

Calendar of Events

Oct 2	Wed	5:30 PM 7:30 PM	Dinner at Marie Callenders, 2460 Mendocino Ave, Santa Rosa SCRA Meeting , Agilent Technologies, 1400 Fountain Grove Prkwy, Santa Rosa
Oct 4	Fri	7:30 PM	Marin ARC Meeting, Alto Clubhouse, 27 Shell Road, Mill Valley
Oct 5-6	Sat-Sun		California QSO Party!
Oct 5	Sat	10:00 AM	Red Oak Victory ARC Meeting, Point Richmond
Oct 9	Wed	6:30 PM	SCRA Board of Directors Meeting, 3450 Airway Dr., Santa Rosa
Oct 15	Tues	7:30 PM	Hamilton Wireless Assoc., Bldg 549, Hamilton Field, Novato
Oct 16	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.
Oct 18-20			Pacificon - Concord www.pacificon.org
Oct 26	Sat	9:00 AM	VE Test Session - SCRA Agilent, 1400 Fountaingrove Prkwy, Santa Rosa Contact: John KD2L (707) 575-9176

Sonoma County Radio Amateurs, Inc.
P. O. Box 116
Santa Rosa, CA 95402-0116

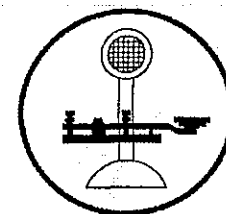
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John Breckenridge II
574 Wild Oak Dr
Windsor CA 95492

WB6FRZ



Club Station
W6LFJ

Short Skip

newsletter of the

Sonoma County Radio Amateurs, Inc.

P. O. Box 116, Santa Rosa, CA 95402-0116

(707) 579-9608

<http://www.sonomacountyradioamateurs.com>

Repeaters

146.985- • 146.73- • 224.48- • 441.375+



Repeater Station
W6SON

Volume 27 Number 10

October 2002

QTC

by
Bill Hillendahl KH6GJV
SCRA President

Straits



A couple of things are on my mind for this column this month: **CQP** and **Pacificon**.

Starting off the month on the weekend of **October 5th and 6th** is the **California QSO Party**, also affectionately known as **CQP**. (See article in this issue.) This is a contest where North American stations in the 50 United States and 8 Canada Provinces try to make as many contacts with stations in the 58 California counties. This is an easy and fun contest that can be used to introduce new Hams and those who have not participated in such a task to contesting. The "exchange" or required information passed between stations is really simple. You just give the other party the contact number and county you are operating from if you are in California. US CA stations have to get the contact number and the state or province. That's it! Now I'm not a heavy tester, but I really do enjoy the CQP. Even if you can't spend the whole weekend on it, give it a try. Make a few contacts. Contesting can be really addictive.

Starting on **Friday, October 18th** and running through **Sunday, October 20th**, the **Mt. Diablo Amateur Radio Club** (MDARC) is once again putting on the best convention in the western states, **Pacificon**! Specific information is available at www.pacificon.org. Friday's program is the well known and informative Antenna Forum. If you really want to learn something

(continued on page 3)

ARRL OFFICIALS UPBEAT ABOUT REACHING 5-MHZ COMPROMISE

ARRL President Jim Haynie, W5JBP, and General Counsel Chris Imlay, W3KD, say they're optimistic about reaching a resolution to issues that could otherwise block plans for a new 5 MHz band. Until surprise opposition surfaced from the National Telecommunications and Information Administration (NTIA), the FCC appeared to have put ARRL's request for a new, domestic-only, secondary amateur allocation at 60 meters on the fast track.

In an eleventh-hour move a month ago, the NTIA recommended in a letter to the FCC--sent after the comment deadline--that the Commission not go forward with a proposal for an Amateur Radio allocation at 5250 to 5400 kHz. The NTIA regulates radio spectrum allocated to the federal government.

"We are working together with the Federal agencies involved toward a solution of the impasse raised by the NTIA letter," Imlay said after he and Haynie attended a series of meetings September 19 in Washington, DC.

Acting NTIA Associate Administrator for Spectrum Management Fredrick R. Wentland had said in an August 21 letter that critical federal agencies, including the Department of Justice, the US Coast Guard and the Department of Defense, were making extensive use of 5 MHz frequencies. He worried that the 5 MHz proposal the FCC put forth last May at the ARRL's request "does not adequately provide for

(continued on page 4)

2002 Club Officials

President	Bill Hillendahl	KH6GJV	707 544-4944
Vice President	Brian Torr	N6IYY	707 575-5871
Secretary	Jeff Basham	W2JAB	707 542-3860
Treasurer	Vicki Cero	KF6ZCT	415 673-3859
Director	John Breckenridge	WB6FRZ	707 838-6398
Director	Jim Lee	KE6VGV	415 892-0317
Past President	Greg Gordon	AC6VJ	707 523-7077
Activities Chairman	Mark Lockwood	KK7CU	707 332-4836
Public Service Chairman	John Mullan	KD2L	707 575-9176
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	W2JAB	707 542-3860
Web Master	Jeff Basham	W2JAB	707 542-3860

Contacts

Antenna Ordinance/Legal	Lee Dibble	KE6EAQ	707 544-1675
Public Relations	Bill McCall	W6WDM	707 538-2844
Raffles	Mark Lockwood	KK7CU	707 332-4836
Refreshments	Ted DeCroff	KB6PTA	707 542-4008
TV/RF Interference	Alan Bloom	N1AL	707 538-7115
Volunteer Exam Liaison	John Mullan	KD2L	707 575-9176

SCRA Hotline	707 579-9608
SCRA E-Mail	scra@sonomacountyradioamateurs.com
SCRA Web Site	http://www.sonomacountyradioamateurs.com

Tuesday Night Net

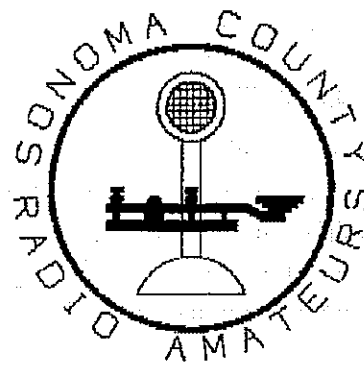
Check in to the SCRA net each **Tuesday** evening on the **146.985-(PL 88.5)** repeater at **7:00 PM**. Announcements are made of upcoming SCRA and other amateur radio activities in the area and what is listed in Hank's Swap Shop. You will also hear the weekly *Amateur Radio Newsline* broadcast.

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 Marie Callenders restaurant, 2460 Mendocino Avenue (corner of Mendocino & Chanate), Santa Rosa. People start showing up at 5:30 PM. No RSVP is required! See you there!

NEXT MEETING
October 2nd
7:30 PM

Program:

Commercial Satellite
Operations

Mark Lockwood KK7CU

(See article)

CLUB MEETINGS

The club normally meets the first Wednesday of each month at:

Agilent Technologies
1400 Fountaingrove Parkway
Santa Rosa, CA

The meeting starts at 7:30 PM

ALL ARE WELCOME!

Please join us at our next meeting. Membership in SCRA is open to anyone interested in Amateur Radio. A membership application is included in this newsletter.

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

SCRA's Mobile Communications Unit
The "Toaster"

If you have not had a chance to come by and help, make it a point to do so. The project is fun and you get to be on the ground floor of designing and building the club's mobile communications center. The "Toaster" will be able to be used at public service events, Field Day, ARES events, and, of course, true emergencies should the need arise. The vehicle will also be a good public relations device to keep Amateur Radio in the mind of the general public. **Work parties are held each Saturday from 10 AM until about Noon at Lee Dibble's home, 1290 Parsons Drive, Santa Rosa.** Come and join the fun!

Fresh-Tasting "Toaster" Fundraiser

By John Breckenridge, WB6FRZ

The club needs your help in a tasty fund-raiser for the "Toaster!" As many of you know, the club has taken on the project of restoring a motor home (the "Toaster") and transforming it into an effective portable communications center. To raise funds for this task, we are asking YOU to help sell coupon books for tasty deals at Fresh Choice restaurants. The price is \$5 per book and contains \$85 worth of coupon savings at any Fresh Choice restaurant. Buy several to sell or as gifts, or get one for yourself and family. Either way you win, and the community is served by making it easier for your club to complete work on this worthy project. For details, contact John Breckenridge, WB6FRZ at (707)838-6398 or come to the next club meeting.

- Develop a point of view about success – your own and your organization's.
- Maintain a sense of humor and inject it when appropriate.
- Return calls within twenty-four hours. Never leave one unanswered.

From "Never confuse a memo with reality" by Richard A. Moran

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Address _____ Hm Phone _____ Wk Phone _____

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ARRL Member? [] Yes [] No

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Individual/Associate Member	\$ 20 (\$5.00/qtr)
Family Membership	\$ 30 (\$7.50/qtr)
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Badge	\$ 7

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Make checks payable to SCRA

Dues - Full Year (3/1 to 2/28)	\$ _____
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Badge	\$ _____
Other - _____	\$ _____
Donation	\$ _____
Total	\$ _____

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

California QSO Party (CQP) 2002**1600Z October 5, 2002****until****2200Z October 6, 2002**

By Marc Ziegler W6ZZZ

CQP Publicity Assistant

Northern California Contest Club (NCCC)

I'd like to personally invite you, your club and your club members to participate in the California QSO Party (CQP).

I also want your help to encourage each and every HF ham in California to "get on the air for CQP". For just this once each year the entire World is "looking for CA". You might be a small station like me but when you get on the bands and "call CQ" in this contest people from around the World will answer you!

We expect a record-setting year in USA/Canada/DX QSOs and participation due to the new "Top Club non-CA" plaque that NCCC is offering for the very first time this year. We have notified 225 non-CA clubs around the World about this new award.

Start your contest season with a bang and have some fun in CQP!

Obviously we would appreciate it if you would advertise the CQP in your club newsletter and your club meetings (even if you decide to not enter the CQP contest as a club).

All the California QSO Party rules, results, county abbreviations, and free logging software are available at: <http://www.cqp.org/>

Read all about the 2001 CQP contest results (only six CA clubs entered the 2001 CQP, maybe you can win in 2002):

<http://www.cqp.org/Results-2001.html> or

<http://www.cqp.org/results/2001/01cqp.pdf>

California county-by-county records (who will set a new county record in 2002?):

http://www.cqp.org/results/Records/rec_ca.htm

☛ Don't forget about all the awards available in CQP (see <http://www.cqp.org/Awards.html>):

☛ 34 Plaques (wood and metal, not mere wallpaper!)

☛ 40 Bottles of special vintage California wine (with commemorative CQP labels)

- ☛ Certificates to the top S/O in each and every state, province, country, and CA county
- ☛ Certificates to each and every ham who makes at least 100 QSOs in CQP

We even have CQP T-shirts available for purchase if you make at least 100 QSOs in the contest.

This year's California QSO Party promises to be a lot of fun!

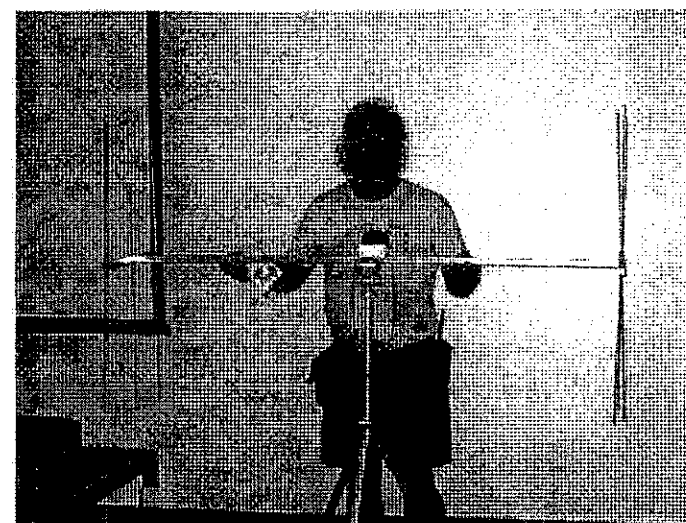
California QSO Party (CQP), sponsored by the Northern California Contest Club (NCCC), see complete rules at <http://www.cqp.org/>

1. 1600Z October 5, 2002 until 2200Z October 6, 2002.
2. Single op, multi-single, multi-multi, CA county expedition, mobile, and Novice/Tech. 160 80 40 20 15 10 6 2 meters.
3. Send QSO number and CA county. If you're outside of California, send the QSO number and your state/province/DXCC country.
4. Single ops are limited to 24 hours. Multi-singles have a 10-minute rule. Single ops and multi-single are limited to one transmitted signal at a time.
5. CW QSOs must be made in CW subbands, except on 160 meters.
6. Work stations once per band/mode, work CA stations again as they change counties. A CA station on a county line counts for 1 QSO but multiple counties.
7. CW - 1.805 and 40 kHz up; phone - 1.850 3.850 7.230 14.250 21.300 28.450; Novice - 10 kHz up and 28.450.
8. Score 2 pts/QSO on phone and 3 pts/QSO on CW. Final score is QSO points multiplied by CA counties (max 58). CA stations multiply QSO points by states and VE sections (max 58).
9. Hundreds of awards, certificates, plaques and bottles of wine.
10. Free CQP logging/scoring software (DOS and Windows): <http://www.cqp.org/Software.html>
11. Send logs to Alan Maenchen, AD6E, 3330 Farthing Way, San Jose, CA 95132 or email to cqp@contesting.com; <http://www.cqp.org/>

October 2nd Program Commercial Satellite Operations

The program for our October meeting will be presented by our own **Mark Lockwood KK7CU**. Mark works for **Loral Skynet** monitoring and controlling the satellites that provide a lot of our communications and television programming. Mark will give us the details of what the satellites handle and some of the technical specifications. Be sure to join us for this high-level program.

The club welcomed **Rich Harrington KN6FW** as our speaker at the September meeting. Rich provided a great program on transmitter hunting and showed off some of his antennas and other hunting



Rich Harrington KN6FW shows how to use one of his T-Hunting antennas.

equipment. Rich also passed on some of his tips on how to smoke out the wily transmitter.

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 kh6gju@arrl.net. We'd love to see YOU in print!

QTC (continued from page 1)

about antennas, how they work and what's new in design, spend the extra \$10 and attend on Friday.

Saturday's activities will start off with the Swap Meet, a treat in itself. I always find something that I stuff in the back of my car to play with later. No wonder my storage is full! Also, Saturday morning, MDARC for the second time is putting on a breakfast where you get to hear the latest from the ARRL from the top man himself, **ARRL President Jim Hayne W5JBP**. Jim will bring us up to date on his Big Project, the Amateur Radio education program, as well as other happenings back in Newington.

There are seminars through the day on Saturday and Sunday that will cover many aspects of our hobby. Quite a number of Amateur Radio vendors will be on hand to show off their latest equipment. Yes, you can actually touch it and ask the hard questions. And, many of the prices are reduced for the convention. You can get some really nice bargains.

Saturday is capped off with the annual banquet with featured speaker, **ARRL General Counsel Chris Imlay W3KD**. Chris will probably bring us up to date on the bills running through congress to help us with our problem with CC&Rs.

Of course, MDARC has the usual broad array of very nice raffle prizes that you have a good chance of winning.

So even if you cannot get clearance to stay for the whole weekend, head for the Concord Sheraton for at least one day. You won't regret it!

"Where there is no law, but every man does what is right in his own eyes, there is the least of real liberty."

— Henry M. Robert

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ARES Comm Log

by Rich Freitas KF6SZA
Greater Santa Rosa
Emergency Coordinator

First, the bad news (or, is it the good news?) there is no article this month for you to read. As we speak, I am working on the ARRL SET for this year. You remember what the SET is, don't you Simulated Emergency Test. Yes, it's that time again when the ARRL conducts its national emergency exercise. Due to my work schedule this year's test will take place on Saturday, October 26th, from 0900 to 1300 hours (for those of you who are military-time impaired, that's 9:00 AM to 1:00 PM). The purpose of the SET is deadly serious but I do try to make the event as entertaining as possible. We will again meet in the morning for a briefing where participants will be formed into teams and dispatched to locations unknown until that time. Once you have arrived at your destination you will be instructed to open an envelope which contains the exercise scenario and your message traffic; then the fun begins while we all get a chance to both pass and copy drill messages. None of the messages are difficult but they are designed to expose you to the types of traffic you may encounter when working with our served agencies. As in a real emergency, you will not be authoring messages nearly as much as you will be responsible for transmitting and copying the traffic exactly as written.

The formal part of the exercise will end at about 12:00 Noon when we will reconvene at a convenient place for lunch and a critique of the SET. This discussion at the end is very important and it seems that each time we run an event I learn something more from the critique. By 1:00 PM you will be through and free to enjoy the rest of the day. I will be passing around a sign-up sheet at the meeting to see how many people are interested in participating. If you can spare a few hours on that Saturday morning and would like to participate, we would like to have you join us. Who knows you may have some fun and pick up a few pointers on traffic handling.

The ARES net meets on Mondays at 7:30 PM on the 146.985 MHz, - offset, 88.5 PL. Everyone is welcome to participate.

5 MHz (continued from page 1)

protection from harmful interference to these critical government operations."

After initially huddling this week with NTIA and FCC officials and staff members, Haynie and Imlay met face-to-face with representatives of the agencies involved to share mutual concerns.

"They are willing to work with us," Haynie said. "Chris and I left feeling a whole lot better." Haynie said hammering out some differences will involve some further meetings--including one with the US Navy--but that he and Imlay were feeling much more positive about the situation.

"I feel confident we'll get something," Haynie said. "I don't think we'll get everything we want, but it's certainly a start, and it's a lot better than what it was this time last week."

One difficulty in the negotiations is that some of the information on the government's use of the 5-MHz frequencies involved is classified. "We were given some hints about the sensitivity and the seriousness of some of the activity that's going on," Haynie said, "and we fully appreciate that now--more so than before--because we just didn't, and couldn't, know. The important thing is that we have established a good working relationship with the Justice Department and the Coast Guard."

Imlay said the discussions tended to center on power restrictions and frequencies but emphasized that no decisions were reached. The ARRL proposal called for a 150-kHz wide band and the full legal power limit. Imlay hinted, however, that perhaps a smaller band than the one requested coupled with some power output limitations, was a real possibility.

The ARRL has called the 5 MHz allocation "an urgent priority of the Amateur Service" and has asked that the proceeding to grant it be expedited. Until the latest snafu, the FCC had been expected by early next year to issue a Report and Order on proposals for the 5-MHz band, a new low-frequency allocation in the vicinity of 136 kHz and primary Amateur and Amateur-Satellite status at 2400 to 2402 MHz.

From the ARRL Newsletter

Sonoma County Radio Amateurs, Inc.
Membership Meeting, September 4, 2002
MINUTES

The meeting minutes were not received in time for publication.

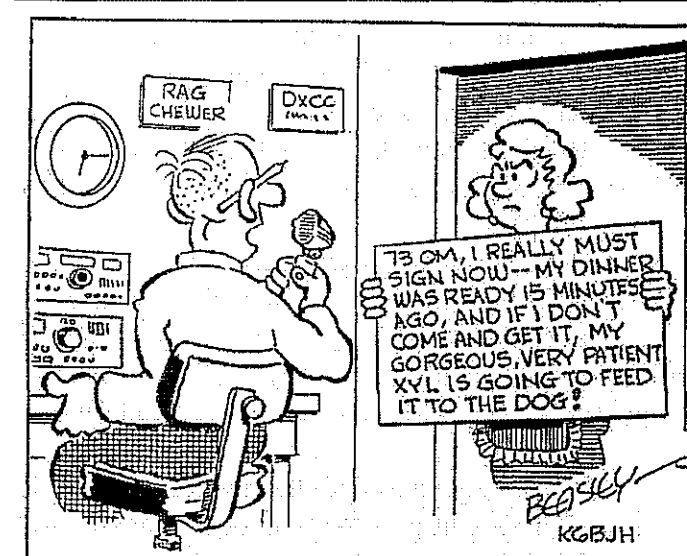
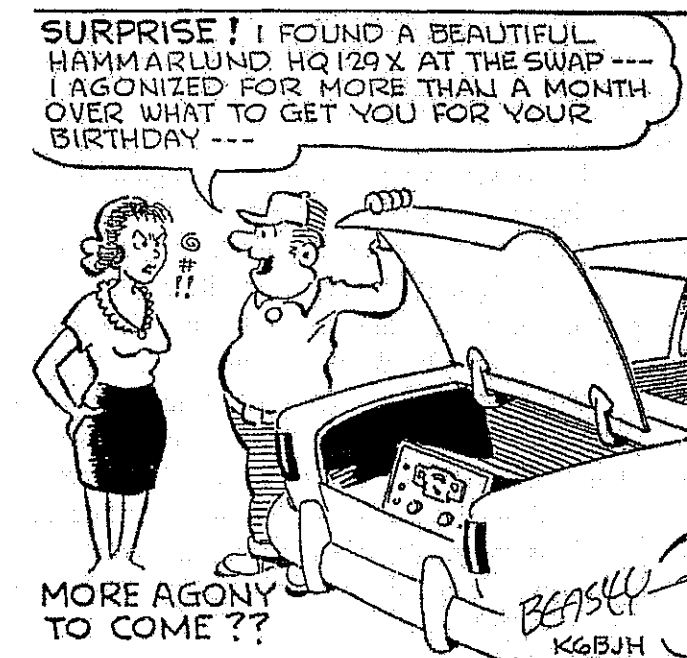
Sonoma County Radio Amateurs, Inc.
Board of Directors Meeting, September 11, 2002
MINUTES

We met in a conference room off the main lobby at Agilent Technologies. Board members present were: President Bill Hillendahl KH6GJV, Vice President Brian Torr N6IY, Repeater Chairman Greg Gordon AC6VJ, and Directors Jim Lee KE6VGV and John Breckenridge WB6FRZ, with visitors Mark Lockwood KK7CU, Josh Fiden KG6FMR, and John Felton KE5RI. Excused was Secretary Jeff Basham W2JAB and Treasurer Victoria Cero KF6ZCT.

1. Call to Order at 6:36 PM
2. Approval of Minutes.
 1. Minutes of the August 14, 2002 Board of Directors Meeting was approved with some minor spelling corrections.
 2. Minutes of the August 15, 2002 Executive Session was approved with one spelling correction.
3. Officer and Director Reports
 - i. Brian Torr had nothing to report
 - ii. John Breckenridge reported that Betty's antenna project is done. There are 33 books of "toaster" fundraiser coupon books left, and will not be purchased back by Fresh Choice. The board approved a discount sale of \$3 each for these books to sell them off.
 - iii. Jim Lee had nothing to report
4. Committee Reports
 - a. ARES - no report
 - b. Mobile Comm Van - The "toaster" mobile comm. van must find a new location. John Felton reported on his efforts but as yet has been unsuccessful. Discussion and brainstorming ensued. Brian to check with Agilent, John Felton to check with airport, and others to continue seeking a location.
 - c. Activities Committee - Mark Lockwood
 - a. T-Hunt - Mark reported on the T-Hunt activities. He and Josh Fiden are hosting a T-Hunt antenna building session at Agilent on 9/25/02 at 7:30 PM. They need RSVPs from those desiring to build an antenna.
 - b. Christmas Party - Brian to confirm that we can do this in the Agilent cafeteria and report back. Discussion ensued.
 - d. Newsletter - Bill presented a quote for mailing from Kinko's. No action was taken.
 - e. Public Service Committee - It was reported that John Mullen has enough operators for the Diabetes Society Ride.
 - f. Repeater Committee - Greg Gordon.
 - a. Greg reported that the repeaters are working.
 - b. Tuesday Night Net Control - No club members outside of the board are volunteering to be net control operators; discussion ensued. NCS volunteers for October are as follows: 10/1 - Bill KH6GJV, 10/8 - Brian N6IY, 10/15 - Greg AC6VJ, 10/22 - John WB6FRZ, 10/29 - John KE5RI
5. Unfinished Business
 - a. Meeting Programs - October: Mark KK7CU on Satellites, November: Elections and Greg AC6VJ - Repeater show and tell
 - b. Club Calendar - No changes.
 - c. Club Generator - The generator has new tires, but the cost was greater than anticipated. The board approved expense reimbursement to Mark KK7CU for the excess cost of the tires; m: Brian N6IY, s: John WB6FRZ
6. New Business
 - a. Elections were discussed
 - b. Nominating Committee - board members to submit names to Bill
 - c. Member of the Year Committee - Bob and Al will co-chair this committee (they were the recipients last year); more discussion in closed session.
 - d. The Santa Rosa Bike Club has donation funds available. Bill to create a list of items that we would like to have and submit it to the Bike Club for consideration.
 - e. John Felton KE5RI requested that the club provide a members roster to the rest of the club. Discussion ensued. Brian N6IY volunteered to create and maintain a database of members with

publishable information. John WB6FRZ volunteered to bring a sign-up list to the club meeting for members to indicate the information about them to be published.

- f. John Felton KE5RI presented the club with some HF equipment donated by Rob Michaan off of his sailboat. This was: TS430S, ICM700 HF radiotelephone, AT250 Auto Tuner, and MFJ260 dummy load. Bill to provide Rob Michaan a thank you letter and valuation of the gear.
7. Announcements
 - a. CQP is October 4 and 5
 - b. Brian reminded us that the Agilent lobby rooms are unavailable for the March meeting
8. Adjournment at 8:32 PM



---7:30 O.M., I REALLY MUST SIGN NOW-----

From "The Best of Beasley" Worldradio Books

HSC Web Specials!

The items below can be found in the "Specials" area of our on-line 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# 18131	Computer Power Supply, ATX, 145W HSC# 18350
Rechargeable 12VDC Battery 40 AH, lead/acid, Yuasa NPX-150R HSC# 18917	Network card, ISA bus, 10-Base T HSC# 18943
Server Cabinet, ATX rack mount, with Power Supply, White color HSC# 80541 New Price!	Computer Speakers, powered HSC# 18662
Battery charger, NiMH HSC# 19151	Game-pad, Microsoft "Sidewinder" HSC# 80486
SCSI Controller, Initio, PCI Bus HSC# 18218 New Price!	Compact AC Inverter for the car, 100W HSC# 19021 New Price!
SCSI Controller, Adaptec 1505, ISA Bus HSC# 17995 New Price!	Motherboard, 486DX4 AT HSC# 18529 New Price!
Mouse, 2-button HSC# 18731	Motherboard, Baby AT, 486VLB HSC# 19003
Mouse, w/ numeric keypad HSC# 80533	Multimeter, analog, VOM HSC# 18260
Scrolling mouse, translucent body HSC# 18829	Multimeter, DMM, with transistor check HSC# 80370
Computer Power Supply, ATX 200W "Mini-Tower"-style HSC# 18665 New Price!	Multimeter, DMM, tilt-up display, nicel HSC# 80804
	Computer Joystick, "FX2000" HSC# 18772 New Price!
	Tower Chassis, 7-Bay "RAID" HSC# 80544

Disk Drive Deals!

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7,200 RPM, 8,09.0 ms avg. seek time
21 Hds, 11 Disk(s), 3,711 Cyl.
Standard 50-pin SCSI
3.5" size, half-height (1.5" tall)
Refurb, 90-day warranty
HSC# 18412 \$32.50
- Seagate ST15171WC Ultra-
SCSI Wide Area
Formatted capacity: 8,108
Spline speed: 7200 RPM
3.5" size, half-height (1.5" tall)
90-124 mb/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 (HSCA23702)
or 68-pin (HSCA23703) 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
Hex, base, & manual, 90-day warranty
HSC# 19125 \$9.95
- Intel "PRO/100" PCMCIA Network Adapter Card
MBA1600 LAN cards supports 10BaseT/10BaseTX
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 APM4008 PCMCIA SCSI Card
Up to 2 MB/sec PC Card bus rate
New OEM pack with DB25 cable, 90-day warranty
HSC# 19160 \$49.50

VHS Video To Go!



- "VideoMaster" Model No. VHS-105 player deck
Dual power option! - 110VAC or 12VDC!
Perfect for entertaining the kids in the tent!
Many other uses...home, business, camping...
Standard NTSC VHS format, full front-panel
controls, auto-rewind buttons with LED's
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-R/W!



- Hewlett-Packard Model 7200 Series CD-R/W
Use just like a floppy! Shores printer port!
Drag & drop up to 650MB on a single CD!
2X write on CD-RW, up to 6X read on CD-R
1X RW: 150KB/sec, 2X RW: 300KB/sec
6X Read: 600KB/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 (port provided)
Refurbished, 90-day HSC warranty

HSC# 19036 \$49.50

VHS for even less!



- Magnavox Model No. VHS-100AT01 video player
Standard "F" type connectors for inline connection
Rear panel switch selects Ch. 3 or Ch. 4 output
HCA jacks for line level video/audio connect
Pulled from working service. Units have slight
scratches from removed infrared transmit element
covering front panel infrared detector. Remote
NOT included.
For 110VAC, 60 Hz operation
Removed from working service, 90-day HSC
warranty

HSC# 19152 \$17.50!

Lab Bench Supply!

- Model No. AEEC-350, 0-50VDC 30 Amp
110VAC, 60Hz - 150VA - small footprint
Dual digital meters for voltage and current
Short-circuit protected, grounded line 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-500VR
0 - 120 VAC output/500 VA
Measures 6.5" x 9" 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

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

- Perfect for home/small businesses
Share printers, send faxes, 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
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need more network cards (HSC# 19193 \$4.95)
80 network cable, driver/installation manual CD
OEM package, new, 90-day warranty

HSC# 80599 \$29.95

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

HSC# 18942 \$17.50

Solder Pots!

- Finally...we found a source for solder pots! New, 90-
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AEEC-10P - handy compact desktop unit
110VAC, 110 Watts - perfect for small jobs
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Both dimensions: 36mm dia x 30mm deep

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HSC Electronic Supply

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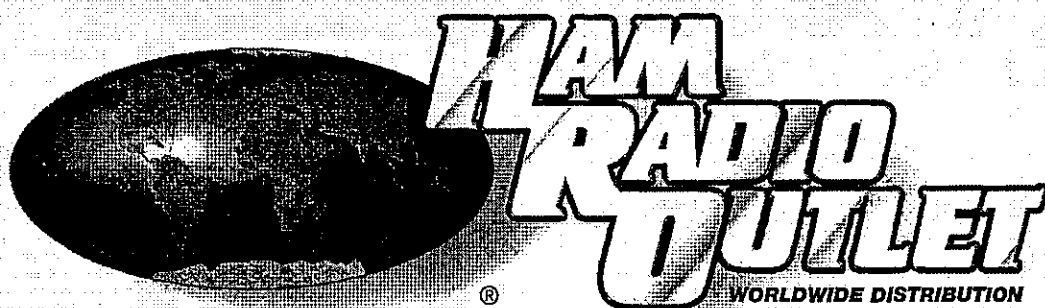
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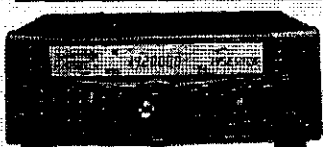
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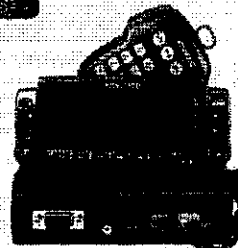
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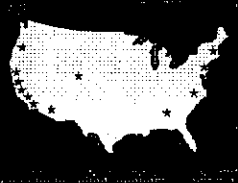
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- 220 mems, opt. barometer unit
- Alpha Numeric Display
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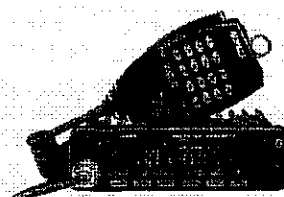
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DJ-196T 2M HT

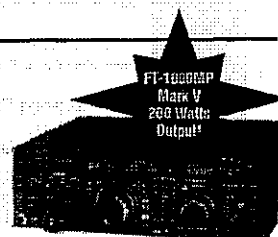
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