

Calendar of Events

Jan 5	Wed	5:30 PM 7:30 PM	No-Host Dinner at Coco's, 1501 Farmers Lane, Santa Rosa SCRA Meeting, Luther Burbank Art & Garden Center, 2050 Yulupa Avenue, Santa Rosa
Jan 7	Fri	7:30 PM	Marin ARC Meeting, Alto Clubhouse, 27 Shell Road, Mill Valley
Jan 8	Sat	10:00 AM	Red Oak Victory ARC Meeting, Point Richmond
Jan 12	Wed	6:30 PM	SCRA Board of Directors Meeting
Jan 18	Tues	7:30 PM	Hamilton Wireless Assoc., Bldg 549, Hamilton Field, Novato
Jan 19	Wed	7:00 PM Wed 7:30 PM	REDXA Meeting, Carrow's, Petaluma Valley of the Moon ARC Meeting, McDougall Hall, Sonoma Developmental Center, Glen Ellen.

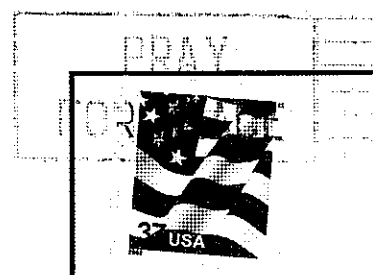
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P. O. Box 116

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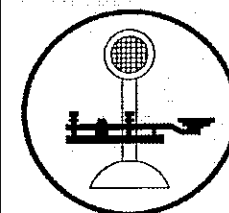
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Short Skip

newsletter of the

Sonoma County Radio Amateurs, Inc.

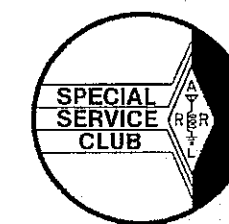
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Repeater Station
W6SON

Volume 30 Number 1

January 2005

Happy New Year



President's Column

by

John Felton KE5RI
SCRA President

Let me first thank all of you for giving me the opportunity to serve as your president. I, along with your other board members, are here to serve you. As we begin a new year we have some challenges ahead. Whether it be a sign of the times, or other reasons, we have seen a decline in membership and overall participation. On the positive side, I am excited by the fact that by putting our heads together we can put together a plan to reverse this trend. As a start in this direction, our first meeting in 2005 will feature a group discussion to determine what we want our club to be. This will be followed by a brainstorming session to generate as many ideas as possible.

To make this a fruitful effort, I encourage everyone to attend what I believe may be the most important meeting of the year. This is your chance to help us to make SCRA the club you want it to be. We need your help to put the FUN back into Ham Radio and we can do it if we all work together.

See you all at the January meeting.

73, John

ARRL RENEWS DEMAND FOR FCC
TO SHUT DOWN NEW YORK
BPL FIELD TRIAL

The ARRL has once again asked the FCC to shut down a BPL field trial now under way in Briarcliff Manor, New York. It's also asked the Commission to withdraw the system's Part 5 Experimental authorization. After the League's first shutdown request in October, the chief engineer of Ambient Corporation, which provides the pilot project's BPL hardware and holds the Experimental license, suggested that Amateur Radio interference complaints had been addressed through improved software and notching performance. Not so, says a December 17 letter to the FCC from ARRL General Counsel Chris Imlay, W3KD. Writing on the League's behalf, Imlay contends that the FCC is not sticking to its commitment to prevent interference to Amateur Radio from BPL systems and to enforcement where interference occurs. "Based on the Commission's complete inaction to date with respect to documented interference complaints at various BPL test sites, the commitment seems vacuous," Imlay said. "ARRL demands that this BPL site be shut down immediately, pending compliance determinations and a demonstration that the system can operate without causing harmful interference." ARRL member Alan Crosswell, N2YGK, a resident of the community, has documented interference, complaints and related information on his "BPL in Briarcliff Manor" Web site <<http://www.columbia.edu/~alan/bpl/>>.

Imlay says another complaint from Crosswell and the League's own observations on December 16

(continued on page 7)



2005 Club Officials

President	John Felton	KE5RI	707 539-5831
Vice President	Kevin Alt	K6BSG	707 566-9016
Secretary	Rich Freitas	KE6SZA	707 578-9335
Treasurer	Jim Lee	KE6VGV	415 892-0317
Director	Bruce Donecker	N6CT	707 823-7969
Director	Bill Hillendahl	KH6GJV	707 544-4944
Past President	Brian Torr	N6IY	707 575-5871

Activities Chairman			
Public Service Chairman			
Repeater Chairman	Greg Gordon	AC6VJ	707 523-7077

Short Skip & Web Staff

Editor	Bill Hillendahl	KH6GJV	707 544-4944
Hank's Swap Shop	Jeff Basham	KK6JAB	707 542-3860
Web Master	Jeff Basham	KK6JAB	707 542-3860

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Public Relations	Bill McCall	W6WDM	707 538-2844
Raffles			
Refreshments	Ted DeCroff	KB6PTA	707 542-4008
Volunteer Exam Liaison			
ARRL DXCC Mgr	Chuck Ternes	N6OJ	707 763-2528

SCRA Hotline 707 579-9608

SCRA E-Mail scra@sonomacountyradioamateurs.comSCRA Web Site <http://www.sonomacountyradioamateurs.com>

Tuesday Night Net

Check in to the SCRA net each **Tuesday** evening on the **146.985- (PL 88.5)** repeater at **7:00 PM**. Announcements are made of upcoming SCRA and other amateur radio activities in the area and what is listed in Hank's Swap Shop. You will also hear the weekly *Amateur Radio Newsline* broadcast.

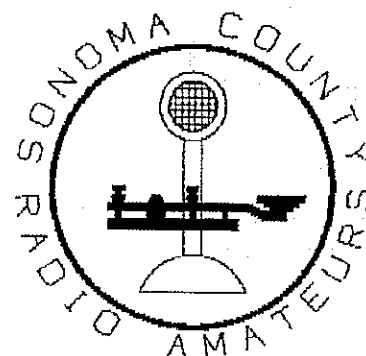
Short Skip Advertising Rates

Business Cards	\$ 12
1 st Quarter Column	\$ 13
Each Addn'l Quarter Column	\$ 4
Full page (one side)	\$ 35
Pre-printed inserts (each)	\$ 35

Guaranteed circulation of 150 per month!
For more information, contact the Editor.

HUNGRY BEFORE
THE MEETING?

JOIN US FOR DINNER! We meet at Coco's restaurant, 1501 Farmers Lane (corner of Farmers & Hwy 12), Santa Rosa. People start showing up at 5:30 PM. No RSVP is required! See you there! (Except December!)



NEXT MEETING
January 5th
6:30 PM

Program:

**Brainstorming
Session**

Bring your ideas!
(see article)

CLUB MEETINGS

The club normally meets the first Wednesday of each month. This month's meeting will be at:

**Luther Burbank Art
& Garden Center**
2050 Yulupa Avenue
Santa Rosa, CA

The meeting starts at 7:30 PM

ALL ARE WELCOME!

Please join us at our next meeting. Anyone interested in Amateur Radio may be eligible for membership. A membership application is included in this newsletter.

For more information, contact any SCRA officer, director or member.

CONTEST CORNER by Kevin Alt, K6BSG

Hello testers. CQ WW 160 meter CW contest this month as well as several New Year's Day contests. Work off that holiday pie with some CW practice! Happy DX'ing.

31 Dec - 1 Jan, 2005 - ARRL Straight Key Night - 160-10 meters.

See: <http://www.arrl.org/contests/rules/2005/skn.html>.

1 Jan - New Year's Snowball Contest CW/SSB, 80 meters.

See: www.qsl.net/eu1eu/index_e.htm.

1 Jan - HA Happy New Year Contest CW/SSB/FM, 160 meters - 1.2 GHz.

See: <http://radioklub.puskas.hu/ha5khc/web/>.

1 Jan - SARTG New Year RTTY Contest - 80 - 40 meters.

See: www.sartg.com/contest/nyrules.htm.

1 Jan - AGCW Happy New Year Contest - CW, 80-20 meters.

See: www.agcw.de/.

2 Jan - Kid's Day - Phone, 20 - 2 meters.

See: <http://www.arrl.org/FandES/ead/kd-rules.html>.

8-9 Jan - ARRL RTTY Roundup - 80-10 meters.

See: <http://www.arrl.org/contests/rules/2005/rtty.html>.

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8-9 Jan - North American QSO Party - CW, 160-10 meters.

See: www.ncjweb.com/naqprules.php.

8-9 Jan - Midwinter Contest - CW/SSB, 80-10 meters.

See: www.qsl.net/pi4ylc/Engels/midwinter%20contest.htm.

9 Jan - DARC 10-meter Contest - CW/SSB.

See: www.darc.de/referate/dx/fedcz.htm.

15 Jan - 070 PSKFest - 80-10 meters.

See: www.podxs.com/html/pskfest.html.

15-16 Jan - North American QSO Party - Phone, 160-10 meters.

See: www.ncjweb.com/naqprules.php.

15-16 Jan - MI QRP Club January CW Sprint - 160-6 meters.

See: www.qsl.net/miqrclub.

15 Jan - LZ Open Championship - CW, 80-40 meters.

See: www.qsl.net/lz1fw/lzopen/index.html.

15-16 Jan - Hunting Lions in the Air - CW/Phone, 80-10 meters.

See: www.sarl.org.za/public/contests/lionita.asp.

15-16 Jan - HA DX Contest - CW, 160-10 meters.

See: www.mrasz.hu/engver/mraszen.html.

22-23 Jan - BARTG RTTY Sprint - 80-10 meters.

See: www.bartg.demon.co.uk.

22-24 Jan - ARRL January VHF Sweepstakes - All modes.

See: <http://www.arrl.org/contests/rules/2005/jan-vhf-ss.html>.

29-30 Jan - CQ WW 160-Meter Contest - CW.

See: www.cq-amateur-radio.com/index.html.

29-30 Jan - REF French Contest - CW, 80-10 meters.

See: www.ref-union.org/concours/.

29-30 Jan - UBA Contest - Phone, 80-10 meters. See: www.uba.be.

29-30 Jan - UK DX RTTY Contest - 80-10 meters.

See: www.ukdx.scotham.net.

Sonoma County Radio Amateurs, Inc.

Please Print Clearly

Membership Application

New ☐ Renewal ☐

Name _____ Call Sign _____ License Class _____ Date _____

Address _____ Hm Phone _____ Wk Phone _____

City/State _____ Zip _____ E-Mail _____

ARRL Member? ☐ Yes ☐ No

Dues & Fees: (SCRA dues year is from 3/1 to 2/28)

Payment Calculations:

Make checks payable to SCRA

Individual/Associate Member	\$ 24 (\$6.00/qtr)
Family Membership	\$ 36 (\$9.00/qtr)
Under 18 Membership	\$ 12 (\$3.00/qtr)
Badge	\$ 7

Dues - Full Year (3/1 to 2/28)	\$ _____
Dues -	
Prorated ____ Qtrs. X \$ ____ /qtr	\$ _____
Badge	\$ _____
Other - _____	\$ _____
Donation	\$ _____

Badge Information

Call Sign _____
First Name _____
City _____

Total \$ _____

Mail to: SCRA, P. O. Box 116, Santa Rosa, CA 95402

SKN (from page 3)

We tap the code out in our licensing classes as we learn "dits and dahs." While sitting in traffic, we translate the words on billboards or the letters on license plates into Morse. The short and long sounds become easy to distinguish at slower speeds, with some practice. As we gain some confidence in our skill to copy, we speed up. And the music of the key becomes our anthem. We tune across the bottom 50 KHz or so of any of our HF bands. Like the rhythmic cadence of drums in the distance, the almost ominous sound of a weak CW signal beckons those that love "the code".

In this era of digital communication, keyboarding, FM and electronic keys, once a year many excellent operators bring the past to the present and participate in the annual ARRL Straight Key Night. The object of this friendly event is to enjoy some good, old fashioned QSO fun, using straight keys. The emphasis is on rag-chewing rather than fast contest-type exchanges. SKN 2005 begins at 7:00 p.m. EST December 31 and runs for 24 hours through 7:00 p.m. EST January 1 (0000 --2400 UTC January 1, 2005).

In many circles SKN has been expanded to encompass vintage radio equipment as well. Reminiscing about their early days in our hobby, many operators use SKN as the "excuse" to refurbish their old Viking, Heathkit, or Scout. You will hear as many vintage radios on the air during SKN as you will variety of keys. And you will hear signals generated using old-fashioned bugs, a variation of the straight key. SKN is the time amateur radio recalls the past, transporting it to the present.

When participating in SKN 2005, instead of sending RST before sending the signal report send the letters SKN, to indicate your participation, and to clue in passers-by who may be listening that SKN is going strong. After SKN, send the Contest Branch a list of stations worked, plus your vote for the best fist you heard (it doesn't have to be one you worked). Also, include your vote for the most interesting QSO you had or monitored.

Don't forget to post your comments and interesting photographs from your SKN adventure to the ARRL Contest Online Soapbox at www.arrl.org/contests/soapbox. Entries should be emailed to the Contest Branch at StraightKey@arrl.org or may be sent via regular mail to SKN, ARRL, 225 Main St, Newington, CT 06111. The Soapbox becomes an on-line album of stores and photographs to share

with others.

Entries for SKN 2005 must be received by January 31, 2005. Votes for 'Best Fist' and "Most Interesting QSO" will be tabulated and included in the April 2005 issue of QST. If you have questions about SKN, please visit the Contest Branch Web Page at <http://www.arrl.org/contests> or contact contests@arrl.org

Last year we had 227 entries submitted for SKN -- the most ever for Straight Key Night. Why not dust off the key, clean the contacts and light up the ether with the beautiful melody of hand-created CW? Sweeter music is hard to find.

From ARRL



SCRA's DECEMBER HOLIDAY PARTY

What a blast! Once again, SCRA threw an outstanding holiday party. Club Pres Brian Torr N6IYY orchestrated the event and arranged for the main courses which were yummy and plentiful. Vicki Cero KF6ZCT supplied the holiday decorations which graced each table. Beautifully done, Vicki! Ted DeCroff KB6PTA supplied the holiday music and led the group in Christmas carols. Thanks, Ted. And a slide show of SCRA activities through the year was shown. Thanks to all the photographers who supplied the photos. It really was the capstone to the club's year. Look for photos from the party throughout this *Short Skip*.

Next year's party is already in the planning stage. There may be a change of venue and night which will make the event even better. Stay tuned!

ALASKA!

Have you thought about making a cruise to Alaska? Bill KH6GJV is putting together a cruise for July 2005 on the luxurious Holland America line departing Vancouver BC on July 17, 2005 for Anchorage, AK. The seven day cruise will head north through Ketchikan, Juneau, Skagway, Glacier Bay and on to Seward/Anchorage. Pre and post cruise tours of Vancouver, Victoria and Denali are also available.

Interested? Contact Bill for more details. 707 544-4944 or kh6gjbv@arrl.net (This is not an SCRA or ARRL sponsored event.)



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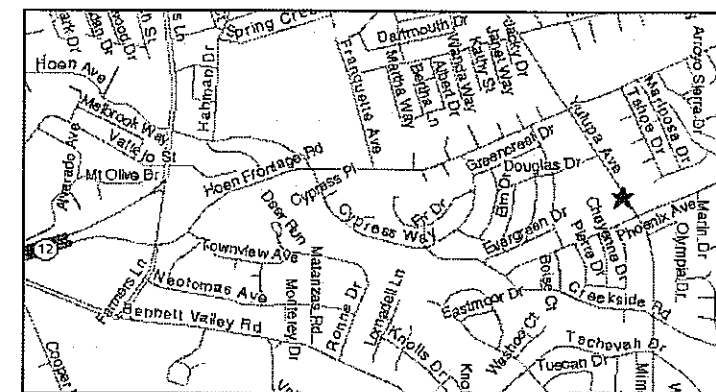
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MEETING LOCATION

Luther Burbank Art & Garden, 2050 Yulupa Ave, Santa Rosa (Bennett Valley)

The Sounds of Our Hobby... Announcing the 2005 ARRL Straight Key Night

Let's journey back to years gone by when an aspiring young amateur was being coaxed by his Elmer to "go ahead, put your hand on the key and try sending a few letters." As the youngster gathered his courage, he gets the feel of the key. "You don't literally have to 'pound' brass to send code" the Elmer admonishes after the death grip the kid has on the keyer nearly forces it through the desktop. "Relax, take it easy. You know the letters in your mind. Now, let your fist transfer the characters to the key."

With a little practice the kid is finally ready to try a QSO on the air, under the watchful tutelage of the faithful Elmer. With a "cheat sheet" in hand -- the text of what the young operator will send carefully written out -- the painfully slow first letters -- "C" "Q" are transmitted. The side tone of the radio mesmerizes the new operator as he realizes "WOW... I just sent my first CQ...." And the kid was hooked...

(continued on page 8)

Are you a budding author? Write an article for *Short Skip* on a Ham radio-related subject, technical or non-technical. E-mail the article to kh6gjbv@arrl.net. We'd love to see YOU in print!

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Fax (707) 527-1368



ARES Comm Log

by Rich Freitas KF6SZA
Sonoma County District
Emergency Coordinator

Ramblings

NEWS: I am pleased to announce that Jim, W6ESJ, has agreed to accept the position of Santa Rosa Emergency Coordinator, and Fred, KQ6OB, has agreed to accept the position of East County Emergency Coordinator. This change is extremely welcome, as I've been attempting to cover those areas (rather badly at times) along with my duties as District Emergency Coordinator for Sonoma County. Both of them have a substantial amount of experience with emergency communications and I'm looking forward to working closely with them to increase the ARES presence in Sonoma County.

UPCOMING TRAINING: In the never-ending quest to "raise the bar" of professionalism for ARES, next month we will have a face-to-face training session on formal Radiogram message handling. It is an unfortunate fact that many served agencies and the general public judge our potential performance and relative value as a public service by what they hear via scanner during our weekly nets and SET drills. Most of our nets and practice drills leave a lot to be desired regarding serious traffic handling. Public opinion is, all too often, that amateur radio operators are nothing more than glorified CB'rs. Sadly, many times they're right. We simply do not project the "professionalism" that they rightfully expect and then we wonder why they don't call us when something happens and why our frequencies are under attack. We must correct and promote our public image – or fade into history.

Served agencies often view Amateur Radio operators as nuisances instead of assistants. The reason is that we often don't pay enough attention to what the served agency really wants and needs. We tend to operate within our own perceptions of what we think they want or need and we don't seek a deep understanding of what their requirements really are. The result is that the service we offer becomes greatly diminished in value to the served agency and we wind up offering and performing services convenient and effective for us ... but not necessarily what they

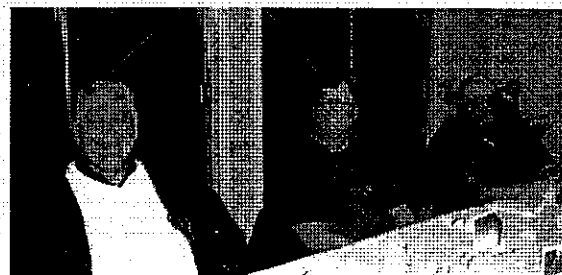
envisioned, really wanted, or needed. This is not an easy issue to resolve.

Our served agencies know that they need help with communications. A problem arises when we assume that they are aware of all the different modes of communications available to them from the amateur radio service. For the most part, they know nothing about communications beyond their telephone and pager. Most people aren't really aware that their cordless or cellular phone, wireless intercom, baby monitor, garage door opener, and pager are really radio devices.

The idea that hams can serve them with packet, ATV, APRS/GPS, long range HF, CW and VHF/UHF simplex and repeater communications is simply too much technology for most agency personnel to comprehend. After all, how much study did it take for you to get your Extra ticket? We have to gently educate them as to our capabilities and then carefully listen to them for clues to possible uses of various modes to help solve their communications problems. Hams are great talkers; the greater part of true and artful communications is listening!

TOPICS NEEDED: First of all, let me say that everyone is welcome to our training sessions whether you are an ARES member or not. With that in mind, I would like to have some suggestions for future face-to-face training meetings. An interesting phenomenon occurs whenever I ask this question. Hams usually will talk about anything – things they are well versed in and things they know virtually nothing about. However, when I ask for training topics it's like the bands have gone completely dead. There are so many facets to Amateur Radio and so many applications for our capabilities and I can't believe that everyone except me is an expert in all of them. SO let's hear some ideas on areas you'd like to learn about. You give me the topic and I'll arrange a training session.

The ARES net meets on Mondays at 7:30 PM on the SCRA repeater on 146.985 MHz, -offset, 88.5 PL. You are invited to check in anytime.



Sonoma County Radio Amateurs, Inc.
Membership Meeting, December 1, 2004

MINUTES

There was no formal meeting. The holiday party was the order of the evening.

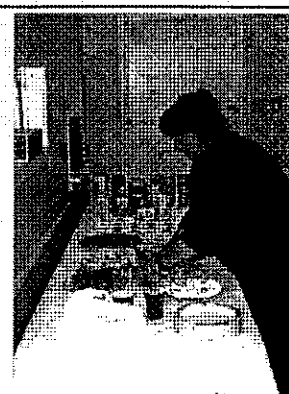
Sonoma County Radio Amateurs, Inc.
Board of Directors Meeting, December 8, 2004
MEETING NOTES

Board Members Present: Brian Torr, N6IY; Bill Hillendahl, KH6GJV; Randy Black, KE6VMZ

Guests Present: Rich Freitas, KF6SZA; John Felton, KE5RI, Kevin Alt, K6BSG, Pat Coyle, KG6JSL; Bruce Donecker, N6CT; Michael Silva, KC6UNA

- 1) Call to Order, Verification of Quorum, Introductions.
The meeting was called to order by President Brian Torr, N6IY, at 6:35pm. The meeting was held at Marie Callendar's, 2460 Mendocino Avenue, Santa Rosa. A quorum was not present in that only three of the seven voting board members were present. As a result, no official business was handled.
- 2) Approval of Minutes - Deferred
- 3) Officer and Director Reports
 - 1) President - Brian, N6IY, had nothing to report
 - 2) Vice President - Position Open
 - 3) Secretary - Position Open
 - 4) Treasurer - Jim Lee, KE6GVG was not present
 - 5) Directors
 - 1) Randy, KE6VMZ, had nothing to report
 - 2) Gregory, AC6VJ was not present
 - f) Past President - Bill, KH6GJV had nothing to report
- 4) Committee Reports
 - a) ARES - Rich, KF6SZA, had nothing to report
 - b) Mobile Comm Van - Rich, KF6SZA, is trying to arrange time to paint Toaster
 - c) Newsletter - Bill, KH6GJV, had nothing to report
 - d) Public Service - Brian, N6IY to request public service contacts from John Mullan, KD2L
 - e) Repeater Committee - John, KE5RI
 - i) Net Control volunteers - Jan 4, AC6VJ; Jan 11, KH6GJV; Jan 18, N6IY; Jan 25, KE6RI
 - ii Status of the repeaters - John reported on the status of the club's repeaters.
 - ii SCRA vs NARCC Update - Discussion was held regarding the litigation.
- 5) Unfinished Business - None
- 6) New Business - The new Board of Directors will hold a retreat on Jan 15.
- 7) Future Programs - John, KE5RI will hold a brainstorming session at the January general membership meeting.
- 8) Adjournment - The meeting concluded at 8:45 pm

If you are not getting the ARRL San Francisco Section news by e-mail and you are an ARRL member, be sure to subscribe under your Members Only information or go to <http://www.arrl.org/sections/?sect=SF> or <http://www.pdarrl.org/sfsec/>



BPL (from page 1)

confirmed the existence of harmful interference on 20 meters "sufficient to preclude virtually all Amateur Radio communications."

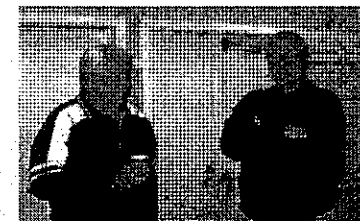
ARRL observations December 16 indicated that BPL noise "precludes or repeatedly disrupts" ham radio communication using typical receivers. The harmful interference was noted at a distance of approximately three-quarters of a mile from the modem, affecting a wide area, "unlike Part 15 point-source radiators," Imlay said.

The December 17 letter went to FCC Enforcement Bureau Chief David Solomon, FCC Deputy Office of Engineering and Technology (OET) Chief Bruce Franca and OET's Experimental Licensing Division Chief James Burtle. Copies went to Ambient Chief Engineer Yehuda Cern and to FCC Special Counsel Riley Hollingsworth. In cooperation with utility Consolidated Edison, Ambient has been operating the Briarcliff Manor BPL system under an experimental license, WD2XEQ.

The FCC should shut down the Briarcliff Manor BPL field trial and pull the Experimental license too, Imlay argued. "Given the unsupported and demonstrably false allegations contained in the Ambient October 12, 2004, response to ARRL's interference complaint," he concluded, "the Commission should rescind the experimental authorization as well, and determine other appropriate sanctions against Ambient Corporation."

The Briarcliff Manor BPL system was the focus of a March 2004 front-page Wall Street Journal article, "In This Power Play, High-Wire Act Riles Ham-Radio Fans," by technology writer Ken Brown. ARRL staff members accompanied Brown to the BPL site so he could hear the interference firsthand.

From ARRL Letter



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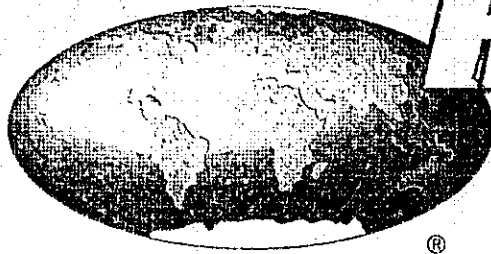
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phoenix@hamradio.com

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Doraville, 1 mi. no. of I-285
atlanta@hamradio.com

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(800) 444-4799
Steve, N4SR, Mgr.
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woodbridge@hamradio.com

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(603) 898-3750
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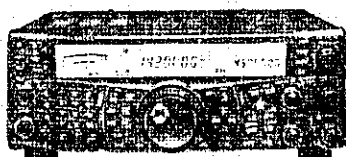


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KENWOOD



TS-2000 HF/VHF/UHF TCVR

- 100W HF, 6M, 2M • 50W 70CM
- 10W 1.2 GHz w/optional UT-20 module
- IF Slags DSP • Built-in TNC, DX packet cluster
- Backlit Front Key Panel

Low Intro Price!



TH-D7A(G) 2M/440

- 2M/440 Dual Band
- Built-in 1200/9600 Baud TNC
- APRS Compatible
- DX Packet Cluster Monitor
- 200 Memos, CTCSS
- VC-III Messaging Control

Low Pricing!



TM-D700A 2M/440 Dualband

- 50W VHF 35W UHF • Opt. Voice Synthesizer
- Receives 118-1300 mHz (cell blocked)
- Remote Head Inst. only (kit included)
- 200 Memories • Built-in 1200/9600 baud TNC
- Advanced APRS Features
- DX Packet Cluster
- Tone Scan • GPS/VIC-H1/PC Ports

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UPS • Most Items Over \$100



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The Store Nearest To You!

YAESU



VX-7R

- 50/2M/220/440 V-T
- Wideband RX
- 900 Memories
- SW TX (300mw 220MHz)
- Li-Ion Battery
- Fully Submersible to 3 ft
- Built-in CTCSS/DCS
- Internet WIRE compatible

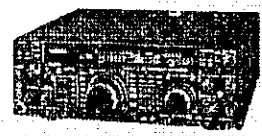
Great Price!



FT-100D HF/6M/2M/70CM Trans.

- Compact Transceiver w/detachable front panel
- Rx 100kHz to 970mHz (cell blocked)
- 1x 100W 160-6M, 50W 2M, 20W 70CM
- Built-in DSP, Vox, CW keyer
- 300 Memories

Low Pricing!



FT-1000MP MKV HF Trans.

- Enhanced Digital Signal Processing
- Dual RX
- Collins SSB filter built-in
- 200W, External power supply

Low Pricing!

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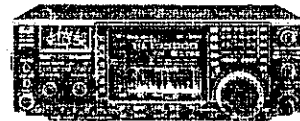
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IC-706MKIIG HF/VHF Transceiver

- All mode HF/6M/2M/70CM
- 100W HF/6M, 50W/2M, 20W/440 MHz
- AF-DSP • Plug and Play Filters • No Soldering
- Easy-to-Navigate menus

Low Pricing!



IC-756 PRO II All mode Transceiver

- 160-6M @ 100W • Enhanced Rx performance
- 32 bit IF DSP • SSB/CW Synchronous tuning
- Enhanced 5 inch color TFT w/spectrum scope
- Selectable IF filter shapes for SSB & CW
- Multiple DSP controlled AGC loops
- Advanced CW functions
- 101 alphanumeric memories

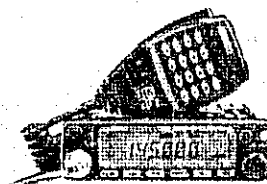
The Ultimate Radio!



DJ-196T 2M/HT

- 5 Watt out
- 40 memories
- Alphanumeric display
- CTCSS + DCS built in
- "S" meter
- Auto Dialer

Low Pricing!



DR-135TP 2M mobile

- 50 Watt out • Alpha numeric display
- 100 mems • Built-in TNC 1200 & 9600 Baud
- Front Panel GPS in • Rear DB-9 port
- CTCSS/DCS Encode/Decode built in

Low Pricing!

HSC Web Specials!

The items below can be found in the "Specials" area of our online shopping pages at www.halted.com...check them out and use our secure site to place your order for the holidays!

Fujitsu FPG-310 Color Pen Plotter GPIB (IEEE-488) interface Boxed, w/ manual, cord, 90-day warranty HSC# 19131	Computer Power Supply, ATX, 145W HSC# 18250	\$47.50	\$9.95
Rechargeable 12VDC Battery 40 AH, lead/acid, Yuasa NPX-150R HSC# 18917	Network card, ISA bus, 10-Base T HSC# 18943	\$29.50	\$4.95
Server Cabinet, ATX rack mount, with Power Supply, White color HSC# 80541	Computer Speakers, powered HSC# 18662	New Price!	\$9.95
Battery charger, NiMH HSC# 19151	Game-pad, Microsoft "Sidewinder" HSC# 80486	\$17.50	\$12.50
SCSI Controller, Initio, PCI Bus HSC# 18218	Compact AC Inverter for the car, 100W HSC# 19021	New Price!	\$14.95
SCSI Controller, Adaptec 1505, ISA Bus HSC# 17995	Motherboard, 486DX4 AT HSC# 18529	New Price!	\$9.95
Mouse, 2-button HSC# 18731	Motherboard, Baby AT, 486VLB HSC# 19003	\$3.95	\$9.95
Mouse, w/ numeric keypad HSC# 80539	Multimeter, analog, VOM HSC# 18280	\$4.95	\$9.95
Scrolling mouse, translucent body HSC# 18829	Multimeter, DMM, with transistor check HSC# 80370	\$9.50	\$14.95
Computer Power Supply, ATX 200W, "Mini-Tower"-style HSC# 18665	Multimeter, DMM, tilt-up display, nical HSC# 80594	New Price!	\$39.95
	Computer Joystick, "FX2000" HSC# 18772		\$3.00
	Tower Chassis, 7-Bay "RAID" HSC# 80544		\$42.50

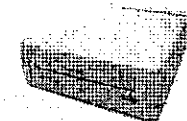
VHS Video To Go!



- "Adeltronics" Model No VHS-10S player deck
- Dual power option - 110VAC or 12VDC!
- Perfect for entertaining the kids in the winter!
- Many other uses... home, business, camping...
- Standard NTSC VHS format, full front panel controls, soft-touch buttons with LEDs
- Remote control sensor on front panel - remote NOT included...may work with generic remotes?
- Removed from working service, 90-day HSC warranty

HSC# 19048 **\$19.95!**

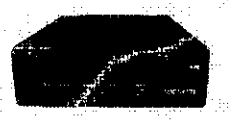
External CD-RW!



- Hewlett-Packard Model 7200 Series CD-RW
- Use just like a floppy! Shares printer port!
- Drag & drop up to 850MB on a single CD!
- 2X write on CD-RW, up to 6X read on CD-R
- 1X RAW: 150KB/sec, 2X RAW: 300KB/sec
- 6X Read: 800KB/sec - drives avail. at HP website
- EIDE (ATAPI) interface w/MMC, front tray load
- 74 min. on 120mm disk, 21 min. with 80mm disk
- Power supply not included (pinout provided)
- Established, 90-day HSC warranty

HSC# 19036 **\$49.50**

VHS for even less!



- Magnavox Model No VR100AT01 video player
- Standard 7" type connections for inline connection
- Front panel switch selects Ch. 3 or Ch. 4 output
- RCA jacks for line level video/audio connect
- Picked from working service. Units have slight markings from removed infrared beam/sensor element covering front panel infrared detector. Remote NOT included.
- For 110VAC, 60Hz operation
- Removed from working service, 90-day HSC warranty

HSC# 19152 **\$17.50!**

Lab Bench Supply!

- Model No. AEEC-360, 0-50VDC @ 3 Amp
- 110VAC, 60Hz - 160VA - small footprint!
- Dual digital meters for voltage and current
- Short-circuit protected, grounded 1/4" cord
- New, IEC power cord, manual, 90-day warranty

HSC# 80606 **\$139.00**

Variable Transformers!

- One of the most useful instruments on your bench!
- Always wanted one, but they were too expensive?
- Two sizes to choose from, now they're affordable!
- Both new in box, made in China
- Model AEEC-600VR
- 0 - 120 VAC output, 500 VA
- Measures 0.5" x 8" x 7" tall
- Features meter, illuminated switch, line cord, fuse

HSC# 80474 **\$45.00**

- Our most popular model
- Model AEEC-2000VR
- 0 - 120 VAC output, 2000 VA
- Measures 8" x 10" x 9.5"
- Features meter, illuminated switch, line cord, fuse

HSC# 80461 **\$95.00**

Solder Pots!

- Finally...we found a source for solder pots! New, 80-day HSC warranty, very handy for the workbench!
- AEEC-10P - handy compact desktop unit!
- 110VAC, 110 Watts - perfect for small jobs
- Adjustable temp. levels - 300 to 430 deg. C
- Bath dimensions: 36mm dia x 30mm deep

HSC# 80610 **\$32.00**

Disk Drive Deals!

- Seagate ST15150N 4.3 GB "Barracuda" SCSI
- 7200 RPM, 8.0/9.0 ms avg. seek time
- 21 Hds, 11 Disks, 3,711 Cyl.
- Standard 50-pin SCSI
- 3.5" size, half-height (1.5" tall)
- Refurbs, 90-day warranty

HSC# 18412 **\$32.50**

- Seagate ST1917 (HWC, Ultra-SCSI Wide ASAS2)
- Formatted capacity: 9.1GB
- Spindle speed: 7200 RPM
- 3.5" size, half-height (1.5" tall)
- 80-124 mbits/sec internal transfer rate
- Average Access (read/write): 9.7-10.7 ms

HSC# 18753 **\$39.95**

Special...buy this drive & get a 50-pin (HSCA23700) or 68-pin (HSCA23720) Adapter for \$10.00! Normally a \$20 - 30 value!

PCMCIA Goodies!

- EPSON Ethernet PCMCIA interface card
- Both 10Base2 and 10BaseT cables included!
- Compatible with notebooks/PCs with Type II slots
- Hot card insertion and removal - no power down
- No jumpers or switches - two LED status lights
- New boxed, diskolets & manual, 90-day warranty

HSC# 19125 **\$9.95**

- Intel "PRO/100" PCMCIA Network Adaptor Card
- MBLA1600 LAN card supports 10BaseT/100BaseTX
- For PC Card Type II sockets, 32KB packet buffer
- Full duplex support (10Mbps networks only)
- Ethernet Specs: IEEE 802.3 & 802.3u spec
- With RJ45 cable, OEM packed, 90-day warranty

HSC# 19190 **\$39.50**

- Epson/Adaptec APA4636 PCMCIA SCSI Card
- Up to 2 Mbytes/sec PC Card bus rate
- New, OEM pack with DB25 cable, 90-day warranty

HSC# 19160 **\$49.50**

EASY NETWORK!

Multi-PC Web Access...
Save Money!
Up to 4 PC's on one phone line!

- Perfect for home/small businesses
- Share printers, scan laws, backup files
- Proxy server for multi-PC internet access!
- Only one phone line needed for ISP connection
- Includes 4-port hub/56K modem & 1 network card
- If you want more than two PCs networked, you will need more network cards (HSC# 18493 \$4.95)
- 50 ft network cable, drive/installation manual CD
- OEM package, new, 90-day warranty

HSC# 80599 **\$29.95**

- ...or, you can just buy the modern/hub-card!
- Comes with installation software CD
- You can connect your own 10-BaseT network PC's (up to three!) to its hub and serve!
- OEM package, new, 90-day warranty

HSC# 18942 **\$17.50**

HSC Electronic Supply

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