Radio Operators Class

American Red Cross
Yolo County Chapter

Yolo County ARES
Berryessa Amateur Radio Klub- BARK
Yolo Amateur Radio Society
Class Overview

- Part 1 Getting started
- Part 2 Hands on stations
- Part 3 Mentor Assignments & Course Evaluation
Getting started

- Introductions
- Getting your first radio
- Understanding the lingo of the manuals
- Groups in the area: ARES, BARK, YARS
Getting Your First Radio

- HT, Mobile, or Base station?
- Features to look for…
Learning the *Lingo* to program your radio

- Simplex & Repeater Operation
- VFO & Memory Operation
- Frequency Selection
- Squelch
- Repeater offset
- Setting the PL or CTCSS Tone
A Tower of Babel!

RADIO PROGRAMMING LINGO

VFO
SIMPLEX
CTCSS
F-Key
MEMORY
SQUELCH
PL
REPEATER
+-SHIFT+-
ENCODE
Getting started

- Make a copy of your manual or download a copy
- Use a highlighter
- Use Post-it Notes

Enter VFO mode
Simplex
Enter PL tone
Repeaters & Simplex

- Repeaters
- Simplex
Variable Frequency Oscillator mode

- VFO — Pick your frequency!
On the Two Meter Band the standard repeater offset is 600kHz.

**Minus - Offset**

\[
\begin{array}{c}
146.000 \\
- \quad 0.600 \\
\hline
145.200
\end{array}
\]

**Plus + Offset**

\[
\begin{array}{c}
146.000 \\
+ \quad 0.600 \\
\hline
146.600
\end{array}
\]
Yolo County ARES

CTCSS and PL tones

- Motorola developed CTCSS & PL
  “Continuous Tone Coded Squelch System” or “CTCSS” for short, and patented it as “PL” short for “Private Line”

Mother may I? Open the Repeater!
Program a Repeater Frequency...

BARK Repeater: 146.970 Minus PL 123.0

- Enter VFO
  *Variable Frequency Oscillator mode*
- Enter frequency-use key pad 146.970
- Turn ON “Repeater Offset” set to “-”
  *a function / menu choice*
- Turn ON “CTCSS or PL”
- Select Tone “123.0”
Program a Simplex Frequency...

ARES Simplex: 147.510

- Enter VFO
  Variable Frequency Oscillator mode

- Enter frequency- use key pad 147.510

- Turn OFF “Repeater Offset”
  a function / menu choice

- Turn OFF “CTCSS or PL”
If using a HT, find the LOCK key...
Radio Groups in Yolo County

Berryessa Amateur Radio Klub - BARK

- Web site: www.bark2m.com
- Net: Every TUESDAY at 07:30 PM, 146.97MHz, negative offset, PL 123.0Hz
B A R K

BERRYESSA AMATEUR RADIO
KLUB

REPEATER

2 METER 146.970 MHz
MINUS OFFSET (146.370 MHz)
PL 123.0

NET: Every Tuesday Night at 1930 hours.
WOOF WOOF, GROWL, ARF ARF ARF...!

I LOVE BARK RADIO
Radio Groups in Yolo County

Yolo Amateur Radio Society

- Web site: www.yars.org
- Net: Every Monday at 8:30 PM, 147.000 MHz, negative offset, PL 136.5 Hz
Yolo Amateur Radio Society

Mt. Vaca K6MVR Repeater
147:000, Tone 136.5 hz
Net: Monday 2030 hours

Club Meeting @ Explorit Center, Davis 1st Tuesday
1830 hours
Radio Groups in Yolo County

Yolo County ARES

- Web site: www.yoloares.org
- Net: Every Monday at 8:00 PM, 146.97MHz, negative offset, PL 123.0Hz
Hands-on stations...

Each station will have a 15 minute presentation, with a five minute break between stations.

- Station #1- Powerpoles Batteries, and Power Supplies
- Station #2- Setting up a mobile Rig and assembling a "Go Kit"
- Station #3- Antennas: J-pole, Vertical antenna, Coax & Mag Mounts
- Station #4- Talk on the RADIO! Overview of Net Control Functions and a visit to the ARC-RRT/ARES Radio Room
- Station #5- Show and Tell

*Red Cross Emergency Communications Response Vehicle* - ECRV
Finishing up...

- Mentor Assignments
- Course Evaluation