

# ALL EARS

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Official Newsletter of the Escondido Amateur Radio Society - N6WB

May 2003

## UPCOMING MEETINGS

EARS meets at the Escondido Chamber of Commerce building, 720 N Broadway, at 7:30 p.m. on the fourth Tuesday of each month. Come early and chat!

### MAY 27 SHOW AND TELL

Some of EARS own are going to show their latest gadgets and tell us all about 'em.

Jo Ashley, KB6NMK, has a new Yamaha generator which will be on display. Sam Bradsher, N6SD, will be bringing a 2-meter RDF Yagi with an active attenuator for fox hunting and a Rock-Mite transceiver.

Also, Nick Uran, KK6TV, will be bringing his laptop and TS570 with the WriteLog software installed. This is the software we want to use on Field Day.

This is an open forum and all members may have their fifteen minutes of fame as well, just for bringing something to show or to show off.

### JUNE 24 FINAL FIELD DAY PREP

This meeting is the Tuesday before Field Day. Last minute plans will be discussed and information will be available for anyone who still needs it. The WriteLog software will be gone over one last time.

### JULY 22 SATELLITES

Paul Williamson, KB5MU, will be giving a talk on amateur satellite operation.

## EVENT CALENDAR

May 24	Valley Center Western Days Stampede
May 27	EARS Monthly Meeting 7:30 p.m.
May 31	VE Testing
June 3	Board Meeting at Konrad's 7:00 p.m.
June 10	Field Day Planning Meeting 7:00 p.m.
June 21	EARS Monthly Breakfast 8:30 a.m.
June 24	EARS Monthly Meeting 7:30 p.m.
June 28-29	Field Day
June 28	VE Testing
July 1	Board Meeting 7:00 p.m.
July 19	EARS Monthly Breakfast 8:30 a.m.
July 22	EARS Monthly Meeting 7:30 p.m.

## ALL EARS

The official bulletin of the  
Escondido Amateur Radio Society

An e-mail subscription to All Ears is FREE! You don't need to be a member. Just drop a note to:

John Musselman, WB6UHF, Editor  
wb6uhf@arri.net

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The deadline to submit material for the June bulletin is Tuesday, June 10.

## INSIDE THIS ISSUE

Advice for Newcomers - p. 3

Get Ready for Field Day! - p. 5

Technician, Upgrade Yourself - p. 6

## FROM THE PRESIDENT'S SHACK

by Willie, N8WP

Welcome to the May edition of the *All EARS* newsletter. We have had an eventful April. The club did very well during the earsBay auction! The earnings are already helping to pay for the club's new repeater. Speaking of which... The repeater project seems to be going along well. Marvin, WB6PKK, showed us an example of his fine work at the last board meeting. The additions he made to the repeater equipment are highly professional. They look like they came off the Motorola shop floor. Roger, N6EQ, was able to get a new set of manuals for the equipment. The PL transponders are in place; we are slowly but surely collecting all the hardware to make a seamless transition to the new equipment. I am certainly looking forward to it! Our Technical Committee is doing an outstanding job, be sure to express your appreciation to Marvin and Roger.

I managed to find a new job in April. I am now working for Boeing in Anaheim. That makes my attendance at the meetings quite a chore! I have been doing my best to lead from afar. I will continue to attend as many meeting as I can. I was forced to give up my roll as Field Day Chairman. The Field Day Committee is now in the capable hands of John Musselman, WB6UHF. He will lead us well.

This past weekend was CQ Magazine's National Foxhunt Weekend. I guess that CQ Magazine does not endorse Mother's Day. I imagine that Mother's Day put a dent in the club's foxhunt on Sunday. We did manage to have a great time. Congratulations to Gary Garman, KA6OCA, and Karen Garman, KD6YRO, for locating the elusive fox first! Twelve hunters were in attendance and all shared a great picnic. Perhaps the next fox hunt can be held on Father's Day to even things up a bit.

We now have a location for a training class. See the details elsewhere in this issue about our first class, a General class to help current members get upgraded to be HF capable amateurs. I, for one, like the idea of getting more hams on HF.

Field Day, Field Day, Field Day... Did I mention that Field Day is coming up soon! I have been practicing Morse code every day, trying to get my code speed back to a respectable level. I hope you are too! Send an e-mail to John and let him know what shifts you want to work. I don't know if I mentioned it but Field Day is my favorite event. I expect that we will put our all into it this year. I will be running the GOTA, Get On The Air, station. This is the opportu-

nity to try out HF or contesting for the first time. The GOTA station is a low-pressure way to have some fun.

See you at the May club meeting.

73,

Willie N8WP

### EARS Club Officers for 2003

#### President

Willie Peloquin, N8WP, 858-663-0525  
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All Officers with an asterisk (\*) plus:  
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# AC6V's GUIDE TO FM REPEATERS

by Rod, AC6V

**This guide is intended for new Amateur Radio Licensees. It is one Chapter of a 12 Chapter book on FM Repeaters. The entire book outline can be seen at URL: <http://ac6v.com/FM101.htm>**

## FINDING REPEATERS

One can set their receiver to scan the band and listen for repeaters, but a repeater may not be transmitting or seldom used, so it is catch as catch can. To find repeaters in your area, ARRL repeater guides are published and guides are also available free on the Internet — see Web Repeater Guides. <http://ac6v.com/repeaters.htm> Many are open repeaters — open to all licensed hams. Others are closed for members only and require membership. Some are specialty repeaters such as Emergency or DX repeaters and not amenable to other uses. The repeater guides usually specify this. In large metropolitan areas, coverage of repeaters sometimes overlap and it is hard to avoid hearing two repeaters in certain locations. Tone Squelch may help in some cases. See repeater pairs at the end of this section. Most radios offer a Scan function that allows repeater bands to be scanned. Either VFO (continuous) or memory scan can be used. When a signal is encountered, the radio either pauses for a bit or stops on the encountered signal (see manual for options). Using PL seek (if available) will allow you to lock on the PL frequency used by the repeater. This is great for traveling when you don't have a repeater guide or are too busy driving to fool with radio settings. Since modern radios have in excess of 100 channel memories, some users program their radios for all standard repeater pairs. For typical HF/VHF/SHF Standard pairs — see Repeater Pairs. <http://ac6v.com/repeaters.htm> San Diego and Southern California Hams are directed to SoCal Repeaters. Here the TASMA and JPL links are especially well done. <http://www.tasma.org/> and <http://rprrlist.w6jpl.ampr.org/>

For the traveling ham, USA Repeaters and indeed World Wide Repeaters — See World Wide Repeaters. From Austria to Turkey! From Alaska to Wyoming! <http://ac6v.com/repeaters.htm#WWW>

For San Diego Hams — some great full color maps showing major highways and where the repeaters are located can be found at the Ramona Outback Amateur Radio Society. 2M, 220MHz, 440MHz <http://roars.net/repeaters.htm> For Hams traveling, the ARRL has a CD ROM — TravelPlus for Repeaters™ CD-ROM Includes User Definable Maps. Repeater List Advanced Search. GPS Tracking Automatic List Refresh – Automatic list display of all repeaters within defined range during GPS Tracking. <http://www.arrl.org/catalog/travelplus/>

## HOW DO WE USE REPEATERS?

There are literally thousands of repeaters across the US (and the world). Each one can have it's own peculiarities and unique operating procedures, but there are some basics that apply to many of them. Be aware that some repeaters are very informal and just about anything goes within the FCC rules. Others are very formal – best listen in for a while.

Still others have several hundred users as well as visitors and to create order out of chaos, these repeaters are more organized as to protocol and usage. Act accordingly.

Use Plain Language, Talkin Like You Talk On The Telephone. You can pick up the jargon as you go along.

If you are new maybe LISTEN for a while to catch on to the swing of things. Repeaters are party lines. Lots of people use them on and off throughout the day, and the one you've selected may be busy with another conversation. So listen for a minute or two. If you are in a hurry and not sure if the repeater is in use, just give your call sign and ask - "AC6V - Is the repeater in use?" This will avoid interrupting a conversation (QSO) or an emergency. Throughout this article, I'll use my call sign in the examples...simply substitute your call for mine in the example when it's time for you to actually get on the air.

If the repeater is quiet, key your transmitter and announce "AC6V listening", this is short hand for "AC6V listening for any call". Or "AC6V listening - anyone on frequency?" Some just announce simply "AC6V". Others give an idea of their situation - "AC6V Mobile". "AC6V Maritime Mobile". Although not as common today, "AC6V monitoring" was at one time used by control operators and in some areas may still be the case, but this seems to have given way to where monitoring and listening are now synonymous.

Don't call CQ (HF Band Stuff) — many VHFers don't savvy it and just plain isn't used on FM repeaters (on VHF SSB OR CW - Yes). If you insist on calling CQ on a repeater, it is not against the rules – but 16 old time hams will come back to you with the lecture "We don't use CQ on repeaters".

When you un-key your transmitter, most repeaters will stay on the air for a few seconds, and many will send some kind of "beep or courtesy tone." Then after a squelch tail, the repeater transmitter drops off the air. The beep (if so equipped) is there to remind everyone to leave a pause between transmissions in case someone wants to break in. Even if there's no beep, leave a pause. Somebody may have just come across a traffic accident and needs the repeater to report it. In addition the beep resets a timer. See Timers Below. Some systems use a two tone or be-bop tone as a courtesy tone and may also signal various condi-

## AC6V's GUIDE TO FM REPEATERS (cont'd)

tions of an inter-tie system. See your repeater guidelines.

Following the beep, a brief delay is heard before the repeater drops out. A bit of noise is heard between the end of a radio transmission and the reactivation of the receiver's squelch circuit. This is called the squelch tail. Not all repeaters incorporate a squelch tail. Various repeaters may have variations on this and the timing, but below is typical repeater timing. **ALWAYS WAIT FOR THE BEEP** so the timer can reset.

How long a pause after the beep? Two to three seconds after the squelch tail is long enough for others to come in. 10 to 30 seconds delay leaves everyone wondering why you disappeared or someone just tuning in listens for 10 seconds or so, hears nothing and comes in - makes a call — the other party answers and the whole thing gets screwed up. Talking right after the beep is OK since the repeater timer has been reset, but that doesn't give much time for timid or uninformed folks to get in. Many let the repeater totally drop out and then allow another 2 seconds or so before keying up the repeater again.

When you hear the beep and no else comes in — it is your turn to talk. To prevent noise when the repeater is not transmitting, receiver circuits use a squelch feature which silences the receiver when no signals are being received.

If somebody answers, you have a contact! If no one answers, perhaps no one is on channel, but more likely they are busy, not inclined to talk, building something, soldering, etc., not ignoring you or being rude, but not responding for their own reasons. Repeating your "AC6V listening" a few times is OK, but repeating it several times is probably a waste of air space. Local repeaters across country may not care to "entertain" travelers but will usually answer questions about the area.

If you want a quick "Radio Check" to see if you are accessing the repeater adequately — try "AC6V Radio check please" or "AC6V signal report please" will usually solicit a come back but not necessarily an extended conversation. Another way to solicit a conversation is to ask a pointed question, "AC6V - anyone on frequency tell me the PL for repeater X?" AC6V - Anyone know the city requirements for towers? etc.

But don't key up (kerchunk) with out Identifying (IDing) — its illegal and annoying. To see if you are accessing the repeater and not soliciting a comeback, just key up and say "AC6V Testing - no response needed". Often the tester is making an SWR measurement, checking a new installation, or deep down in the innards of the radio tweaking an adjustment, so they don't want to rag chew at the moment, so probably would appreciate no answer, otherwise they

would ask for a radio check. Some repeaters have an anti-kerchunk feature, this requires audio before the machine will come up. So kerchunkers zip their fingers across the mic grooves. UGH!

Since repeaters use FM (noise free) and are channelized, it is conducive to using plain language, as you would do on a telephone. Calling CQ, using Q-signals, and HF jargon isn't necessary although there is some jargon that is commonly used as well as a few Q-Signals.

These will be discussed later so you will recognize them. Keep in mind that some VHF/UHF users have never been on HF and are not familiar with the terms.

You can talk about almost anything you want — there are few rules about the content of Amateur conversations. You can't use Ham Radio to do business, but you can talk about where you work and what you do. It seems so easy to call work and pick up a message, tell the boss you're gonna be late, etc, but these work type messages are a no no. Remember, the FCC prohibits all business communications on Amateur Radio (except in emergencies). Unlicensed persons may participate in amateur radio communications, provided a control operator identifies at the beginning and end of transmission, and is present and continuously monitors and supervises the communication to ensure compliance with the rules.

Prime time TV language has been peppered with some "hells" and "damns," and so has language on some repeaters. Most repeaters discourage or prohibit this as sensitive folks and children may be listening. Indeed obscenities are against the FCC rules. You're not having a private conversation — you have lots of listeners, some of them women and children. Non-Hams may be listening on scanners — lets keep an image to the public of sounding professional. Keep that in mind as you choose language and subject matter. Also until you get to know folks, controversial subjects such as religion and politics can get some nasty replies, depending on how open or closed-minded the other person is.

Be aware that some repeaters have a recorder and the audio track is recorded at all times. The voice logs are reviewed daily.

Inappropriate language use or meanings will invoke a cautionary comment from the repeater trustee. Continued abuse may draw legal action. The log (files) will be used as legal evidence against the offender if required.

**To be continued next month...**

## GET READY FOR FIELD DAY!

by John Musselman, WB6UHF

This year's Field Day is now being planned!

All club members are invited to join us at Lake Dixon on the weekend of June 28 and 29 for the premiere operating event of the year. This year's outing will be along the same lines as last year's. We will be back at our favorite campsites at the top of the hill. Once again we will be operating 2A and once again we will have a GOTA (Get On The Air) station for anyone who doesn't get on much and for non-hams who want to see what the excitement is about.

The public will also be invited to come see us as we will have information handouts and hosts available.

Those club members who want to sign up for operating duty should e-mail me now for assignment. Also, please come out to the next planning meeting on June 10 to help with the arrangements.

Set up for Field Day will begin Friday at 2 p.m. and club members are invited to operate the stations

Friday night before the contest. There will be a club dinner on Saturday night (bring a dish if you wish).

The contest starts Saturday at 11:00 a.m. Clean up is Sunday at 11:00 a.m. You don't have to be there the whole time; everyone is invited to participate as much or as little as they feel they can.

We're looking forward to another great outing. Look for more details in next month's bulletin.

### The Escondido Amateur Radio Society

is a non-profit organization of educational and social benefit to Amateur Radio operators and others interested in Amateur Radio in the Escondido area.

Dues are very affordable. Come join the fun! See the application form below.

## Escondido Amateur Radio Society Membership Application and Renewal Form

Name \_\_\_\_\_

Call \_\_\_\_\_ Class \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone No \_\_\_\_\_ Date of Birth \_\_\_\_\_

E-mail Address \_\_\_\_\_

Date Licensed \_\_\_\_\_ Expires \_\_\_\_\_

Member of the following organizations?

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Interests \_\_\_\_\_

\_\_\_\_\_

Other \_\_\_\_\_

\_\_\_\_\_

### Membership Rates

One year ..... \$13.00

Family membership ..... \$3.00

Lifetime membership ..... \$130.00

Lifetime membership (family) ..... \$20.00

Mail this form with payment to EARS, PO Box 3243, Escondido, CA 92033, or give it to the treasurer or any other club officer at a regular club meeting.

Membership is from January 1 to December 31. After July 1, membership to the end of the year is ½ the annual fee. Special rates apply for family membership for each additional licensed amateur radio operator in your immediate family and for lifetime membership.

For membership confirmation and auto-patch codes, include a self-addressed stamped envelope with this form.



## MAY BOARD MEETING SUMMARY

information provided by Sam, N6SD

1. Konrad, N6UKO, reported that the club made \$390 from the auction and that there is \$1329.92 in the savings account. The checking account balance was unavailable.

2. The board decided on the following programs through August: May - Membership show-n-tell and possibly a talk on antique radios. There will also be an introduction to Field Day operation. June - Field Day training for Write-Log software. July - Amateur satellites. August: Picnic at Rod McCloud Park (in lieu of regular meeting).

3. John, KG6DVE, is changing the calling routine to include more check-ins on the net.

4. John, KG6DVE, has been e-mailing prospective members. The club will provide stamps so information can be mailed out.

5. Jo, KB6NMK, reports that a series of training classes for emergency services volunteers is starting this month. Some of these training sessions are required in order for volunteers to participate in an emergency. The Red Cross is also offering two training classes specifically for amateur radio operators, "Introduction to Disaster Services", and "Survey and Damage Assessment". Contact Colleen at (619) 542-7607 by May 31 to sign up for either class.

4. Marvin, WB6PKK, reported that he is progressing with the modifications on the Motorola repeater. The PLL and interface board modifications have been completed. Manuals for the equipment were located and purchased.

5. Sam, N6SD, reported that a room for training has been located by Steve, AD6VI, at the American Legion Post 149 building at 230 E. Park Ave. It was decided that a General class upgrade would be offered in code and theory on Thursday evenings from 6 to 8 p.m. Sam will write announcements for the newsletter, the website, and the North County Times.

6. John, WB6UHF, announced that there will be a field day planning meeting Tue May 13th starting at 6:30 p.m. at Harry's house. The goal is to have a 2A category with a GOTA station. Members are being solicited for donations to offset the expenses of Field Day operations.

7. Club members are being asked to volunteer for the Amateur Radio booth sponsored by SANDARC at the San Diego County Fair. The time slots are more flexible if we volunteer as individuals rather than as a club. Sam, N6SD, will prepare a sign up sheet to be passed around at the May general meeting.

8. Konrad, N6UKO, has not been contacted yet for participation in the Lawerance Welk Parade.

9. Nick, KK6TV, reported that 17 people have signed up to participate in the Valley Center Parade.

10. John, KG6DVE, will contact K6LEM about having a special station for the San Pasqual Battle-field celebration.

11. John, KG6DVE, will write a proposal for a float for the Grape Day Parade.

12. Konrad, N6UKO, is organizing our participation in the Escondido Street Faire on May 18th. There will be two shifts, 9 a.m. to 1 p.m. and 1 p.m. to 5 p.m.

## GENERAL UPGRADE CLASSES

by Sam Bradsher, N6SD

EARS is sponsoring a general class license upgrade course covering theory, regulations and code. The class is geared toward Technician class licensees who wish to add HF privileges.

The training will be held at the American Legion Hall at 230 E. Park Avenue in Escondido every Thursday from 6:00 to 8:00 p.m. beginning July 10 and continuing through October 16 (except August 7, September 4 and October 2)

Last minute changes may require the class to extend to later dates.

If you wish to attend this class, call as soon as possible since class size may be limited.

For registration and information, call Sam Bradsher, N6SD, at (760) 747-9096 or e-mail him at [n6sd@arrl.net](mailto:n6sd@arrl.net).

## GENERAL INFORMATION

**EARS WEB PAGE** - EARS is on the Internet. You can read about upcoming activities, get links to other ham radio sites, read back issues of All Ears, or update your call or address. The site is updated regularly. Check it out at [www.qsl.net/earsca](http://www.qsl.net/earsca).

**EARS REFLECTOR** – is a free service that keeps members up-to-date via e-mail. Local news, gossip, “for sales” as well as reminders of all upcoming EARS functions are sent regularly to all subscribers. When you subscribe, you may also broadcast messages to all the other subscribers.

To get on the reflector, go to the EARS website at <http://www.qsl.net/earsca> and click on the Yahoo Groups banner at the bottom of the main page. Or, go to <http://groups.yahoo.com> and follow the directions. If you have any questions, suggestions or comments, email Nick, [kk6tv@arrl.net](mailto:kk6tv@arrl.net)

**CLUB BADGES** - Let everyone know that you are a member of EARS and avoid having them guess what your name is. See Harry, W6YOO, to obtain a badge.

**CHANGE OF ADDRESS OR CALLSIGN** - Please let us know if you change your address, callsign, telephone, license class, etc. We want to keep our records up to date. Contact Marvin, WB6PKK, the keeper of the club database, or any club officer.

**MILITARY AFFILIATE RADIO SYSTEM** - The US Army, the US Air Force, and the US Navy/Marine Corps Military Affiliate Radio System (MARS) are looking for a few good men/women. If you would like to get on the HF bands regardless of license, now's the time. See Harry Hodges, W6YOO/AAR9LX for details.

**QUARTER CENTURY WIRELESS ASSOCIATION (QCWA)** - If you were first licensed twenty-five or more years ago and you are licensed today (it doesn't have to be continuous) you are eligible to join the QCWA. There is a local chapter in San Diego that holds quarterly meetings (brunch) and has VHF net on Wednesday evenings. The national organization conducts an annual QCWA QSO party and there is an annual convention. They are a great group so if you are interested in more details, contact Harry, W6YOO.

**MONTHLY BREAKFAST** - EARS members meet socially the third Saturday of each month at the Westside Cafe, on West Ninth Ave. at the corner of Redwood St. at 8:30 a.m.

**SUNDAY EVENING NET** is every Sunday at 8 p.m. local time. You can get the latest information on club activities there. Tune in to the club repeater at 146.88 MHz, negative offset and PL of 107.2, check in and say hi.

**MONTHLY ARES MEETING** – The San Diego Section ARES meets on the second Saturday of each month at the Spice House restaurant, 9035 Clairemont Mesa Blvd. The training session follows breakfast at the County Office of Emergency Services (formerly called the “EOC”), 5550 Overland Avenue, at 9 a.m. If not attending breakfast, be sure to arrive at the back gate (Complex Street), not later than 0845 for access.

**ARRL AND ARES BULLETINS** - The ARRL and ARES bulletins are posted daily on K6PD-1 packet BBS on 145.03 MHz.

**AMATEUR RADIO LICENSE RENEWALS AND CHANGE OF ADDRESS** - If you need to renew your license or supply the FCC with a change of address, the form to use is NCVEC Form 605 (obtainable from Harry, W6YOO). You fill out the form; attach a Xerox copy of your license and mail to SANDARC VEC, PO Box 2446, La Mesa, CA 91943-2446. You must include your Social Security Number. There is no charge for this service.

**ARRL LETTER** - The ARRL Letter, a weekly e-mailing of Amateur Radio related news, is available to ARRL members free of charge directly from ARRL HQ. To subscribe for e-mail delivery, ARRL members first must register on the Members Only Website, [www.arrl.org/members](http://www.arrl.org/members). The ARRL Letter is also available to all, free of charge, at [www.arrl.org/arrlletter](http://www.arrl.org/arrlletter), where it is posted each Friday after it is distributed via e-mail.

**HAM RADIO LICENSE PLATES** - All California hams may receive their call sign on their license plate. Use DMV Form REG17A. The cost is \$21.00 and is a one-time fee.

**VE TESTING** - is conducted in Escondido under the auspices of SANDARC on the last Saturday of every month at the Chamber of Commerce building, 720 N Broadway. Contact Harry Hodges, W6YOO, to schedule an appointment.

ESCONDIDO AMATEUR RADIO SOCIETY  
P.O. Box 3243  
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**FIRST CLASS POSTAGE**

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