



HANK'S SWAP SHOP

Dave Willey KD6KWM PO Box 3514
Phone: 577-0558 Santa Rosa CA 95402
Noncommercial ham ads printed free. Please
call when item is sold. Ads run 2 months.

NOTE: New Swap Shop Editor! See above.

WANT: KENWOOD TS-440. Pat KD6MAZ
542-1274.

HEATH SB220 80/10M linear amp, best offer.
HALLICRAFTERS SR-160 150W SSB/CW xcvr
good for ragchewing on 80/40M, \$100. Tracy
WB6TMY 527-8124.

KENWOOD TS180S 160-10M 100W w/mic.
Don KD6HQ 575-9015.

HEATH IO-4205 scope, 5 MHz dual-trace,
manual \$50. Rick K6ZWB 542-6907.

KENWOOD TS430S w/pwr sup & mic \$750.
WANT: MULTIPLE CASSETTE RECORDER for
copying tapes for the blind. Wish to
purchase or permission to use once per month.
MFJ 817 SWR/power meter 144/440 MHz
(dual needles) \$45. John WB6FRZ 838-6398. ■

Oregon Hamfest

The Coos County Radio Club's third annual
hamfest is Saturday July 24 from 9:00 to
5:00 at the Junior High School in North Bend
OR. Talk-in 146.61. Admission \$4 pre-
register, \$5 at the door. Tables \$10. Free RV
parking all weekend. Door prizes, dealer sales,
seminars, swap tables, VE exams, snack bar.
For more info, call (503) 396-4479. Coos Co.
Radio Club, POB 3494, Coos Bay, OR 97420. ■

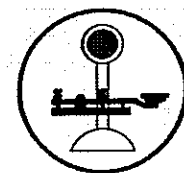
DATED MATERIAL:
PLEASE DO NOT DELAY

JOHN BRECKENRIDGE
WB6FRZ
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WINDSOR, CA 95492

BULK RATE
U.S. POSTAGE PAID
SANTA ROSA, CA
PERMIT NO. 658

ADDRESS CORRECTION REQUESTED

Sonoma County Radio Amateurs, Inc.
PO Box 116
Santa Rosa, CA 95402



SHORT SKIP



Sonoma County Radio Amateurs, Inc.

JULY 1993

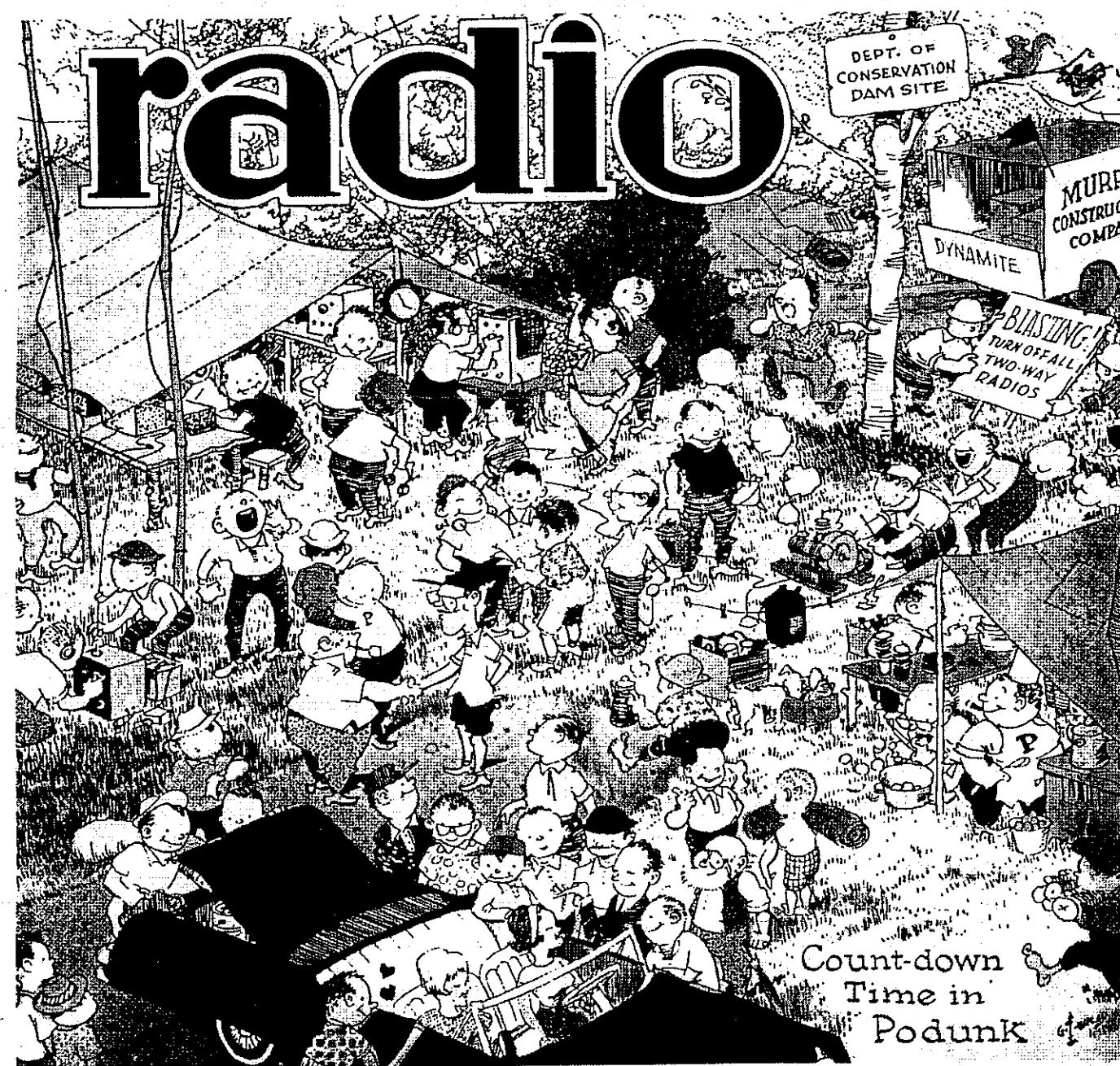
Club Station
W6LFJ

P.O. Box 116
Santa Rosa, CA 95402

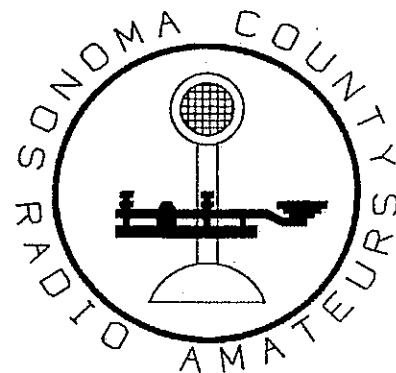
Repeater Station
WB6PVS

VOL 18 #7

Complete Field Day story next month.



June, 1964



OFFICERS FOR 1993

PRESIDENT:	Rick Reiner	K6ZWB	542-6907
VICE PRESIDENT:	Pete Sourek	KC6UXM	838-0622
SECRETARY:	Alan Bloom	N1AL	538-7115
TREASURER:	Jim McLaughlin	WA2EWE	573-0277
MEMBERS-AT-LARGE:	Kelly Cureton	KD6CJQ	527-1531
ACTIVITIES CHR:	Merlyn Pfeiff	N6VUC	584-3898
REPEATER CHAIRMAN:	Jim Rutherford	WB6PER	526-2972

SHORT SKIP STAFF:

EDITOR:	Alan Bloom	N1AL (e)	538-7115
1578 Los Alamos Rd, Santa Rosa, CA	95409	(d)	577-3981
CIRCULATION MGR:	Adam McLaughlin	KD6POC	
SWAP SHOP:	Dave Willey	KD6KWM	577-0558
HAM NEWS:	R.L. Caron	KK6GP	

BBS EDITORS: Pete Sourek KC6UXM, and Allan Chapman W6MEO
 AUDIO TAPING: John Breckenridge WB6FRZ, Laurel Meyer KC6FKX, Pat Malone KD6MAZ

Activities Committee:

Pub. Service: Kathy Mahan KC6UXJ 823-4980
 Doug Carter KC6RHA 528-9116
 QSL Mgr: Bill Splaine N6GHG 431-8636
 TVI/RFI: Al Bloom N1AL 538-7115
 Antennas: Joe Senft KM6TN 578-5824

Awards: Steve Lund WA8LLY 823-4544
 VEC Exams: Dave New AA6YX 527-0981

Education: Steve Carniglia KK6VY 538-7658
 N1AL WB6FRZ KC6RHA KK6VY
 WB6TMY K6XZ K6ZWB KC7VS

Refreshmnts at meetings: Bob Olsten WD6DPE
 Greeter at Meetings: Shelly Sourek KD6AFZ

Raffle at meetings: Adam McLaughlin KD6POC
 Membership lottery: Jim Andrews KC6PJW

Field Day: Merl N6VUC and Steve KK6VY
 RACES RO: Jim Pelmulder N6PTM 823-7947
 ARRL Liaison: Alan Bloom N1AL 538-7115
 Badge Chair: Fred Leoni N6YEU 431-8202

Repeater Control Op's:

WB6PER Jim 526-2972 N6PTM Jim 823-7947
 WD6CKP Hoppy 542-6750 N6VUC Merl 584-3898

SHORT SKIP ADVERTISING RATES:

Business cards: \$10

\$11 First 1/4 Column
 \$3 Additional 1/4 Columns
 (\$32 Full Page, 1 side)

Pre-printed inserts: \$32/sheet

Guaranteed circulation: 200/month
 AD DEADLINE: 10th of previous month

Club Meetings:

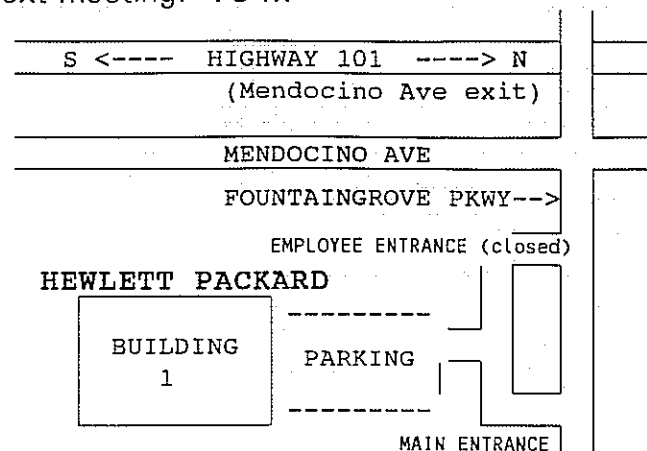
7:30 PM, 1st Wednesday each month at the
 Hewlett Packard plant in Santa Rosa. (See
 map below.) All are welcome.

Next Meeting: July 7, 1993

ARE YOU NOT AN SCRA MEMBER?

If so, then this is a complimentary copy.
 Our club is involved with almost every area of
 Amateur Radio: Repeaters (13/73), Field Day,
 license classes (Novice through Extra),
 volunteer exams, RACES, DX programs,
 packet radio, hidden xmtr hunts -- you name it.

We invite you to attend our next monthly
 meeting (see below) or check into the Tuesday
 night SCARS net on the 146.13/73 repeater at
 7PM. You will hear the latest Amateur Radio
 Newline broadcasts, announcements of SCRA
 activities and a Swap Shop. Membership in
 SCRA is open to anyone interested in Amateur
 Radio. If you would like to join, there is a
 membership application on page 11. Hope we
 can have an "eyeball" QSO with you at the
 next meeting! 73 ...



Smoke Makes Things Work!

An interesting theory in what makes integrated
 circuits work has been claimed. It is the
 realization of a basic truth so simple and so
 obvious that we can't see it.

"Smoke" is the thing that makes integrated
 circuits work because every time you let
 smoke out of an IC, it stops working. Some of
 you remember verifying this through tests.

The theory goes on to say that smoke makes
 all electrical things work. Remember the last
 time smoke escaped out of your power
 supply? Didn't it quit working?

The truth dawns when you realize it's the
 wiring harness that carries the smoke from one
 device to another. When the wiring harness
 leaks, it lets the smoke out and nothing works.
 A large motor or starter requires large
 quantities of smoke to operate properly.
 That's why the wire going to it is so big.

You may disagree with this theory... or you
 may expand upon it through further testing.
 Respectfully submitted by an open minded
 troubleshooter. de N6VZT @ KA6FUB

Downloaded by Allan W6MEO

Application for Membership in SCRA

Name _____ Callsign _____ Lic. Class _____
 Addr. _____ Phone Nr _____ () New Mbr
 _____ ZIP _____ Date _____ () Renewal

Dues: \$12/year, \$18/year family. New members also pay a \$6/person initiation fee. Dues for
 new members *only* are pro-rated \$1 (\$1.50 family) per month, starting at renewal time, March 1.

I WOULD LIKE TO PARTICIPATE IN:

- () Public Service Events
 () RACES or ARES Emergency services
 () Field day, other operating events
 () Helping with SCRA Flea Market
 () Acting as club Net Control Station
 () Helping with *Short Skip* newsletter
 () Taking a Novice class
 () Teaching a Novice class
 () Taking an upgrade class
 () Teaching an upgrade class
 () Other _____

Badge (New Members only)

Fill in this section exactly as you
 want it to appear on your badge.

Callsign _____

First Name _____

City _____



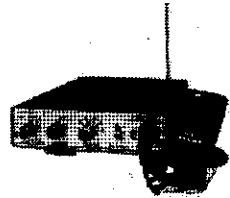
"Thou shalt relinquish the repeater
 in time of emergency."

HSC ELECTRONIC SUPPLY

GOODIES FOR THE RADIO AMATEUR:

RAMSEY KITS:

- 2 Meter Synthesized FM Transceiver
- 2 Meter 30 Watt Amplifier
- All-mode HF receivers
- QRP CW Transmitters
- Etc...



ARRL BOOKS:

- ARRL Handbook
- License Manuals
- Antenna Books
- Etc...



POPULAR BRANDS:

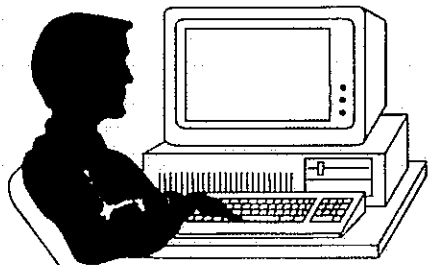
- MFJ
- Ameco
- Larsen
- Antenna Specialists
- Sangean
- Etc...

NECESSITIES:

- Code keys
- Wire Antennas
- Surplus Electronics
- Tools, parts, Etc...

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Antenna Committee



by Joe Senft KM6TN

On Thursday May 20, the writer in company with John Wallack W6TLK and Al Bloom N1AL made brief appearances before Santa Rosa's Design Review Board. We appeared in support of Don Boosinger KD6HQ, who was appealing an unfavorable ruling by the city's Assistant Planner, Scott Harriman, to Don's application for approval of his antenna installation.

First some background facts:

In August/September 1989, Don installed a tower approximately 33 ft tall on his property. Mounted on the tower are a KLM model KP34XA tri-band beam under a KLM 40 meter dipole. The tri-bander has a 32 ft boom and the six elements are about 26 ft long.

Sometime in 1990, a neighbor filed a complaint with the city of Santa Rosa, taking exception to Don's antenna installation. Upon checking their records, the city determined as follows: The antenna had not received design review approval prior to installation and the antenna and tower had been installed without a building permit.

For awhile, nothing happened!

On 12/30/92, the Santa Rosa Code Enforcement/Building Inspector Gary G. Gibbons advised Don of new complaints directed and ordered Don to remove the offending tower and antenna. Don was advised by Mr. Gibbons that if he so desired, he could apply for design review approval. Don did not remove the antenna, but did submit the said application.

On March 30, 1993, Assistant Planner Scott Harriman wrote to Don, denying his application for design review, quoting Article 3, Section 20-05.725 of the Santa Rosa zoning ordinances. Don was given 10 days to file an appeal to Mr. Harriman's decision.

Don filed by letter dated April 5, 1993 and quoted PRB-1 as a basis for his appeal. Don suggested that the Design Review Board might wish to consult with the City Attorney's office about the nature and intent of PRB-1.

Mr. Harriman followed Don's suggestion. The case was reviewed by Mr. Bruce Leavitt, Asst. City Attorney. On May 5, Mr. Leavitt prepared for Mr. Harriman a 2½-page, well-researched, well-written legal opinion which generally agrees with our view of PRB-1. John W6TLK requested a review of Mr. Leavitt's opinion by Ken McTaggart N6KM, who is a practicing attorney in Sonoma and an ARRL volunteer counsel. Ken also concurs, in most part, with Mr. Leavitt's opinion.

Prior to the hearing, on May 20, Mr. Harriman made a written recommendation to the Design Review Appeal Board that his original denial be upheld. The recommendation is mostly silent about Mr. Leavitt's opinion.

The Appeal:

During the hearing, Don presented his case. Al N1AL spoke about the need for antennas, their size in relation to frequency, and the advantages of height, both for communications efficiency and to reduce RFI. John W6TLK addressed the board as to the Amateur Radio community in general.

I spoke as Chairman of the SCRA Antenna Committee, directing my effort to encouraging the Design Review Board to pay particular attention to the City Attorney's opinion.

One lady, a neighbor of Don's, appeared in opposition to the antenna on Don's property. She stated her husband is an inactive ham (didn't know his callsign) who has worked far and wide with a much smaller antenna. The original complainant did not appear, but sent a letter to Scott Harriman, stating his opposition, mentioning, among other things, that since he couldn't have a TV antenna, why should Don be permitted his antenna!

At the conclusion of the hearing, it appeared that 3 of the 4 board members were prepared to vote for denial of the appeal. One member abstained and moved that the matter be tabled so that Don could have an opportunity to resubmit his request for design review, based on a somewhat less-visible installation. That was accepted by the board.

We intend to closely follow this case and will probably have further discussions with Ken McTaggart.

(next page)

(continued)

My personal feeling is that there has been a serious breakdown in communication between the City Attorney's office and the city's Assistant Planner, Mr. Scott Harriman. We will direct our efforts to this problem.

Below is a copy of Santa Rosa's antenna regulations. Besides design review approval, a building permit may also be required.

In closing, we strongly recommend that any amateur living within the Santa Rosa city limits who desires to erect *any antenna* be aware of the city's zoning code relating to antennas and comply with existing law before installing an antenna or tower. If you don't, you may find yourself in a difficult position when you later attempt to legalize your installation.

Stay tuned.... 73 - Joe

Excerpt from Santa Rosa Zoning Code:
Section 20-05.725 Regulation of Antennas, Satellite Dishes, and Flag Poles

A. Mast and pole antennas, whip antennas, satellite dish antennas, TV antennas, tower antennas, and other antennas, used for the transmission or receipt of radio, TV, short wave, microwave and other electromagnetic signals, situated in any "R" zone or other residential area of the city, shall be required to obtain final design review approval prior to being installed, if any part of the antenna is to be located within the public view.

B. For the purposes of this article, "within the public view" means that some portion of the antenna will be visible from a public street or other public place, or from privately owned location(s) from which a substantial number of people will be able to plainly see the proposed antenna or some portion thereof. The term "substantial number of people" shall mean the residents of four or more dwelling units when the proposed antenna would be seen from each such dwelling unit.

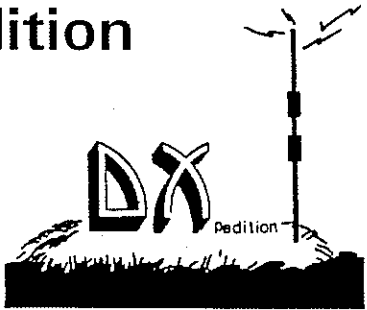
C. Design review approval may be conditioned upon, but is not limited to, the screening of the proposed antenna from the public view or its placement at a location where it will not be within the public view. Design review approval may not involve the waiver of, or the grant of a variance to, any of the zoning regulations applicable to the property on which the antenna is proposed to be located.

D. It is the purpose and intent of the City Council in adopting the provisions of this Article to safeguard and protect the basic residential character and family environment, including required open spaces, of the residential areas of the City from visual eyesores and aesthetic blight, to thereby protect the stability of property values of such areas, and to protect the public welfare and the safety of its residents.

Mini-DXpedition

The date of the mini-DXpedition has been changed to the first weekend in Nov. at the R-Wild Horse Ranch, Tehama Co., 38 miles west of Red Bluff on State Route 36. Large RV sites, full hookups (30 amp electrical at each site), plenty of room for Sterba curtains, vees, longwires, you name it (not too many tall trees). Tent camping or motel at the ranch if you have no RV.

We need volunteers to choose the date and to organize antennas, operations and food. See Bill Waters WA6OLW at the Sept. meeting.



RACES to be Eliminated?

The June issue of QS4-5, the newsletter of the Marin Amateur Radio Club, reported that the Marin County Office of Emergency Services will be eliminated next fiscal year. There is a chance that their RACES program will be eliminated as well.

MARC has written the Board of Supervisors, pointing out that eliminating RACES will remove about 100 volunteers, who donate many hours of time and use of expensive personal equipment. The administrative cost of RACES is only about \$3000 per year.

Puzzle Corner
de Hoyt Koepke, NØUJD

Find the entire phonic alphabet, ALPHA to ZULU, in the word puzzle.

R	E	B	M	E	V	O	N	T	M	H	P	X
Z	E	E	I	L	R	A	H	C	O	T	D	R
X	U	C	K	I	L	L	O	T	K	E	Q	A
R	S	H	E	N	N	Y	E	K	S	I	H	W
Y	T	O	T	S	A	L	F	A	Z	L	Q	G
R	O	T	C	I	V	Y	A	R	X	U	P	T
O	T	O	R	T	X	O	F	R	Q	J	L	Q
M	R	P	T	O	S	G	L	E	U	U	I	U
E	X	R	N	P	N	N	O	I	E	P	M	E
O	V	A	R	B	O	A	G	S	K	A	A	B
V	I	C	D	E	L	T	A	A	C	P	R	E
A	M	A	C	K	Y	I	N	D	I	A	R	C
P	L	U	N	I	F	O	R	M	E	V	R	N

BARC's Bark Boulder (Colorado) Amateur Radio Club

11 STORE BUYING POWER

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240 Mem. w/optional mem. unit
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220MHz/2.5 W

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(510) 534-5757
(800) 854-6046

ANAHEIM, CA 92801
933 N. Euclid St.
(714) 533-7373
(800) 854-6046
Jim Rafferty, N6RJ, V.P.
Near Disneyland

PORTLAND, OR 97223
11705 S.W. Pacific Hwy.
(503) 598-0555
(800) 854-6046
Earl KETZ, Mgr.
Tigard-99W exit
from Hwy. 5 & 217

OAKLAND, CA 94606
2210 Livingston St.
(510) 534-5757
(800) 854-6046
Rich WA9WYB, Mgr.
I-880 at 23rd Ave. ramp

DENVER, CO 80231
8400 E. Iliff Ave., #9
(303) 745-7373
(800) 444-9476
Joe KDOG, Mgr.

SAN DIEGO, CA 92123
5375 Kearny Villa Rd.
(619) 560-4900
(800) 854-6046
Tom KMGK, Mgr.
Hwy. 163 &
Clarendon Mesa

PHOENIX, AZ 85015
1702 W. Camelback Rd.
(602) 242-3515
(800) 444-9476
Gary WB7SLV, Mgr.
East of Highway 17

SUNNYVALE, CA 94086
510 Lawrence Expwy. #102
(408) 736-9496
(800) 854-6046
Tom K86LUC, Mgr.
Lawrence Expwy.
So. from Hwy. 101

ATLANTA, GA 30340
6071 Buford Highway
(404) 263-0700
(800) 444-7927
Mark K4JZQ, Mgr.
Doraville, 1 mi.
no. of I-285

VAN NUYS, CA 91411
6265 Sepulveda Blvd.
(818) 988-2212
(800) 854-6046
Jon K86ZBI, Mgr.
San Diego Fwy.
at Victory Blvd.

WOODBRIDGE, VA 22191
14803 Build America Dr.
(703) 643-1063
(800) 444-4799
Curtis WB4KZL, Mgr.
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Bob Ferrero W6RJ
President/Owner

Jim Rafferty N6RJ
Vice President

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(603) 898-3750
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Chuck K3L4Z, Mgr.
Exit 1, I-95
28 mi. No. of Boston

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Prices, specifications, descriptions, subject
to change without notice.

Page 4

Beware the New Copyright Statute

by David M. Ostfeld

A new Public Law 102-561 substantially revises all criminal law involving copyright infringement, including that of computer software. If you think you are not a criminal, you may be surprised by the new statute!

No one is sure whether all computer owners in the US may eventually be found to be felons, but it is hoped the law will be used to suppress only large-scale pirates. You may have already seen ads offering rewards for turning in friends and neighbors who could fall under the statute's broad provisions.

A FELONY, punishable by 5 years/\$250,000 to illegally reproduce or distribute for gain or advantage during any 6-month period: Ten or more copies, or one copy of ten or more works, or any combination, of copyrighted works, whose retail value exceeds \$2500, when the reproduction is "willful."

Those of you who have made copies worth less than \$2500, take no solace in that. You may still not be safe. Section b(3) says that although you may not be a felon nor imprisoned for more than a year, you could still serve up to a year and be fined \$0.25M!

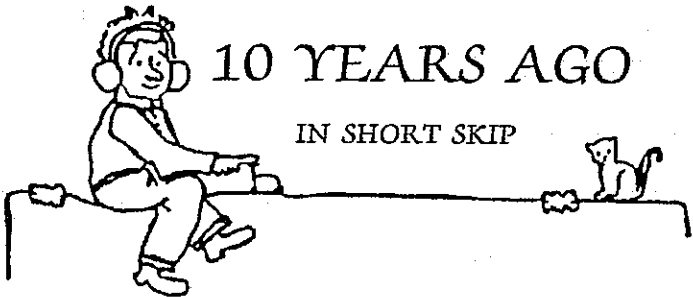
Portions reprinted, with permission, from *The Institute*, p7, May/June 1993 (C) 1993 IEEE.

Believe it! The law applies to all intellectual property, not just computer data. You don't have to be a big violator to be used as an example - you just have to be caught, and ignorance is no excuse. Now, do you still want a bootleg copy of that service manual??

Downloaded by AI W6MEO

Answers to I.Q. Quiz:

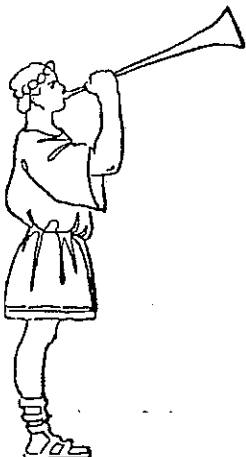
1. Sandbox
2. 3 degrees below zero
3. Neon lights
4. Backward glance
5. Life after death
6. G.I. overseas
7. See-thru blouse
8. Space program



In the July 1983 issue, the Board of Directors proposed that SCRA purchase a 1-year-old Repco brand repeater, complete with Wacom duplexers, from member Fred Plante W6LOU to replace the failing GE machine on Sonoma Mt. The Repco is now used as the club's "spare repeater."

The first SCRA Flea Market was on track. The Sebastopol Community Center was reserved (from center director Karen TerSarkisoff KA6ZDB), and N1AL was looking for free sources of advertising.

Communications for the Ass-to-Ass Run (since discontinued) were by N1AL, KD6NT, N6FAX, KF6FX, WA6ACX, KD6GC, and W6DTV. For the Tin Man Triath-a-lung, it was N1AL, WB6RHP, KD6NT, N6FAX, W6DTV.



COMING EVENTS:

SCARS NET: 146.73 MHz
Tuesdays at 7 PM.

KIDS' NET: 146.73 MHz
Thursdays at 7 PM.

VE EXAMS HOTLINE NRs:
(408) 984-8353/255-9000

JULY:

- 4 - LARK Flea Mart, Livermore WU7R
- 5 - RACES etc. Net 7:30 PM
- 7 - SCRA meeting 7/7:30 PM
- 10 - Foothill College Flea Market
- 10-11 - IARU HF World Championship
- 10-11 - CQ Worldwide VHF Prefix Contest
- 11 - Sonoma Vly Wine Festival, KD6KVO
- 15 - CDF/VIP Meeting 7:30 PM
- 17 - Deadline for August Short Skip
- 19 - RACES etc. Net 7:30 PM
- 24 - Harvest Century Bike Tour, N6GHG
- 31 - Vineman Triathalon, KI6QY etc.



SCRAPS:
SCRA Public Service

By Kathy Mahan KC6UXJ

SCRAPS
Where all the hams are super,
Where all the events have bloopers and
All the T-shirts are Extra Large!

Aah! Finally the dog days of summer and with it come two more events where our SCRAPS volunteers have been lending their radio expertise: On May 22nd, Dave KD6KWM and four other hams helped out at the Special Olympics. According to Dave, this Special Olympics was the best yet. Helping to make it such a success were: Eric KD6LRZ and his son Derrick who is also very interested in becoming a HAM! Thanks to Nadine KC6WUI, Jack KN6IO, Eran KD6KVO and again to Dave KD6KWM for coordinating this event on about 3 days notice. Great job everyone!

A very special thank you goes to KK6WN. Charlie, out of the goodness of his heart, was nice enough to make 2 wonderful sandwich boards for use at Public Service events. Hopefully this will identify us more than just "the radio people." Thanks Charlie!

The 2nd Annual International Vineman Triathlon was held on June 6. The distances for this event are one-half of the Vineman held in July. Coordinator for this event was Doug KC6RHA who did a great job. Thanks also to the following people who again helped make this event run so smoothly and also for getting up so early in the morning (except for KC6UXJ who could sleep in till 7AM). Net Control Merl N6VUC, Doug KC6RHA, Dave KD6KWM, Case KD6ATT, James KD6GSF, Kelly KD6CJQ, Phil N6OOA and Kathy KC6UXJ.

Upcoming Events:

Date	Event	Coordinator
July 11	Sonoma Vly Wine Fest & Ride	Eran KD6KVO
July 24	Harvest Century	Bill N6GHG
July 31	Vineman	Marie KI6QY,
		Bill N6GHG & Doug KC6RHA
Sep 19	March of Dimes WalkAmerica	Kelly KD6CJQ
"25/26	MS Waves to Wine	Merl N6VUC & Doug KC6RHA



DON'T FORGET: A SCRAPS appreciation picnic will be held on September 11 at Doyle Park, Santa Rosa. Be sure and mark it on your calendar and I'll start taking reservations next month. This is a family picnic so plan on bringing the kids too! Do plan on attending!!!

Speaking of Do's and Don'ts ...

DO identify yourself every ten minutes when doing public service events, but it is not necessary to ID with your call sign at every transmission. The following is an example of a good operating procedure during a public service event using tactical call signs:

Rest Stop 1: Net control this is rest stop 1.
Net Control: Rest stop 1 go ahead.
Rest Stop 1: I have a request for 3 more gallons of water.
Net Control: There is a truck within 10 minutes of your location. Net control clear.

On your next transmission, give your tactical sign and call sign. If you have no information to transmit and it has been 10 minutes since your last ID key up your mike, give your tactical sign (Rest stop 1), call sign (AB6YZ) and unkey. No further exchange is necessary.

A good practice for net controllers: Take a regular roll call of volunteers to make sure they're all awake and well. This also helps serve for ID purposes when things aren't fast and furious. Example:

Net control: I would like to take a roll call at this time, Rest Stop 1
Rest Stop 1: Rest stop 1, AB6YZ
Net control: Sag 3
Sag 3: Sag 3, AB6CD

DO know what you are going to say before you push the mike button. It is very easy to confuse the whole transmission if you do not have the facts right on the tip of the tongue and are not ready to put out the message in a crisp and orderly fashion.

DON'T ever use the word "break" unless there is an emergency. Otherwise, use your tactical sign or call sign to gain access to the net.

(next page)

Marin/Sonoma VECouncil FCC Exams

Date	Time	Sponsor	Place
Jul 3	0900	SCRA	Co. OES Santa Rosa
Aug 7	0900	VOMARC	Sonoma Dev. Center
Aug 21	1800	SMRS	USCG, Two Rock
Sep 11	0900	MARC	Hamilton Field Novato
Sep 25	0900	SCRA	Sebastopol Flea Mart
Oct 23	1800	SMRS	USCG, Two Rock
Nov 6	0900	VOMARC	Sonoma Dev. Center
Dec 4	0900	MARC	Hamilton Field Novato

Candidate requirements:

1. Photo identification or two non-photo IDs.

2. Original and photocopy of license, if any.

3. Original CSCEs from earlier tests, if any.

4. Radiotelegraph license, if held.

5. Doctor's medical exemption, if applicable.

6. Fee is \$5.60, except Novice test is free.

Contact Persons:

SCRA:	Sonoma County Radio Amateurs Dave (707) 527-0981
MARC:	Marin Amateur Radio Club Recording (415) 883-9789
VOMARC:	Valley of the Moon Am Radio Club Jim (707) 996-6461
SMRS:	Sonoma Mt. Repeater Society Dale (707) 762-9414

(SCRAPS, continued)

DO analyze your present operating methods and try to polish each element so your contribution is worthwhile. Net Control may have final authority, but good, clean operating methods and procedures almost make a net run without a NCS.

Thanks to everyone who work so hard making these events so successful. I have found that this season the communications have been extremely well done, the events are well coordinated and all the volunteers for each event are working closer together to make it happen. SCRAPS has an excellent team of volunteers.....and we always need more!

CIAO for now!



COLOR: BLACK/RED/BLUE ON LIGHT BLUE BACKGROUND.

Club QSL Cards

For a small fee, you can have a batch of club QSLs printed with your call/name/address. We normally wait before taking them to the printer unless you order "Express" service. However, since currently a 250-card order is pending, we will print as soon as another order arrives.

Payment must accompany your order. If you want the cards mailed to you, so indicate by adding \$4.00 postage/handling. Bring your order to a club meeting or send to:

SCRA, PO Box 116, Santa Rosa CA 95402.

PERSONALIZED CARDS:

# CARDS	NORMAL SERVICE	EXPRESS SERVICE
250	24.00	44.00
500	35.00	56.00
1000	56.00	75.00
>2000	6.00/100 (120.00/2000) (Express service only)	

"BLANK" CARDS: (No Call/Name/Address)

\$5.00 per hundred cards.
(Available at club meetings)

Enter the information EXACTLY as it should appear on the card: (Postage is optional)

***** SCRA MEMBERS ONLY *****

ADD ARRL
DIAMOND?

YES NO

CALLSIGN: _____

NAME: _____

EXPRESS
SERVICE?

YES NO

ADDR: _____

\$ _____ +\$ _____ =\$ _____

NR. OF CARDS CARDS POSTAGE TOTAL

Color tinting for Incandecent Lamps in HF & VHF rigs

by George WA2RCB

If your HF or VHF rig "blows" one of those grain-of-wheat lamps which was painted to tint the radio's backlighted display, you can color the replacement bulbs to match or change the color to suit your own taste. Look for DEKA Transparent glass paint at your local art supply store. The paint comes in 20 ml. bottles with a white plastic cap.

Simply dip the bulb into the paint while holding by the leads. Touch the inside of the bulb once or twice to the inside cap to remove any excess, then allow to dry overnight hanging in mid-air. I added a nifty orange tint to the original (and somewhat bland!) LCD backlights in my Kenwood TM-241A, which reduced the glare at night while driving. Below is a table of colors, numbers, and the approximate match to certain radios. Have Fun!

Lemon	#26 - Icom HF & VHF
Light Blue	#30 - Late model Yaesu & Drake
Orange	#27 - RCI & Uniden
Light Green	#34 - Late model Icom

Notes: Light Red, #28 is not a common color, but makes a nifty meter back or edge light. Orange #27 good too!

I have not used these paints on higher wattage/brighter bulbs which give off more heat. They seem to work with bulbs from surplus gear (Ex: Type-330's) and the common #47 Pilot lamp. If you're unsure, let it dry, then breadboard the lamp at rated power overnight to see if the colors change with heat. I would NOT use these paints with Halogen type bulbs. Again, Have Fun!
Downloaded by Allan W6MEO

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STEVE BASHAM
Manager

I. Q. Quiz

(from IEEE newsletter)

Example:

MAN BOARD = Man Overboard

1. SAND

2. 0
M.D.
Ph.D.
M.S.

3. KNEE
LIGHTS

4. ECNALG

5. DEATH LIFE

6. G.I.
CCCC

7. BLOUSE

8. [] PROGRAM

Tnx, Ren AA6UY

Jim Peimulder
N6PTM

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WA6VAG

CHARLES J. TARR
Attorney at Law

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THOSE ACCUSED OF CRIME

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(707) 778-1114

RENEW YOUR ARRL MEMBERSHIP THROUGH THE CLUB AND THE CLUB GETS TO KEEP \$2 (no expense to you). Make out your check to SCRA, and send it with your ARRL renewal form to SCRA, PO Box 116, Santa Rosa, CA 95402 or give it to the Treasurer.

In 1960, a year before the launch of the first OSCAR satellite, this writer, who was the Technical Director of Project OSCAR, wrote the Project OSCAR Master Plan. 25 follow-on experiments were proposed, several have been implemented: Earth's magnetic field attitude control, Tape-recorder-playback voice communications, Cloud-cover Television camera, Mail-box and Solar-cell battery charging. A lunar repeater was also among some of the more exotic experiments suggested but has not yet materialized.

A major effort was put forth starting in 1966 to revive this concept and the name Project MOONRAY was adopted. Contacts were made with Owen Garriott, W5LFL to explore the possibility of having NASA transport an Amateur repeater package to the moon on one of the forthcoming APOLLO flights. Owen was in training at that time to be one of the future astronauts to go to the moon on APOLLO 18, 19 or 20. The MOONRAY package was to be stowed under the seat of the Lunar Rover vehicle. Owen was to be the driver and when he had reached a suitable spot on the moon's surface, he would have set up the MOONRAY repeater, turned it on, pointed the antenna and bore-sighted the TV camera onto earth. He then was to unplug his space-suit communications microphone, plug it into the MOONRAY package and work some QSO's with hams on earth. As you may know, congress cut off all funding for the APOLLO program beyond APOLLO 17 and our plans have been temporarily shelved until we can find another mission willing to carry a MOONRAY package for us.

Since there are plans for a manned Lunar Outpost to be built sometime in the future, the Project OSCAR group has decided to undertake the design, development and construction of an up-to-date, state-of-the-art MOONRAY package. We will be getting in touch with the first group that we find showing some activity in returning to the moon. Meanwhile we have already started to design the MOONRAY unit. We are actively seeking expert assistance to help us determine the best characteristics to incorporate into the MOONRAY package. Suggestions are welcome and if used, full credit will be given to the suggester. Some of the parameters that need to be determined are:

- Uplink and downlink frequencies (within Amateur Satellite bands)
- Bandwidths to be used, path loss considerations, receiver noise figures
- Antenna system choice for maximum gain and polarization mode
- RF Power levels needed and perhaps automatic or commandable level control
- Type of modulation to handle cw, SSB, Slow-scan or real time TV, Packet, etc
- Repeater method (Cross-band, same band, double frequency, etc)
- Antenna pointing methods to lock onto earth during lunar libration
- Temperature control in lunar environment including sun shade methods
- Experiments and data to be telemetered, how many and what kind?
- Telemetry rates, methods, timing, processing and reception techniques
- Physical configuration of the MOONRAY package
- Models, mock-ups, breadboards, prototypes, test units, flight packages
- Test methods, lunar environment simulation, life tests, failure modes
- Instruction manuals, final checkout procedures, test data recording, etc.
- NASA requirements and conformity methods to assure acceptance
- Progress reports, bulletins, publications, press releases, publicity
- Ground control center requirements, locations and implementation
- Astronaut training, liaison, task considerations and backups
- NASA liaison, proposal group, technical advisors, chronologist, historian
- Methods of dissemination of progress and schedules (nets, reports, bulletins)
- Miscellaneous tasks: Material procurement, fund raising methods, test areas (labs)
- World-wide participation: AMSAT UK, AMSAT DL, AMSAT Japan, Australia, Canada, etc.

For any additional details about Project MOONRAY, you can write to me personally: N. K. Marshall
2207 Peachland Avenue
Sebastopol, CA 95472
or telephone: (707) 823-5426

You can contribute to MOONRAY's success by offering your technical expertise at this time in the design, development, construction, test, checkout, advisory or financial support. You can also help by talking about Project MOONRAY on the air, at club meetings, among your friends and acquaintances. If you write articles for publication, please submit prepublication copies to: Project MOONRAY c/o Project OSCAR, PO Box 1136, Los Altos, Ca 94023-1136.

• MOONRAY articles have already appeared in QST (Nov 1967); in CQ (Dec 1967); in 73 (July 1967 and April 1968) and CQ (July 1967, Sept 1968 and March 1969) also in Ham Radio (Aug 1968)

Aspect* Script File "Timestamp" for Procomm Plus*

by Allan Chapman W6MEO

This routine takes DOS's DATE word MM/DD/YY, and TIME word HH:MM:SS, reformats the date to meet international and legal requirements, appends TIME and a "Z", then combines both in a simple two-stroke time-stamp which transmits as follows:

{07/SEP/90, 14:57:38Z}
-> (Derived from 09/07/90 and 14:57:38) <-

The routine employs the Aspect commands and conventions described in Chapter 11 of the Procomm Plus User's Manual, and operates with versions 1.1B through 2.01, probably others.

Command	Explanation
DATE S1	;Stores DATE word in String 1
TIME S5 1	;Stores TIME word, 24-hour format, in S5
SUBSTR S2 S1 0 2	;Creates S2 using month numerals
ATOI S2 N2	;Converts str S2 to numeric field N2
IF EQ N2 01	;Hunts for month numeral, and when found, assigns the proper month name to string S3
ASSIGN S3 "/JAN/"	
ENDIF	
IF EQ N2 02	
ASSIGN S3 "/FEB/"	
ENDIF	
IF EQ N2 03	
ASSIGN S3 "/MAR/"	
ENDIF	
IF EQ N2 04	
ASSIGN S3 "/APR/"	
ENDIF	
IF EQ N2 05	
ASSIGN S3 "/MAY/"	
ENDIF	
IF EQ N2 06	
ASSIGN S3 "/JUN/"	
ENDIF	
IF EQ N2 07	
ASSIGN S3 "/JUL/"	
ENDIF	
IF EQ N2 08	
ASSIGN S3 "/AUG/"	
ENDIF	
IF EQ N2 09	
ASSIGN S3 "/SEP/"	
ENDIF	
IF EQ N2 10	
ASSIGN S3 "/OCT/"	
ENDIF	
IF EQ N2 11	
ASSIGN S3 "/NOV/"	
ENDIF	
IF EQ N2 12	
ASSIGN S3 "/DEC/"	
ENDIF	
SUBSTR S4 S1 3 2	;Starts new date word, beginning with day #
SUBSTR S6 S1 6 2	;Year word string S6 established
TRANSMIT "{"	;Begins timestamp with bracket
TRANSMIT S4	;Sends day #

```
TRANSMIT S3 ;Sends month
TRANSMIT S6 ;Sends year
TRANSMIT " " ;Adds comma and space
TRANSMIT S5 ;Sends time word from S5
TRANSMIT "Z" ;Appends "Z" for Coordinated Universal Time
TRANSMIT "}" "M" ;Ends timestamp with bracket and <CR>
SOUND 1660 100 ;Beeps one second @ 1660 Hz
```

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Treasurer's Report



de Jim WA2EWE May, 1993

ACCOUNT	REVENUE	EXPENSE
Activities (Field Day)		50.00
Refreshments at meetings ..	18.65	18.79
Dues and Initiations	366.00	
Raffle at meetings	60.50	
Misc (ARRL renewals).....	60.00	58.00
Short Skip Newsletter		106.00
	445.15	232.79

ASSETS:		
General Fund Account	5165.27	
Cash/checks on hand	30.00	
Total General Fund	5195.27	
Total Repeater Fund	846.05	

New Members & Corrections



Since last month

MARTIN GIBBS KC6HPQ	EMMETT WILDER KB7RPV
1831 ROBIN HOOD LANE	390 ORANGE BLOSSOM LN
SANTA ROSA, CA 95405	SAN RAFAEL, CA 94903
578-0436	415-492-0788
MIKE HAWK KD6PKF	ROSS COLLINS KD6VBV
1407 GOLD WAY	37 LAKEVILLE ST
ROHNERT PARK, CA 94928	PETALUMA, CA 94952
585-1851	762-2790
STEPHEN JEPPSON N6RBZ	WILLIAM SMITH KC4WVL
3243 SANTA ROSA AVE	ESU ALAMEDA CG ISLAND
SANTA ROSA, CA 95407	BLDG 10
528-1230	ALAMEDA, CA 94501-5100

We now have 262 members.

SCRA MINUTES

June 2, 1993



The meeting was called to order by President Rick Reiner K6ZWB at 7:40 PM. Other officers present were Vice President Pete Sourek KC6UXM, Secretary Al Bloom N1AL, Treasurer Jim McLaughlin WA2EWE, and Members-at-Large Kelly Cureton KD6CJQ and Merlyn Pfeiff N6VUC.

VISITORS: Shelly KD6AFZ introduced 9 visitors.

UPGRADES: There has been one new Technician, one upgrade to Advanced and one to Extra this month.

The MINUTES and TREASURER'S REPORT were approved as published. m/s KB6PTA/KA6CRG, KD6PKF/N6PTM

REPEATER: N6PTM notes that with summer tropospheric propagation, we have been hearing DX users on the machine lately. When it gets obnoxious, we'll put the repeater in P/L.

PUBLIC SERVICE: RL KK6GP passed around a signup sheet for the "Terrible 2" bike ride. The esprit de corps of the volunteers has been great.

NEW RAFFLE CHAIRMAN: Adam KD6POC volunteered.

NET CONTROL STATION volunteers: AB6OL June, K9ASL July and WX3K August.

The MINI DX-PEDITION will be the first weekend in Nov. A RAIL FAIR in Sacramento June 18-20 will feature a demo by the Morse Telegraph Club with SCRA member WB6TMY.

EDUCATION CHAIRMAN: Steve KK6VY graciously volunteered to coordinate license classes. Contact Steve if you would like to teach or take a class.

The TREASURER'S REPORT by WA2EWE shows \$5165.27 in the General Fund and \$846.05 in the Repeater Fund.

FIELD DAY: Pete KC6UXM collected \$5 for each dinner ticket. Merl N6VUC edited 2 ½ hours of video from last year's FD into an excellent 12-minute presentation.

After coffee and donuts, the rest of the meeting was devoted to FD preparations. N6PTM emphasized that safety should come first. K9ASL covered regulations at the Coast Guard base. N1AL explained logging and duping.

VOLUNTEER EXAMINERS will have a review meeting June 12 at the Luchesi Senior Center in Petaluma.

The RAFFLE was run by our new Chairman Adam KD6POC. The LOTTERY, under KC6PJW's supervision, would have been won by Ken KD6TYH, if he had been present.

The meeting adjourned at 9:51. m/s KD6CJQ/N6PLQ
Respectfully submitted by Secretary Al Bloom N1AL.

Board Meeting Minutes

June 9, 1993

The meeting was called to order at 5:35 PM in the Northbay Savings meeting room by President Rick Reiner K6ZWB. Other officers present were Secretary Al Bloom N1AL, Treasurer Jim McLaughlin WA2EWE, Repeater Chairman Jim Rutherford WB6PER, and Members-at-Large Kelly Cureton KD6CJQ and Merlyn Pfeiff N6VUC. Members Jim Pelmulder N6PTM, Joe Senft KM6TN, James Cureton KD6GSF, Dave Willey KD6KWM, Jim Andrews KC6PJW, Doug Carter KC6RHA, Adam McLaughlin KD6POC and John Breckenridge WB6FRZ also attended.

FIELD DAY: N6VUC led a long discussion about Field Day preparations. WA2EWE has access to tables, chairs and a BBQ cooker. WX3K and N6PTM have the beam antennas. We may have use of a Coast Guard trailer. The CG CO has signed off on the permission letter.

Doug KC6RHA plans to make up a 1-page operating guide for the CG students who would like to participate in FD.

EDUCATION: Steve KK6VY plans to get classes started after Field Day. N1AL has a line on a possible free HP spectrum analyzer that could be used in classes, repeater troubleshooting and testing of members' radios.

ANTENNA COMMITTEE: Joe KM6TN reported on the hearing May 20 before the Santa Rosa Planning Commission about Don KD6HQ's antenna. KM6TN, ARRL SM John Wallack W6TLK and N1AL appeared with Don. It appears the city wants to compromise. Joe suggested sending a copy of the upcoming Short Skip article to all Santa Rosa hams, but the consensus was that we wait until there is a final resolution on the matter.

FLEA MARKET: N6PTM needs a check for \$100 to reserve the Holy Ghost hall.

The recent ARRL SPRING PLANNING MEETING considered a number of topics, as reported by N6PTM. There is a proposal going around to reduce the number of license classes. Another proposal to pay people to promote ARRL membership met with no enthusiasm.

REPEATER: WB6PER has found that politely informing non-member repeater users about proper operating can have a good effect. The battery backup equipment will be purchased shortly. It was suggested that the autopatch remain enabled in net mode so it is available for emergencies during public service events.

The meeting adjourned at 6:43 PM. m/s WB6PER/N6VUC

Respectfully submitted by Al Bloom, Secretary.

HSC

Halted

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QRZ! Ham-Radio CD-ROM

by Scott Cranston KB1NW

Fred Lloyd, AA7BQ, and a cast of contributors have produced a CD-ROM with 500+ Mb of Amateur-Radio-related data, information and software. Here's a summary of what's on it:

- * ISO 9660 Format - readable on all systems
- * March 1993 US Callsign Database (ASCII)
- * PC MSDOS-compatible search and retrieval software: Search by callsign, name, city, or ZIP code. Several output formats including screen, printer, mailing lists, etc.
- * Hundreds of ham (shareware) programs
- * Nearly 200 radio and scanner modifications
- * USENET articles from rec.ham-radio and rec.radio.amateur.* since 1989
- * Complete dumps of several internet ham radio archives
- * Canadian and US CLUB callsigns (no search/retrieval software)
- * FCC Rules and Regulations (Part 97)
- * DX lists, DXCC info, BBS Lists
- * UNIX callsign database/server C source code
- * SIMTEL20 Ham Radio Archive Files
- * Vast amounts of useful reading information for the radio amateur

The QRZ callsign search and retrieval software is very good. The speed of looking up a single callsign is simply "how fast can you get your finger off the return key"! The performance here is nothing short of amazing. For example, on my 40MHz 386 PC a search for all the amateurs with the last name of "Cranston" takes about 15 seconds!

The Usenet news article archives contain a wealth of information and entertainment (you can re-live the No Code wars).

The information supplied by Devon Bowen, KA2NRC from buffalo.edu (\BUFFALO) is an excellent reference to various aspects of amateur radio. From the amateur radio Frequently Asked Questions (FAQ) notes to weather FAX, these files contain solid, basic information and pointers to sources of more info and parts, kits and equipment.

The amateur radio and scanner modifications (\MODS) probably cover all mods known to mankind. Alinco, Icom, Kenwood, Uniden, Yaesu HF, VHF, handheld radios; Radio Shack and Uniden base and handheld scanners.

Software... there are tons of freeware and shareware amateur radio related software on the CD-ROM. Most of it is for MS-DOS (some Windows). There is some Macintosh and Amiga software (KA9Q TCP/IP). Included are logging programs, packet terminal programs, NEC antenna modeling software, FAX, SSTV, RTTY, CW learning, propagation, satellite tracking — too many to list here.

The QST/QEX bibliographies and indices are very nice references that you can search. Use the DOS find command, scan with your favorite word processor, or get the Unix tools from MIX Software for \$20 and use "grep".

The only comparable product is Buckmaster's HamCall CD-ROM which costs twice as much (\$50). HamCall by now should have released an update with the March FCC callsign records. The HamCall CD-ROM also contains tons of software, much of it non amateur radio related, but it has little of the other data and info available on QRZ! The HamCall callsign database is also NOT in plain ASCII text and is slower than that of QRZ. I think the HamCall CD-ROM is updated quarterly, but you pay the full price to get it.

I don't know when any updates to QRZ! will be made. In the 00READ.ME file, Fred Lloyd indicates that there will be a next edition.

In a nutshell, the QRZ! CD-ROM is a gold mine of amateur radio stuff, at a price that can't be beat! The QRZ! CD-ROM is available from a couple of sources:

Walnut Creek CD-ROM
1547 Palos Verdes Mall, Suite 260
Walnut Creek, CA 94596
1 800 786-9907 1 510 674-0821 FAX

Price: \$25 plus 5\$ S&H + sales tax

Media Innovations
5405 Alton Parkway, Suite 504
Irvine, CA 92714
714-831-1121

Price: \$15 each plus \$4.50 S&H + sales tax

I have no financial association with Fred Lloyd, Walnut Creek CD-ROM, Media Innovations, or anyone or anything related to them. I am just a very happy owner of the QRZ! CD-ROM!

Downloaded by AL N1AL