th <u>NOON</u>: **General Class Circuit Components (G6)**: This class covers Sub-element G6, (24 pool questions). Two of the questions will appear on the 35-question General Class test. Topics include resistors, capacitors, and inductors; rectifiers; solid-state diodes and transistors; vacuum tubes; batteries; analog and digital integrated circuits (lcs); microwave ICs (MMICs); display devices; RF connectors; ferrite cores. Estimate this to be a 3-hour session. Limited to 8 students. Some math is required.

May 5th <u>9am</u>: Antenna Class for HOA's: 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.

May 12th <u>9am</u>: Basic FT-8: Learn the basics of the new FT-8 mode including hardware and software installation.

SUNDAY May 18th <u>9am</u>: **Discovering your Technician Privileges**: Now that you have you 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.

May 19th <u>9am</u>: Advanced FT8 Digital Mode: DX and Contesting: Learn the finer points of chasing and working DX stations and DXpeditions using the FT-8 mode. We'll also cover the new "Super Fox" version. A follow on class to our 'Basic FT-8' class for more experienced users.

SUNDAY Jun 8th <u>9am</u>: 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.