



TRI-COUNTY Amateur Radio Association

P.O. BOX 75 CLAREMONT, CALIFORNIA 91711

METEOR SCATTER



THE EASIEST WAY TO MAKE CONTACTS BETWEEN 500 AND 1200 MILES on 144!

Presented by Pat Coker, N6RMJ

Pat is an avid VHF, UHF, 6 meter, and Microwave operator who has many years of experience. Pat will give us the low down on how to operate on meteor scatter. Pat lives in Lancaster, CA.

Why use HSMS? It is much more efficient than slow CW or SSB meteor scatter! In general, if you have a 5% chance of completing a MS sked on SSB, you should have a greater than 90% chance on HSMS! Also, HSMS is usable every day of the year, not just during the peaks of major showers. This is because HSMS needs only the fractional-second under dense pings of sporadic meteors. These are available just about all the time. Other propagation types can work grids that aren't available.

COME JOIN THE FUN AT HAMCON

The Southwest Division's Annual Convention is September 5-7. The motto this year is "Focus Back on the Volunteer". Registration is \$15. Talk-in Station: W1AW/6 on 146.520 MHz. Other features are Vendor Exhibits, Saturday Luncheon, ARRL Forum. Alternative Ladies Program, Sunday Breakfast, Emergency Vehicle Display, Many PRIZE Drawings, W1AW Special Event Station, Grand Banquet (Sold Out), Wouff Hong Midnight Saturday! It's a 3 day lots of fun convention in Long Beach.

<<<< HAMCON VOLUNTEERS >>>>

Need volunteers to work at the Southwestern Division Convention, September 5-6-7 at the Hilton Long Beach too work the Tri County booths to hand out litterateurs for a couple of hours Please contact me at kg6omz@arrl.net or call me at 909-597-2145, and leave your name, call sign, phone No., and e-mail address on the answering machine "just in case I'm not able to answer the phone," so I can check with you first, before I write you down as a volunteer.

Ken Berglof KG6OMZ your Volunteer Coordinator.

MEETING PLACE

Brackett Airport Administration Building
1615 McKinley Ave., La Verne, CA

Exit I-10 at Fairplex, go North to the Fairgrounds, then turn left and follow the road along the South side of the airport to the Administration Building. The meeting place is in the Pilot's Lounge.

Meeting: Monday, September 08, 2003 7:30 PM, TCARA is an Amateur Radio Service Organization. Anyone interested is invited to attend. We meet on the second Monday of every month.

SUNDAY CLUB 2M NET

The TCARA Sunday net is held at 7:00 PM on the Baldy machine repeater: **FREQ: 147.210, minus 600, PL 156.7** (the old Bomb Squad machine). "The latest ARRL News Line broadcast, and Club Info will be included."

HEALTH AND WELFARE

Health and welfare information goes to Bob Embrey, KD6DKV, AT 626-339-3402.

If you have ideas for a program, let one of the officers know about it.

QRM Deadline

The QRM Newsletter deadline for **October issue** should be turned in by **September 22**. Send **News/articles** to Ken Berglof 15720 Country club Dr., Chino Hills, Ca., 91709. E-mail address (Preferred) is: **kg6omz@arrl.net** Early submissions are always appreciated.

Ken Berglof, kg6omz, QRM Editor

E-MAIL UPDATE

Since the club we well be asking opinions and giving out information via e-mail (and also the QRM), it is important to have your current e-mail address on file. Could you please send your updated e-mail address to: **kg6omz@arrl.net**. "Thanks for your help. **Ken Berglof, KG6OMZ.**"

Attention All Amateurs...

LATEST BPL NEWS - VIDEO AVAILABLE (Aug 6, 2003) -- ARRL President Jim Haynie, W5JBP, says Broadband over Power Line (BPL)--if widely deployed--would represent "spectrum pollution" on a level that is "difficult to imagine." Haynie reacted after seeing videotape and early data from recent ARRL field studies in four states where BPL is undergoing testing.

➔ Full store at web site:

<http://www.arrl.org/news/stories/2003/08/08/2/?nc=1>

TCARA MEMBERSHIP

Membership enables you to receive membership prizes, vote, Place FREE "FOR SALE" ads in the QRM, receive the QRM, and run for an office. Dues: Regular - \$15/year. Family - \$20/year. All renewals are due by June 30th\.

TCARA INTERNET HOME PAGE

TCARA has its home page on the Internet, and the URL is: [HTTP://www.qsl.net/k6agf](http://www.qsl.net/k6agf)

CASH DRAWING

Robert Mueller, K6ASK name was drawn at the August 11 meeting, and wasn't there, so **\$10** will be added at the September meeting.

TCARA holds a monthly cash drawing at our meetings. The September drawing will be for **\$40**. \$10 will be added to the pot each month. All members' names will be put in the hat for the drawing. The member whose name is drawn must be present to win. If the member is not present the prize will be rolled over and added to the next month's pot. So plan to attend "**Monday, September 8, at 7:30 P. M.**" All past members are urged to renew their membership. Visitors are welcome and invited to become members before the drawing. All paid up member names will be in the hat and if present will have a chance to win some of the \$120 that will be placed in the pot over the next 12 months.

LOCAL SWAP MEETS

(Hours for Swapmeets are usually 7 AM to 11 AM.)

Second Saturday of each month **Fontana Swap Meet** run by the Inland Empire ARC at A. B. Miller High School on Highland and Oleander in Fontana, 7 AM to 11:30AM. Directions: take I-10 East to I-15 North,

get off at Highland/Cherry Ave exit, and go East on Highland. A. B. Miller HS is about 2.5 miles down the road on the South side of the street. Talk-in is 145.480, down 600kHz, PL=77.0 Note: best place to park is on the East side of the school.

Third Saturday of each month **CMRA Hamfest** (the old DeVry Swapmeet) now held at **Cal Poly Pomona**, 3801 West Temple Avenue, Pomona (right across the freeway from the old DeVry), in Parking Lots F8, F9, and F10. Admission and parking are free. Take the I-10 and exit Kellogg Drive. For recorded information call: **(714) 537-4230**. Ask for Hugh or Greg at the gate.

Last Saturday of each month The **TRW Swapmeet** is located in Manhattan Beach, on the Northwest corner of Marine Ave. and Aviation Blvd. South of LAX, West of the 405 FWY. Take the 105 FWY. West to Aviation Blvd., South on Aviation 2.5 miles to Marine. Talk-in 145.32, down 600 kHz, PL=2A (114.8).

➔(STARTING SEPTEMBER 7)

First Sunday of each month **The Electronics Swap meet** is located in Chino Hills, South side of 71 FWY right at Chino Hills High school, 16150 Pomona Rincon Rd. **Hours 6:30 a.m. through 11:30 a.m.**

"If your traveling South East on HWY 71 turn off on Soquel Canyon Rd. exit, then turn right, and then turn left at the next stop light that is "Pomona Rincon Road." Just one block more, then look to your right.

Need more information regarding the Swap Meet? Contact Alan Sanders at (909) 597-3893 or visit our web site at: [HTTP://www.chhsmusic.com/electswap.html](http://www.chhsmusic.com/electswap.html)

AMATEUR LICENSE TESTING

Last Saturday of each month, except December. TCARA ARRL TESTING SESSION: **Next session will be Saturday, September 27, 2003 at the Club's meeting place at Brackett Airport in La Verne.** Technician through Extra. Call **Carl Sanders, WJ6N, (909) 820-3442**, for reservations (if you have Caller ID blocking enabled, press *82 before dialing the number to unblock your number for the one call). Leave the class of the test you want to take, your name, address, and telephone number. Bring your current license and a copy, any CSCEs and copies, and a picture ID.

SOME REPEATERS & EMERGENCY GROUPS IN THE AREA. COUNTY

Los Angeles County Disaster Communications Services:

145.300 MHz (-) PL 100 Hz (Mt Disappointment)

224.300MHz (-) PL 100 Hz (" ")

Local Groups

Azusa - ACS/RACES net Mon. 7:00 PM **144.970** MHz Johnstone PK.

Glendora - ACS/RACES net Tues. 7:00 PM 144.970 MHz Johnstone PK.

Local Groups:

La Verne - La Verne Emergency Communications Team, K6LVN.

Nets Tuesday @ 7:30 PM, 144.970, Johnstone Peak. Meeting 3rd. Tuesday, 7:30 PM @ La Verne Police Station.

For more information contact:

Jack Swank, W6FAM

Jay Jones, WB9FPM

Claremont "CARDS" net Mon. 7:15 PM 147.210(+) PL156.7 Hz Sunset Ridge.

Johnstone PK Emergency & Red Cross
146.820MHz (-) PL 100 Hz.

Western San Bernardino County - SATERN (Salvation Army) net Sun. 8:PM 146.985 MHz (-) 146.2 Hz Keller PK.

Rancho Cucamonga ACS/RACES net Tues. 7:00 PM 147.300 MHz PL123.

Contact: John Garcia KF6ZQN

Chino Hills - Chino Hills Auxiliary Radio Team (CHART) net is **every Thursday** except the third Thursday of the Month, at **7:00 p.m.** CHART's tactical frequency is **147.480 simplex**. The City's 220 MHzZ repeater frequency is 224.720 PL 127.3-offset.

If anyone has anything to add to this list, please contact Clint Stone KQ6NJ at: cstone1@juno.com

Emergency Communications

S.A.T.E.R.N (Salvation Army Team Emergency Radio Network) of Riverside/San Bernardino County is looking for Amateur Radio Operators in Ontario, Rancho Cucamonga, Corona and the surrounding areas.

Contact Tony Stephen at (909) 628 2843 or e-mail KE6JZF@surfside.net for info. Check in on the SATERN Net Sundays at 8:00 PM on 146.985 (-) PL 146.2 (Keller PK). Clint KQ6NJ

All HAM'S ARE Welcome to use IRLP NODE 7170 POMONA

Every Ham Operator is invited to experience the use of IRLP NODE 7170, FREQ 145.755 simplex with a PL 162.2 "IRLP web sites can be found at the following URLs:

<http://www.irlp.net>

http://www.irlp.g4eid.co.uk/status/all_reflectors.html

<http://www.google.com> - Type **IRLP** for many sites.

Attention All Amateurs...

LATEST BPL NEWS - VIDEO

AVAILABLE (Aug 6, 2003) -- ARRL

President Jim Haynie, W5JBP, says Broadband over Power Line (BPL)--if widely deployed--would represent "spectrum pollution" on a level that is "difficult to imagine." Haynie reacted after seeing videotape and early data from recent ARRL field studies in four states where BPL is undergoing testing.

BPL is "Spectrum Pollution," ARRL President Says

NEWINGTON, CT, Aug 6, 2003--ARRL President Jim Haynie, W5JBP, says Broadband over Power Line (BPL)--if widely deployed--would represent "spectrum pollution" on a level that is "difficult to imagine." Haynie reacted after seeing videotape and early data from recent ARRL field studies in four states where BPL is undergoing testing. "BPL is the most crucial issue facing Amateur Radio and the one that has the most devastating potential," Haynie said. In terms of interference potential on HF and low-VHF frequencies, "nothing is on the same scale as BPL." A form of power line carrier (PLC) technology, BPL would use existing low and medium-voltage power lines to deliver broadband services to homes and businesses. Because it uses frequencies between 2 and 80 MHz, BPL could affect HF and low-VHF amateur allocations wherever it's deployed. BPL proponents--primarily electric power utilities--already are testing BPL systems in several markets, and one reportedly is already offering the service. FCC rules already allow BPL, although industry proponents want the FCC to relax radiation limits. It's feared such a change could exacerbate BPL's interference potential.

At the West Gulf Division Convention (Austin Summerfest 2003) August 1-2 in Austin, Texas, Haynie previewed a short video (see below) that

covers highlights of a recent field tour by ARRL Lab Manager Ed Hare, W1RFI. The video, which will complement technical data ARRL is gathering and compiling, turned out to be a real eye-opener for many in the audience.

Walt Dubose, K5YFW--assistant chairman of the ARRL High Speed Multimedia (HSMM) Working Group--said it was about what he'd expected. "But for most attending--maybe 60 percent--it was much worse than they had imagined, and for some it was a real shocker," he reported. Dubose said a few of those viewing the video simply couldn't believe that BPL actually was causing the high noise level.

In late July, Hare traveled some 1350 miles to visit BPL trial communities in Maryland, Virginia, Pennsylvania and New York to take measurements over significant parts of the HF spectrum. He also took initial readings at low-VHF frequencies. Driving a specially equipped vehicle loaded with radio gear and measurement devices, Hare said he didn't need to look long or track down "a few hot spots" to find BPL interference. "The signals were all over," he said. "The interference found ranged from moderate to extremely strong," Hare said. The video shows the S meter of a HF transceiver holding steady in excess of S9 as the speaker emits a crackling din, which one observer described as sounding like a Geiger counter. Only the very strongest amateur signals broke through on 20 and 15 meters. Hare noted that the field strengths of the various systems all were within FCC Part 15 limits for power line carrier (PLC) devices.

At a couple of points, the video shows noise continuing nearly unabated on 15 and 20 meters as the car moves down long streets lined with overhead wiring. Hare said the signal propagated for at least a couple of miles down one road. "Signals would have been much stronger using a gain antenna," he observed. Hare's vehicle carried a roof-mounted, horizontally polarized Buddi-Pole antenna--a loaded dipole.

Each BPL system exhibited a unique sound depending upon the modulation scheme it used, and Hare said he was able to distinguish three types during his recent tour. While in most cases, the signal sounded like static or pulse noise, in one city, it resembled sort of interference a computer monitor or similar device might generate, with warbling "birdies" blanketing the bands at closely spaced intervals. "Naturally, overhead wiring was the worst," Hare said. BPL signals

continued to be audible in neighborhoods with underground electrical utility wiring, although it was somewhat attenuated. The ARRL already has filed a 120-page package of text and technical exhibits in response to the FCC's *Notice of Inquiry* in late May. The League plans to file reply comments--responses to comments already filed--by the recently extended August 20 FCC deadline. Haynie has been doing a bit of traveling of his own, including 15 days in Washington so far this year to deal with the FCC and with members of Congress on BPL and other Amateur Radio-related issues. "Unfortunately, it all costs money, and a lot of these kinds of League activities are not highly visible to our members or to the amateur community," he said.

During his most recent stop in the nation's capital, Haynie--accompanied by ARRL General Counsel Chris Imlay, W3KD--visited the office of Rep Billy Tauzin (R-LA), who chairs the House Energy and Commerce Committee, and met with Howard Waltzman, Tauzin's chief telecommunication counsel on the committee. He also met with a staffer in the office of Rep Rick Boucher (D-VA), a member of the Telecommunication Subcommittee and a strong supporter of Amateur Radio.

Haynie says a lot of hams want to know more about BPL but are put off by the size and depth of the technical documents and filings. He feels that seeing the video presentation might make a stronger impression. Countering critics who suggest that the League is only using BPL as a fund-raising ploy, Haynie said the League would not be putting as much effort into attempting to quantify the BPL threat and to put a face on it if it weren't real. "The BPL industry and their associations have told the FCC and the world that there is no interference potential from BPL systems," Haynie said. He noted that the American Public Power Association, in its comments to the FCC, put the burden on the technology's challengers to empirically demonstrate its interference potential. "The video presentation does just that," Haynie said. "Anyone seeing these BPL signals for megahertz after megahertz for miles along a power line should be convinced that BPL--even operating at the present FCC limits--poses a serious threat to all HF and low-VHF communications."

While the deadline for initial comments on the FCC's May 23 *NOI* has passed, the FCC has now extended the reply comment deadline to August 20. More information is available on the [ARRL Web site](#). The ARRL filed a 120-page package of [comments and technical exhibits](#) in response to the BPL *NOI* on July 7. There's additional information and additional video clips on the ARRL ["Power Line Communications](#)

[\(PLC\) and Amateur Radio](#)" page. The ARRL has initiated an important Spectrum Defense Fund campaign to support activities to educate government officials on the potential threat that BPL poses to Amateur Radio. To find out more, or to support ARRL's efforts in this area, visit the ARRL's secure [BPL Web site](#).

➔CONTRIBUTIONS DO HELP IN BPL CAMPAIGN

Over the past six weeks, donations from ARRL members and friends have built a war chest to assist in the League's fight against efforts to implement Broadband over Power Line (BPL) technology. ARRL Chief Development Officer Mary Hobart, K1MMH, reports that the Spectrum Defense Special Campaign so far has raised approximately \$225,000 from more than 4200 donors.

"As Amateur Radio meets the most serious threat to our service in decades, the generosity of ARRL members, clubs and advertisers is making a tremendous difference, enabling ARRL staff and leadership to take all needed steps in this campaign," said Hobart. "The ARRL's effort against BPL would not be able to go forward in the coming months without the generous, voluntary contributions of supporters."

Funded by the special campaign fund, the ARRL Laboratory staff continues to prepare technical reports for official filings. Information and data gathered to date include calculations of the interference levels that radio amateurs can expect from BPL. These calculations were included in the 120-page filing ARRL submitted to the FCC in July. Since then, actual field measurements have been taken at four BPL trial sites in Pennsylvania, Maryland and New York. The ARRL also documented the interference in a dramatic video available via the ARRL Web site (see "BPL is 'Spectrum Pollution,' ARRL President Says" <<http://www.arrl.org/news/stories/2003/08/08/2/>>). Additional video documentation will accompany future filings to the FCC.

In addition, Spectrum Defense Fund contributions have borne the cost of ensuring that test equipment meets National Institute of Standards and Technology (NIST) standards. The campaign against BPL also requires ARRL's persistent and significant presence in Washington, DC, to contact key legislators on Capitol Hill as well as staffers at the FCC and at other government agencies to present Amateur Radio's case.

Voluntary contributions help cover the travel expenses of ARRL President Jim Haynie, W5JBP, and others as needed, plus legal fees and the cost of professional advisors.

To find out more or to support the League's efforts in this area, visit the ARRL's secure BPL Web site

<https://www.arrl.org/forms/development/donations/bpl/>

The period to comment in direct response to the Broadband over Power Line Notice of Inquiry (ET Docket 03-104) ended July 7. The FCC now is seeking only "reply comments." A reply comment is a comment on or a rebuttal to specific comments already filed by another party. Reply comments are due by the recently extended deadline of Wednesday, August 20. The ARRL will file reply comments in the BPL proceeding.

Interested parties may file reply comments using the FCC's Electronic Comment Filing System (ECFS) <<http://www.fcc.gov/cgb/ecfs/>>, which also permits users to view all comments on file. To file a reply comment, click on "Submit a Filing" under "ECFS Main Links." In the "Proceeding" field, type "03-104" and complete the required fields. You may type your remarks into a form or attach a file. ECFS also accepts comments and reply comments in this and other proceedings via e-mail, per instructions on the ECFS page. To view documents already submitted in the BPL proceeding, click on "Search for Filed Comments" under "ECFS Main Links" and type "03-104" in the "Proceeding" field.

➔HAYNIE URGES MORE LETTERS TO POTENTIAL SPECTRUM BILL COSPONSORS

ARRL President Jim Haynie, W5JBP, wants to see more letters urging members of Congress to sign on as cosponsors of the Amateur Radio Spectrum Protection Act bills in the US House and Senate. The identical measures, an ARRL initiative, are on their third try in Congress. Noting that cosponsor counts have changed little over the past month and that some lawmakers he's contacted had not yet heard from constituents,