

OFFICERS FOR 1992

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VICE PRESIDENT:	Rick Reiner	K6ZWB	542-6907
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TREASURER:	John Gauger	KK6XT	829-2599
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ACTIVITIES CHR:	Jim Pelmulder	N6PTM	823-7947
SHORT SKIP STAFF:			
EDITOR:	Alan Bloom	N1AL (e)	538-7115
	1578 Los Alamos Rd, Santa Rosa, CA 95409		(d) 577-3981
CIRCULATION MGR:	Bill Splaine	N6GHG	
SWAP SHOP:	Hank Davis	W6DTV	823-7885

ARRL Liaison: Alan Bloom N1AL 538-7115
 Ast. Director: Chuck Sabin N6DDK 795-2371
 Badge Chair: Fred Leoni N6YEU 431-8202

Activities Committee:

Pub. Service: Kathy Mahan KC6UXJ 823-4980 and Don KD6HQ and Rick N6RXA
 QSL Mgr: Bill Splaine N6GHG 431-8636
 TVI/RFI: Al Bloom N1AL 538-7115
 Awards: Steve Lund WA8LLY 823-4544
 VEC Exams: Dave New AA6YX 527-0981
 N1AL WN6D W6DTV WB6FRZ N6OLD AA6RD K6UXO WA8LLY
 Education: John Breckenridge WB6FRZ 838-6398
 N1AL KC6RHA KC6RHB KC7VS KK6VY KF6WV K6XZ K6ZWB
 Flea Market: Rick Reiner K6ZWB 542-6907
 Pete Sourek KC6UXM 838-0622
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 Greeter at Meetings: Shelly Sourek KD6AFZ
 Raffle at meetings: Phil Richardson WA6SEU
 Membership lottery: Walt Burandt KC6RHB

Repeater Control Op's:

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ARE YOU NOT AN SCRA MEMBER?

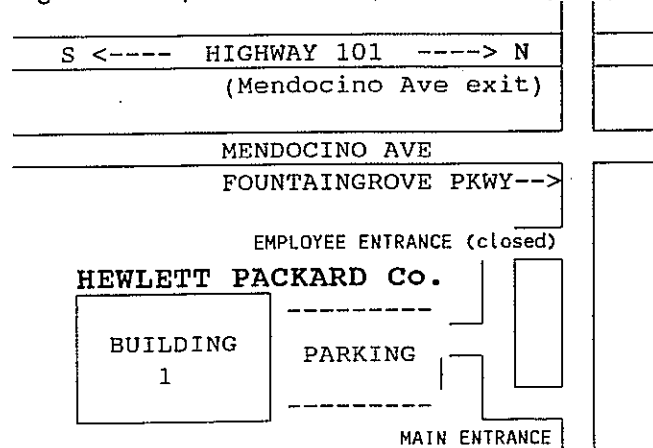
If so, then this is a complimentary copy. Our club is involved with almost every area of Amateur Radio: Repeaters (13/73), Field Day, license classes (Novice through Extra), volunteer exams, RACES, DX programs, packet radio, hidden xmtr hunts -- you name it. We invite you to attend our next monthly meeting (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. If you would like to join SCRA, please refer to the dues listed below. Hope we can have an "eyeball" QSO with you at the next meeting! 73 ...

Club Meetings:

7:30 PM, 1st Wednesday each month at the Hewlett Packard plant in Santa Rosa. Anyone interested in Amateur Radio is welcome.

Next Meeting: October 7, 1992

DUES: \$12 per year, plus a one-time \$4.00 initiation fee. Dues are pro-rated \$1/month for new members who get an SCRA call/name badge. Family memberships are \$18 per year.



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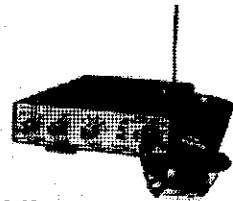
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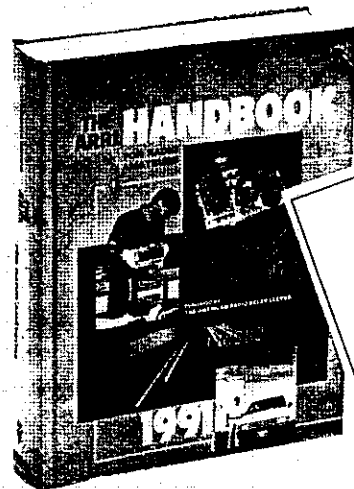


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- Etc...

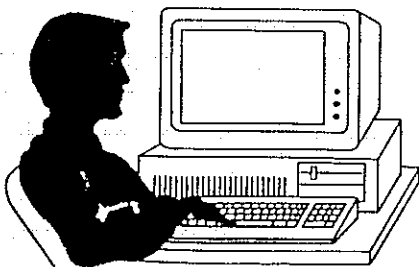


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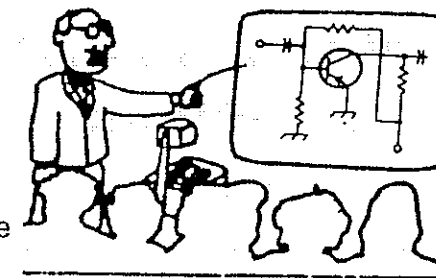
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Manager
KS6W

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Ham Radio Class

John Breckenridge
WB6FRZ



The next Novice class will start Friday October 2, 5:30 - 7:30 PM at the Kaiser hospital off Bicentennial Way in Santa Rosa. Technician class info will also be covered for those interested. Call John, WB6FRZ at 838-6398 for more information.

New Education Chairperson Needed

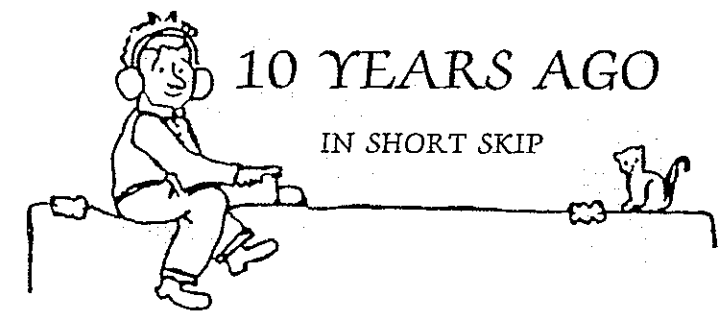
by John Breckenridge, WB6FRZ

Beginning January 1, John Breckenridge will step down as the club education chairperson. Being weary and worn out as well as mentally unstable, John would love to see some enthusiastic new person continue coordinating club classes. If you have been waiting for a chance to become involved in the education program, NOW is your chance! Contact Merlyn Pfeiff, N6VUC to volunteer your services.

Member of The Year Award

Please contact Kathy Mahan or John Breckenridge with your votes for this year's club member of the year award. Be prepared to say why you feel the person deserves this honor. A telephone call works fine, but a short written note is also good. Kathy and John's phone numbers follow.

Kathy Mahan 823-4980
John Breckenridge 838-6398



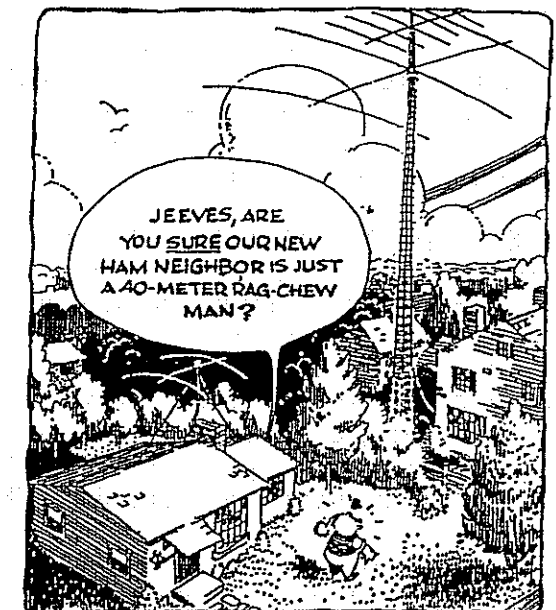
The "Mobilers" under the staunch leadership of Wagonmaster Don WA6ACX had visited Cassini Ranch, Wright's Beach, and, on Sept 11/12, Mac Kerricher State Park. 32 people showed up.

Sonoma County RACES was on Alert Stage 1 for 25 hours Sept 12/13. Lyle N6BLN (now WW6F), Herb K6QXB, Steve KD6GC and Gary WB6PMN went to the St Helena CDF station to help out. (Was this the Silverado fire?)

N1AL agreed to take over trusteeship of the WB6PVS repeater as AG6C had to decline.

Camping

There will be a club campout at Sugarloaf State Park on the weekend of Oct 10. Contact Jim Rutherford WB6PER for more details. (526-2972)

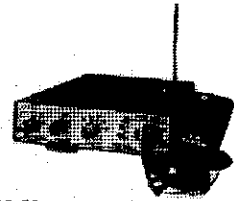


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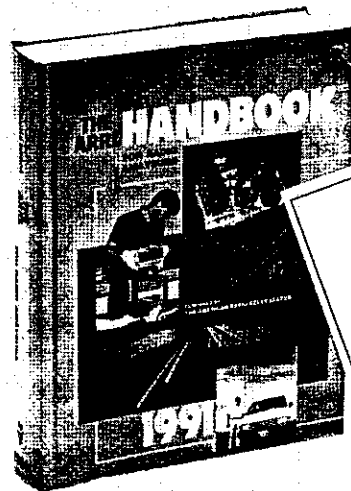


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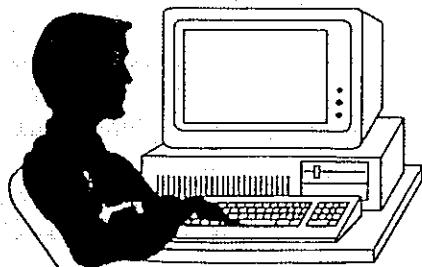


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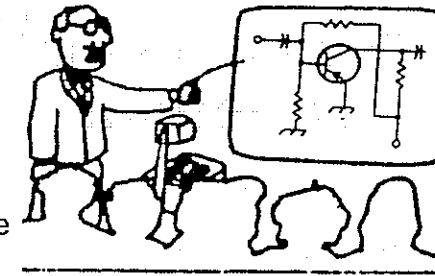
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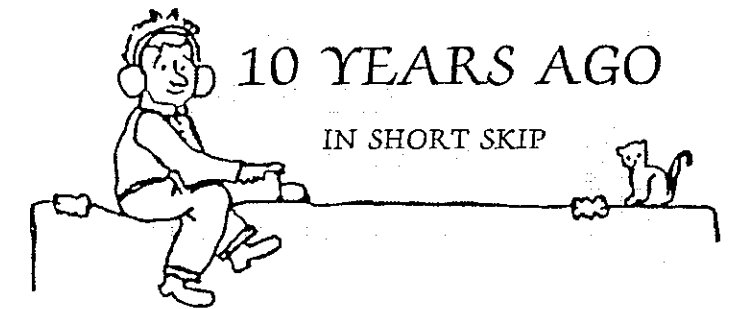
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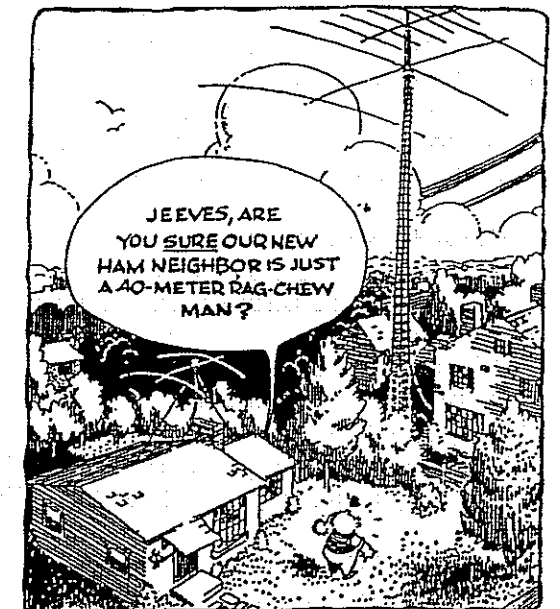
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SCRA MINUTES

September 2, 1992



The meeting was called to order by President Merlyn Pfeiff N6VUC at 7:33 PM. Other officers present: Vice President Rick Reiner K6ZWB, Secretary Al Bloom N1AL, Treasurer John Gauger KK6XT, Activities Chairman Jim Pelmulder N6PTM, and Members-at-Large Bill Splaine N6GHG and Gary Gouger KC6WTE.

VISITORS: We had 4 visitors tonight.

UPGRADES & NEW CALLS Carl Merner and someone I didn't catch.

The **MINUTES** were approved as published in last month's *Short Skip*. m/s KK6WN/N6PTM

The **TREASURER'S REPORT** for July was approved. m/s N6IYY/N6KZS.

PUBLIC SERVICE: We had 30-40 people at the SCRAPs picnic. A few more people are needed for MS Waves to Wine on Sept 12/13.

EDUCATION: Tracy WB6TMY's Novice class has 4 students left. Mike Nichol has already made Tech+. John WB6FRZ has 12 signed up so far for his Novice/Tech class starting Oct 2 from 5:30 to 7:30 PM at Kaiser Hospital.

A **CONSTRUCTION CLASS** under Rick K6ZWB will occur next month. The project is an AM/FM radio kit.

The **TURKEY HUNT** had 14 hunters, all looking for the "turkeys", Hank W6DTV and Sarah N6FAX. All but one of the hunters were new recruits. WB6FRZ was the winner.

The **FLEA MARKET** still needs some volunteers. See Rick K6ZWB or Pete KC6UXM.

PACIFICON 92 is coming up next month. A registration form in in *Short Skip*.

The **10 METER NET** is getting fewer out-of-state check-ins. About 10 club members participate every Tuesday.

The club **VOLUNTEER EXAM PROGRAM** is being handed off from Steve WA8LLY to Dave

AA6YX. Dave has big shoes to fill, as Steve has done an excellent job for many years.

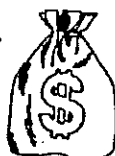
JAMBOREE ON THE AIR: Jim WA2EWE will again be involved with the Boy Scouts on the JOTA this year. Contact Jim if you'd like to help out. (573-0277)

The **PROGRAM** was an excellent slide travelogue on the "holiday islands", Easter Island and Christmas Island, by Chod Harris VP2ML.

The **RAFFLE** was, as usual, ably handled by Phil WA6SEU.

Adjourned 9:35 PM. m/s KK6WN/WD6CKP
Respectfully submitted, Sec. Al Bloom N1AL ■

TREASURER'S REPORT



For month ending July 31, 1992

ACCOUNT	REVENUE	EXPENSE
Activities (Field Day)		224.33
Refreshments at meetings ..	10.36	
Raffle at meetings	84.50	
Dues and Initiations	219.00	
Badges		64.50
Misc	78.00	28.00
Short Skip Newsletter	20.00	250.78
Training and Education		65.00
Officers' Expenses		15.66
Flea Market		493.14
	411.86	1141.41

ASSETS:

General Fund Account	3419.16
Cash/checks on hand	44.84
Total General Fund	3464.00
Total Repeater Fund	841.91

- de KK6XT ■

Before the FCC:

(Tnx Luck Hurder KY1T of ARRL.)

In the matter of Revocation of License of Sandra V. Crane, Amateur Radio Station N6TFO and Suspension of License of Sandra V. Crane Amateur Extra Class Radio Operator License and Revocation of License of Charles P. Pascal, Amateur Radio Station WB6CIY, and Suspension of License of Charles P. Pascal, Amateur Extra Class Radio Operator License.

1. It appears that the respondents, Sandra V. Crane and Charles P. Pascal, were the operators of the California Amateur Radio School in Los Angeles, California, at all times pertinent to this proceeding. Further it appears that Pascal, Crane, or both gave instruction to students of the school prior to the administration on August 4, August 24, and September 14, 1991, of amateur service license examinations. Last, it appears that the respondents, prior to the administration of the examinations, had information that they used to tailor the content of their instruction at the school to include answers to all or most of the questions that would later be part of the examinations, while excluding from instruction the answers to most questions that would not be part of the examinations. This last-described action by respondents constitutes an apparent willful and repeated violation of Section 97.17(e) of the Commission's rules, 47 CFR 97.17 (e).

2. Additionally it appears that Crane willfully and repeatedly violated Section 97.17 (e) as well as Sections 97.515 (d) and 97.517 of the Commission's Rules, by administering amateur service license examinations to her daughter, Tracy L Gullotti, on November 12, 1990, January 6, 1991, and April 12, 1991. It also appears that Pascal, by coadministering the November 12, 1990 examination, also willfully violated Sections 97.17 (e) and 97.515.

3. In light of Crane's and Pascal's apparent violations of the Commission's Rules, we propose to revoke their amateur service station licenses and are suspending their operator licenses...

4. Crane and Pascal ARE ORDERED ... TO SHOW CAUSE why the captioned amateur service radio station licenses should not be revoked...

5. Additionally, Crane's and Pascal's captioned operator licenses ARE SUSPENDED under Section 303 (m) (1) (A) of the Communications Act... for the remainder of the license terms.... ■

CALLSIGNS ISSUED

As of September 1, 1992

GROUP A GROUP B GROUP C GROUP D
AB6OB KN6AA (no more) KD6NDD

From W1AW bulletin ■

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Prototype PC Boards

by Alan Bloom N1AL

For some time now, I have wished for an easy way to make prototype printed circuit boards. There are various computer programs available to do the layout, ranging from multi-kilobuck professional systems to simple shareware programs (try it out and send in the \$20 or \$30 fee only if you like it).

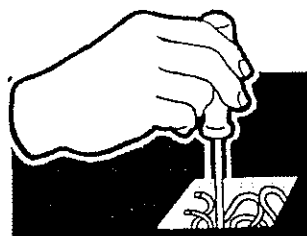
The main problem is how to get the actual boards made once you have laid them out. Most PC shops don't want to talk to you unless you want a few hundred boards. I have gone the route of making them myself, but the process is messy and time-consuming.

I have found a fellow in Utah who is willing to make small quantity (1 or more) boards for a reasonable price. He also has a freeware PCB layout program (no fee requested). I'll review the program first, then talk about the boards.

THE PROGRAM

I have tried the program out, and am favorably impressed. It does not have all the "bells and whistles" of the full-featured layout programs, but it does work, is easy to use, and (as far as I can tell) is not "buggy". It can handle up to 10-layer boards, with each layer displayed in a different color. (CGA, EGA or VGA display required). The basic objects are pads, lines, and text. To make an IC pattern, for example, you would build up a series of pads, "select" them into a collection and store the collection as a file, which can later be inserted into other layouts. Pads may be round, oval, rectangular or half-round (like a connector "finger"). There is an ASCII file that defines the pad types which you can edit to add pads of any sizes. Pads are automatically placed on all layers at once (or not, at your option).

A mouse is optional but highly recommended. The user interface is slick. When you click the mouse, a menu appears at the location of the graphics cursor. Move the mouse to highlight your selection, and let go. Or you can type the command on the keyboard using the first letter of each selection. Like "MDM" means Main-menu / Display-menu / Move-object. The function keys (3 sets of 10) can be defined as macros. You can use the (ASCII) macro file as provided or customize it to your taste.



Zig-zag traces can be drawn all at once, clicking the mouse on each node. You can "select" a group of objects by drawing a box around them and "unselecting" any you don't want included. Once selected, the objects can be deleted, moved or "dragged" (all connecting traces are stretched so they still connect.) There is also a primitive auto-route capability: You mark the beginning and end of the desired trace, and the program tries to draw a connecting line without crossing any other objects. I say "primitive" because the line only makes right angles. However, it is automatically "selected" so you can immediately edit it.

Grid-point spacing is settable, and you can have objects snap to the nearest grid point. You can zoom in or out by factors of 2. When the cursor hits the edge of the screen, the layout automatically pans in that direction.

Plotting the hardcopy layout is done by a separate included program. It generates a disc file with HPGL (Hewlett Packard Graphics Language) commands which can then be copied to any HP-compatible plotter. Or you can just send in a floppy disc with your layout and get back finished boards. This can be dangerous, however, since the computer screen may not look exactly like the plot.

The program can be had for a self-addressed stamped disk mailer along with a blank floppy disk to: PCB Prototypes, Ronald Baker, 8195 South 2660 East, Sandy, UT 84093. I will also try to remember to bring a couple copies to the next club meeting.

THE BOARDS:

The boards are double-sided with tin-plated traces and plated-through feed-thrus (vias). The vendor says "Our quality may not be as high as other PCB fabricators and my boards should be considered as prototypes and not a commercial product." Price is \$1.25/square inch, with a minimum of \$15. Add a 1/2-inch border around the outside edge before figuring the square inches. "There is a discount for each additional PCB of the same design, I can also build large quantity orders but my main goal is the single (less than 5) boards." (He gave me a \$5/board discount for additional boards on my recent order.)

The largest board size possible is 7 x 10 inches. Trace widths should be greater than or equal to 15 mills (.015") and spacing between any two parts should be greater than or equal to 20 mills to ensure a good PCB. He says you can try smaller sizes but at your own risk. In that case, you must supply your own negative. Also available: gold-plated connectors, solder mask, and silk screening.

If you do not choose to use his program then you must provide a drill table on a disc file. He also needs a file for drawing your PCB design, either HPGL for a HP 7575 plotter or a file for a laser printer (PCL format).

He says "We will try and return your printed circuit board within two weeks of when your check clears, this is not a guarantee and the turn around time depends on the work load."

MY ORDER

I have ordered and received a batch of boards. My order consisted of 16 code practice oscillator boards, panelized 4 to a panel. Each PCB is 2x2" with a ground plane on the top side. Cost was \$65. They arrived a little over 3 weeks from the time I mailed the order.

The boards *looked* great -- the problem is that most of them had several shorted traces. It looked like the negative had "bloomed" a bit so all the traces came out fatter than in the original artwork. Also there was a place on 4 of the boards where one of the ground plane cutouts had filled in. (It looked like a foreign object had blocked part of the negative.) Mr. Baker stated that he is just getting started in this business and had been trying out a new process for making the negative. Since I needed to get these boards working in time for the upcoming SCRA flea market, I went ahead and used them (cutting the shorts with an Exacto knife). I plan to try another order soon, and will let everybody know the results.

It looks to me like his process is capable of producing good-quality boards. I'm really hopeful he can get his process under control so we can have a good source of small-quantity printed boards for prototype use. ■

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 give it with your ARRL renewal form to the Treasurer. ■

Jim Pelmulder
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