
Radio Operators Class



**Yolo County
ARES**



American Red Cross

Yolo County Chapter



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**Berryessa Amateur
Radio Klub- BARK**



**Yolo Amateur
Radio Society**



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Class Overview

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





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Getting started

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



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Getting Your First Radio

- HT, Mobile, or Base station?
- Features to look for...





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Understanding the Lingo in the Manual

Learning the *Lingo* to program your radio

- Simplex & Repeater Operation
- VFO & Memory Operation
- Frequency Selection
- Squelch
- Repeater offset
- Setting the PL or CTCSS Tone



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A Tower of Babel!

RADIO PROGRAMMING LINGO





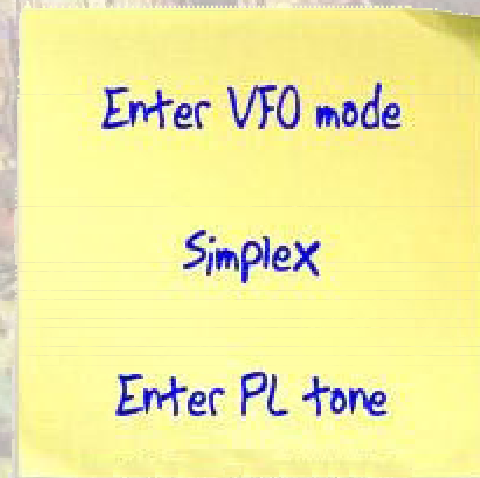
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Getting started

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





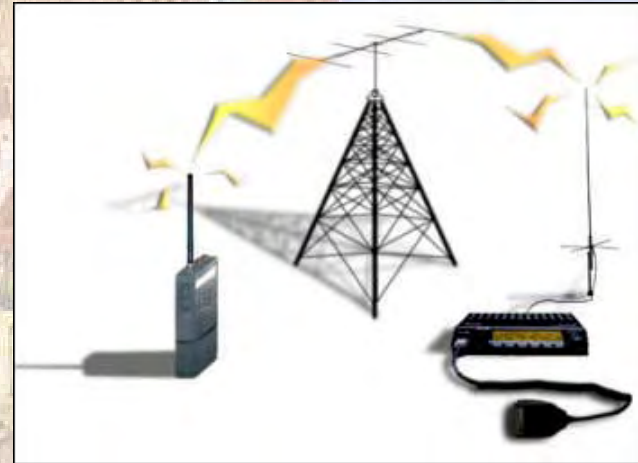
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Repeaters & Simplex

■ Repeaters



■ Simplex





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Variable Frequency Oscillator mode

- VFO — Pick your frequency!





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Repeater Shift / Offset

On the Two Meter Band the standard repeater offset is 600kHz.

Minus - Offset

146.000

- .600

145.200

Plus + Offset

146.000

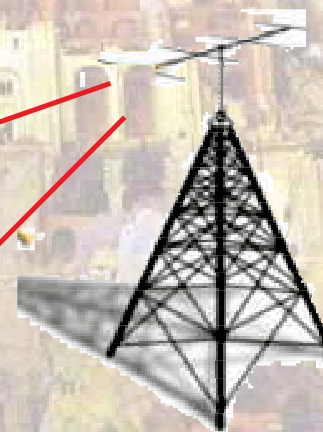
+ .600

146.600

Input

Output

146.000





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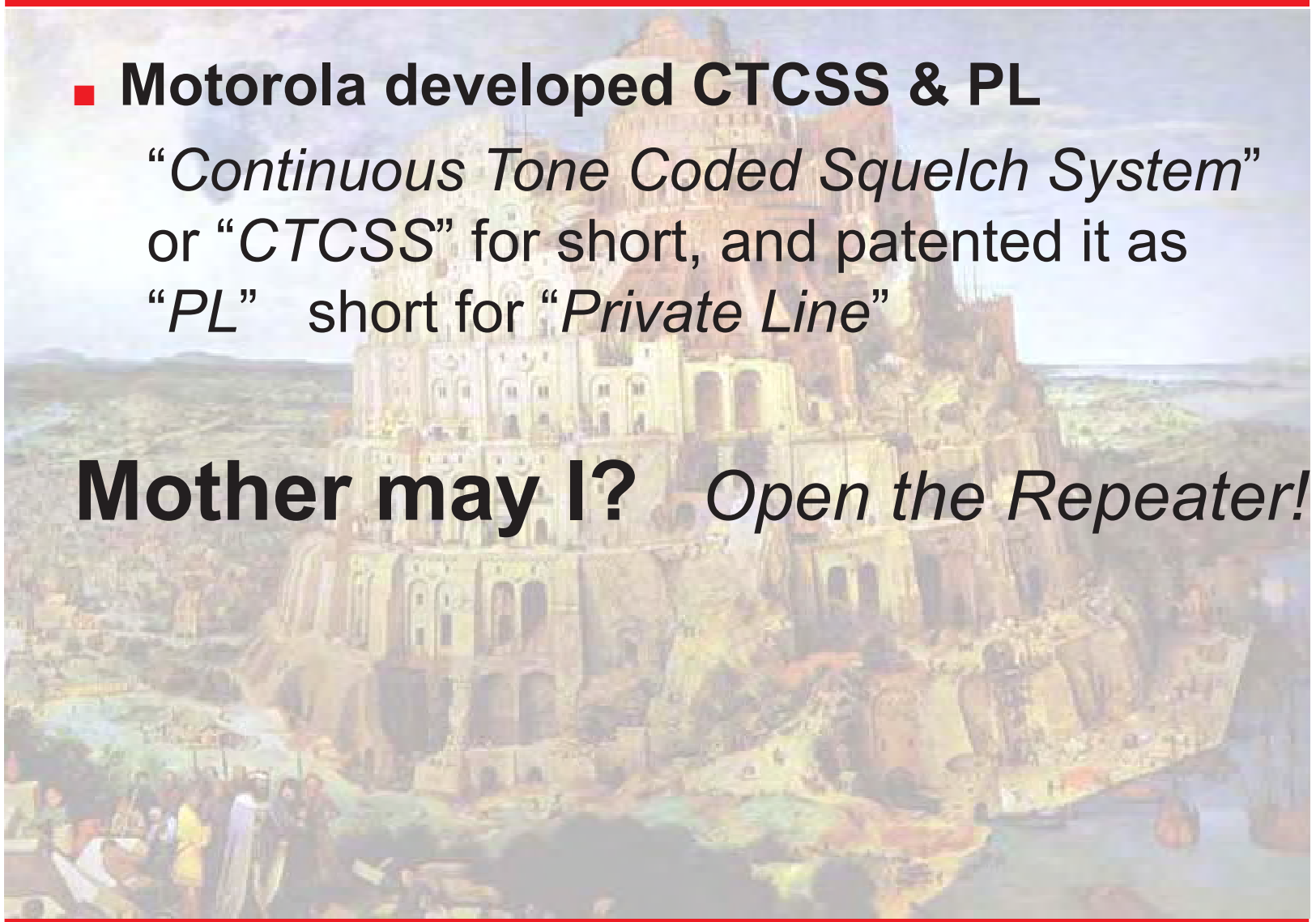
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CTCSS and PL tones

- 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!*





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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"**



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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"**



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If using a HT, find the LOCK key...





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Berryessa Amateur Radio Klub - BARK

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



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BARK

BERRYESSA AMATEUR RADIO KLUB

REPEATER

2 METER 146.970 MHz

MINUS OFFSET (146.370 MHz)

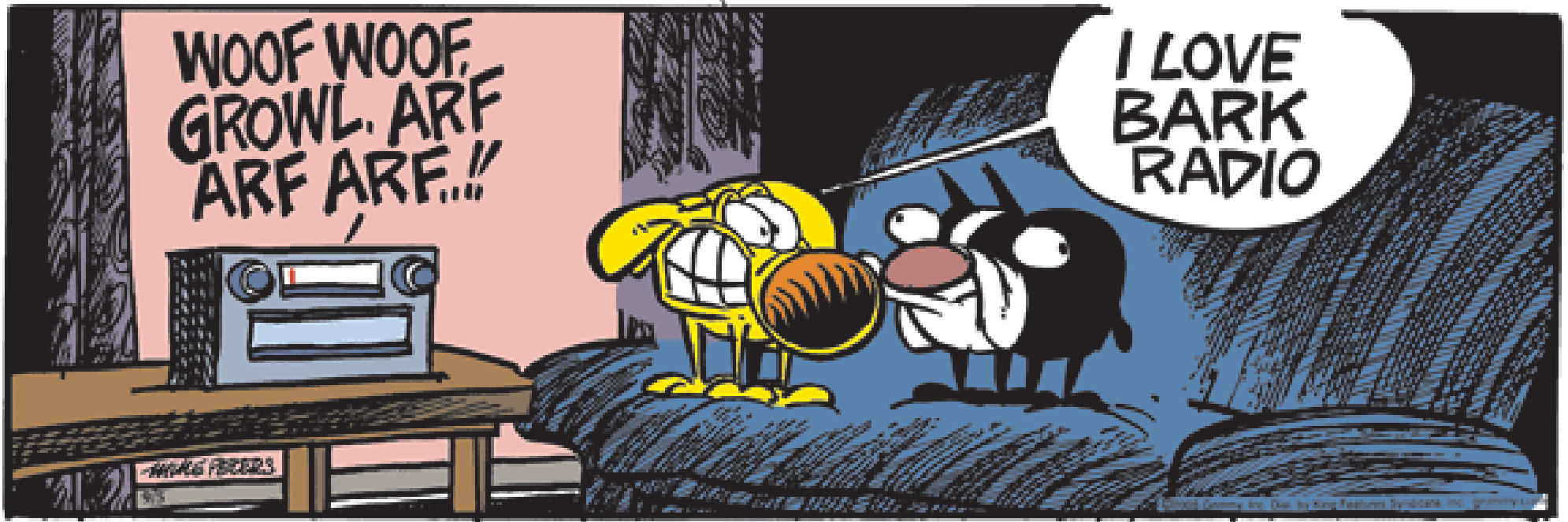
PL 123.0

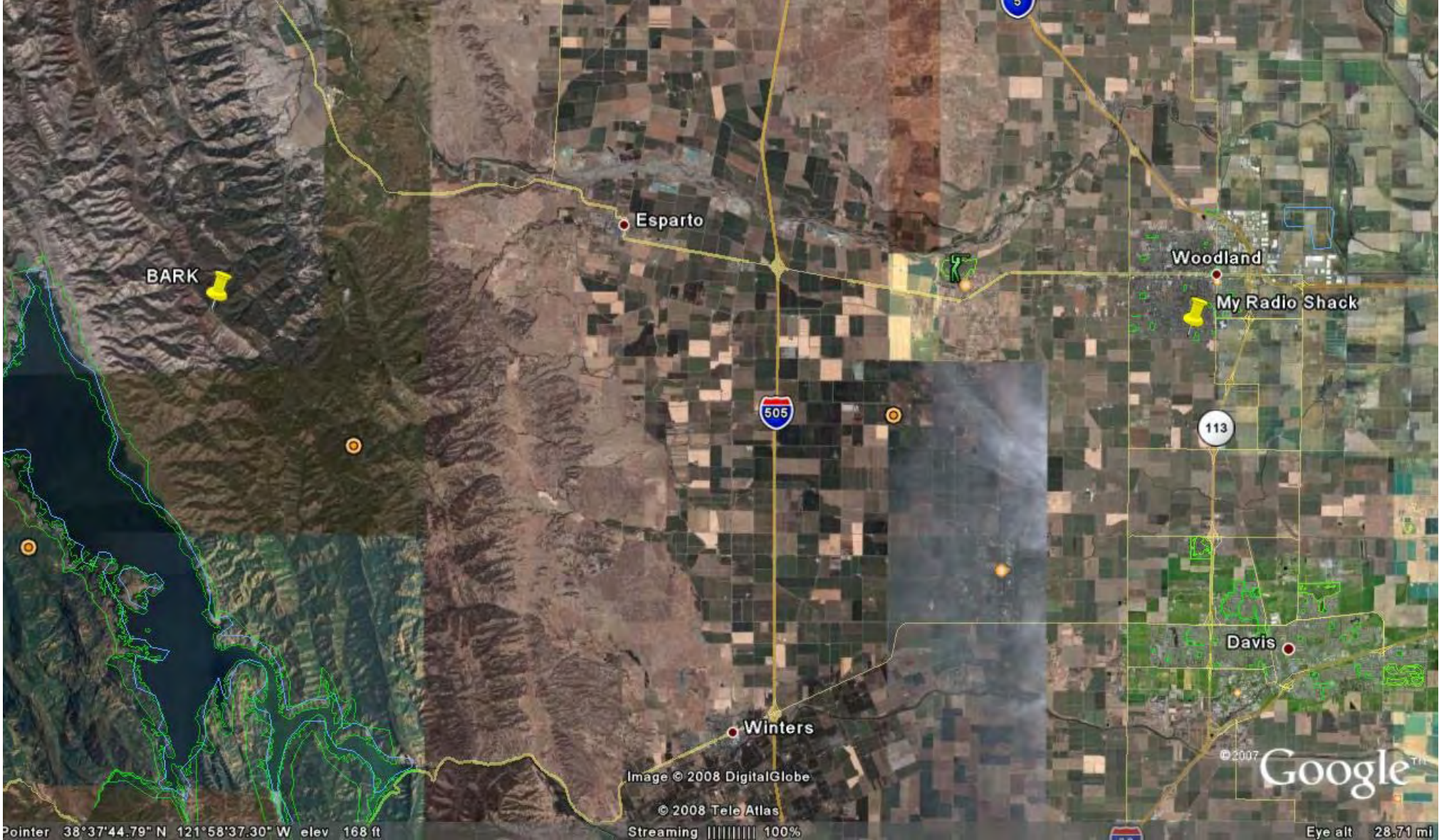
NET: Every **Tuesday** Night at 1930 hours.



WOOF WOOF,
GROWL, ARF
ARF ARF...!!

I LOVE
BARK
RADIO





BARK

Esparto

505

113

Woodland

My Radio Shack

Winters

Davis

Google

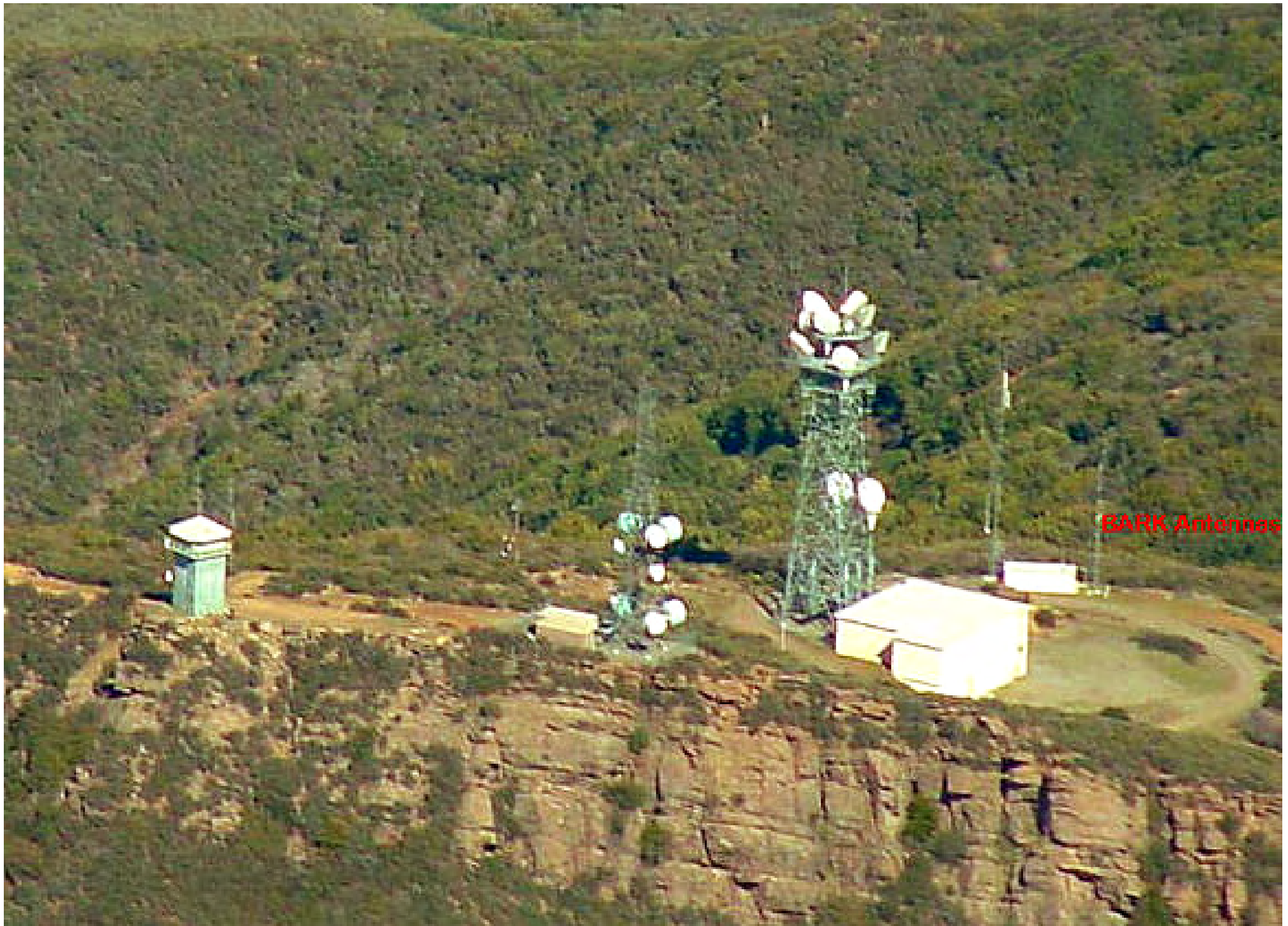
Pointer 38°37'44.79" N 121°58'37.30" W elev 168 ft

Image © 2008 DigitalGlobe

© 2008 Tele Atlas

Streaming 100%

Eye alt 28.71 mi



BARK Antennas













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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



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

Club Meeting @ Explorit
Center, Davis 1st Tuesday
1830 hours















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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



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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



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Finishing up...

- **Mentor Assignments**
- **Course Evaluation**