**ORANGE COUNTY AMATEUR RADIO CLUB** 

VOLUME XV, NO. 7

P.O. BOX 95, ORANGE, CALIF. 92668

JULY, 1974

# READ ALL ABOUT IT!

FIELD DAY COMMENTS

WAGTCB'S HOMEBREW QUAD

FUTURE PROGRAMS

AND MUCH, MUCH MORE!

and 9:00 for all on oned addression. If you have more than one call for Marke to check; held get them all and call you back the same night. Also, look for Martin after the last <del>|</del>

# - 1974 CEUB OFFICERS -

PRESIDENT	KEN KOMECHY		<b>ы</b> бнис	541-6249
V. PRESIDENT	ART SHELDON	•	MAGLHB	832-9676
TREASURER	HAROLD RICHARDS		<b>N</b> A6BJO	544-0033
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MEMBERSHIP	TED GLICK		<b>X6LJA</b>	542-1390
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TVI	KEI YAMACHIMA	:	<b>W</b> 6NGO	538 <del>-</del> 8942
M.A.L. :	ERNIE FUERTE		<b>₩</b> A6GXV	839-7107
	BOB ECKWEILER		WB6QMU	639-5074

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EDITOR

NEIL VADMAIS

WA6TZA

839-7378

#### OCARC ACTIVITIES

MEETING

3rd Friday of each month, 7:30 PM at:

Mercury Savings and Loan 1095 Irvine Blvd. (4th Avenue) Tustin, California

GUESTS ARE ALWAYS WELCOME

BREAKFAST

1st Saturday of each month, 8:30 AM at:

SAMBO'S RESTURANT

2101 E. First Street (1-block west of Tustin Ave.)

Santa Ana, California

MEETS IN THE BACK OF THE ROOM

**15M NET** 

Club station WoZE meets every Wednesday at 8:00 PM on 21.375 MHZ. All anatours are welcome to check in. Club and ARML

bulletins read.

15M CW NET

Club station W6ZE meets every Wednesday evening from 7FM to 8FM on 21.175 MHZ. All anateurs are welcome to check in. Lots of CW practice for everyone.

# CALLEGOK SERVICE

The club has copies of the latest callbooks which are available at each meeting. Also, you can contact Martin-WB6PEX on Monday and Thursday evenings between 7:00 PM and 9:00 PM if you need addresses. If you have more than one call for Martin to check, he'll get them all and call you back the same night. Also, look for Martin after the Wednesday evening net.

# THE PREZ SEZ:

CONGRATULATIONS TO EVERYONE WHO CAME TO FIELD DAY AND MADE IT ANOTHER HUGE SUCCESS !!!!!!!!!

The participation this year was really great and everyone had a good time. There were well over 40 hams out to the operation and probably 20 stayed overnight. Even with band conditions reflecting the sunspot cycle, the total number of QSO's achieved was 1611 with 20 MTRs again leading the pack (of course!). See page 6 for scoring details.

Special recognition is certainly deserved by the following people for their outstanding efforts:

- efforts:
  1)Martin PEX... for finding the time with all his other activities to be an effective field day chairman.
  - 2)Tina WFV.... special thanks to Tina and her husband, Joe, for all their effor in providing the fine chow.
  - 3)Team captains.. thanks to Abe-UCS, Roger-ARK, Ron-FIT, Sandi-WZN, and Martin-PEX for organizing smooth running operations on each band.
  - 4)Kei NGO.....thanks again for providing a lot of hard work with the 15 and 20 MTR antennas and the towers.
  - 5)Art LHB.....for again obtaining use of the Marine base and having courage to climb the BIG tower.

It was also a good year in that everything ran smoothly and we had no accidents. Everyon was really saddened to hear that Rick Nelson-WA6OBM, a member of our club and also president of the Newport club, was badly hurt in a tower mishap at the NARS field day operation. While recently talking to Rick, he stated that while suffering broken bones in both of his feet, he has been able to return to work(although its a tiring effort). Rick sour in good spirits and I know that you join me in wishing Rick a speedy recovery.

For comments on what other club members thought of field day, be sure to read page 8.

I would also like to remind you that the HAM RADIO DISPLAY at the ORANGE COUNTY FAIR is in full swing. This display has been set up through the efforts of SCM Bill-CPB, the Orange County ARC, the FULLERTON ARC, the Newport ARS, and the Orange County DX Club. A station has been set up (greatly aided by donations by HENRY RADIO) using the call, WF6OCF. Operations will continue from July 12 thru July 21 from 10AM to 10PM each day. On Wednesday, July 17, the OCARC nets will be conducted using WF6OCF. DON'T MISS IT !!!!!

KEN - W6HHC

# HOMEBREW A CLOVER LEAF QUAD by WA6TCB . Dick Ahlefeld

( PART ONE of a TWO PART ARTICLE )

Just about every radio amateur operator sometime in his career has conceived the idea of homebrewing something that will benifit his stations workability. With some this urge is short lived and in due course of time passes. With others it lingers on until something is done about it. When the project is completed and it functions at least reasonably well, then the "ham" can point with a sense of pride and say; " I made that!"

With me it's antennas. My entire antenna system, sans one, is homebrew. Two inverted vee's and four quads; with the next to last quad being a triband two element affair.

The current quad, and the gest of this article. is my latest attempt at homebrewing something that will hopefully materially increase the efficiency of my station.

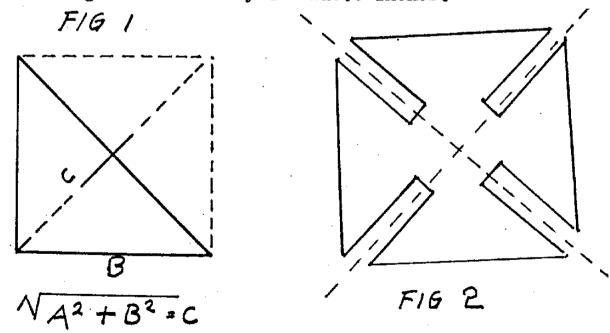
For whatever reason the 40 meter band has and remains my favorite. I've wanted an antenna with capabilities exceeding those of my inverted vee for this band. Needed is directional potential, rejection of unwanted signals and, of course, some amount of DB gain over the dipole antenna.

Investigation of current commercial antennas offered more undesirable features than I cared to cope with. The other alternative was to design and build an antenna system with the desirable features wanted. Hence the birth of a mono-band

# HOMEBREW A CLOVER LEAF QUAD - continued

Having recently acquired a 65 foot freestanding tower for \$30.00 and a used Ham-M rotor for \$45.00, and having a good inventory of the necessary hardware on hand, design and construction commenced.

Wishing to have resonate frequency on or about 7.175 MHz I used the following formula in construction of the driven el-= 1005 ÷ 7.175 = in round numbers a wire length of 140.0 feet. Desiring to keep the size of each element close to the dimension of the 20 meter quad I simply devided 140.0 by  $2 = 70.0^{\circ} \times 12 = 840$  inches. To gain the length of a & b in figure 1 devide by 4 = 210.0 inches.



To obtain the distance from the center of the quad hub to the wire hole on each spreader indicated by "C" fig. 1 proceed  $210.0^{2}$ =44100.0 x 2 = 88200.0 =  $\sqrt{88200.0}$  = 296.98 as follows: inches  $\frac{1}{2}$  = 24.74  $\frac{1}{2}$  2 = 12.37 or 12'4\frac{1}{2}".

# HOMEBREW A CLOVER LEAF QUAD - continued

The 70 feet of surplus wire is used up as follows: 4 = 17.5 - 2.= 8.75 = 8.9 down and up each spreader. For the reflector element use the formulea  $\frac{1030}{f(MHz)} =$ 

At this writing the antenna is up and working. tions well. but does not quite come up to expectation.

Several factors contribute to the less than anticipated function. Probably the major contributing factor is the spacing between the driven element to the reflector. I used a spacing of eight (8) feet. This spacing is far more suitable for the 15 meter operation and falls short of about 50% to achieve maximum gain on the 40 meter band.

#### ---TO BE CONTINUED ---

( See the August edition of "RF" for the second and final part of Dick's article. Dick will describe some of the limitations, techniques of adjusting and loading, as well as some of his results.) 

#### 1974 O.C.A.R.C. FIELD DAY RESULTS

BAND	QSOs	MULTIPLIER	POINTS
10 MTR SSB	110	x2	220
15 MTR SSB	345	x2	690
20 MTR SSB	636	x2	1272
40 MTR SSB	333	x2	666
75 MTR SSB	162	x2	324
NOVICE CW	25	<b>x</b> 2	50
<u> </u>			

TOTAL: 1611 3222

+ publicity bonus

+ emergency pwr bns 100

GRAND TOTAL: 3372 PTS

#### 10 METER CONTEST RESULTS

Super Congrats to Ron, —FIT, for taking "numero uno" in the Orange Section during the 1st Annual ARRL 10-Meter Contest, held Dec. 15-16, 173. Ron logged 340 QSO's for a total score of 26,144 points!

If that wasn't enough representation for OCARC in the contest results, try this on for size:

Roger - WA6ARK (operating then as WN6ARK) came in behind Ron in second place with a score of 3,492 points for 82 contacts. Excellent coverage for a station limited to the Novice portion of the band!

Hats off, Ron & Rog, WELL DONE !!!

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#### BEACH PARTY

OCARC will have its summer Beach Party this month, (July) on Sunday, the 28th. The location will be the same as last year, Newport Dunes, where we had a great time. So pack your picnic basket, cooler, grab your swimwear, and we'll see you on the 27th!

#### - - - AUGUST MEETING PROGRAM - - - -

The OCARC meeting on August 16th will feature, as it's guest speaker, John R. Griggs, W6KW, Director of the Southwestern Division of the ARRL.

At meeting time, John will have just returned from the '74 National Convention in New York City, and also a Directors' meeting. He should have the latest news on many areas of interest to all amateurs, so be sure to attend this meeting.

All amateurs in the area, clubs or individuals, are invited to attend, and are urged to do so.

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# JULY 17th OCARC NETS

The OCARC CW & SSB nets will be transmitted from the Orange County Fair Amateur Booth, under the call WF6OCF, on July 17th. Be sure to check in for a WF6OCF QSL card.

# MAY CLUB MEETING VISITORS

The following persons were guests at our May Club Meeting, and we hope that they, and all other amateurs and amateurs-to-be, will visit again.

Richard Gehle
Dan Thomas - K6TJJ
Lynn V. Hull - WB6PEF
Harry Bullard - WA6VZO

Orange Santa Ana Tustin Yorba Linda

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# 74 FIELD DAY QUIPS

Art - LHB: "Wanted: one tower climber"

Fried - WZO: "Got kind of lonely on 15-meters at night, and fell asleep."

Martin - PEX: "Proved that teamwork really does work."

Bob - QNU: "Our beer efficiency was down this year; we only had four

contacts per beer on 20-meters."

Tina - WFV: "Very well organized; great experience for those who have

never done it."

Sandi - WZN: "If things got slow on your band, you could always listen to

the Novice tent."

Tom - VNE: "Impressed by what those operators could do in time of

emergency."

Kei - NGO: "More stayed over-night this year than ever."

Roger - ARK: "Don't try to load an SB-102 through a matchbox without an

SWR meter. The voice of experience.)

Ernie - GXV: "How did Tina like the snake skin?"

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#### JULY CLUB MEETING

This month's club meeting (July 19th) program will feature both Roy - MCU, with video tapes of the 1974 Field Day fun, and Ken - HHC, with a slide presentation of this year's F.D. activities.

Pictures don't lie, so don't miss it!

#### JUNE CLUB MEETING MINUTES

The June meeting opened with the Pledge of Allegiance, followed by a discussion on last minute plans for the following day's opening of the 1974 Field Day. Bill Weise, W6CPB, was on hand to give a few tips on Field Day activities, and also mentioned some of the proposals of new regulations coming up in the near future. (Get more info on these new regulations at the August Club Meeting.) Bill also commented that the ARRL California QSL Bureau will be moving soon, so be sure to claim any QSL's you may have at the Bureau as soon as possible.

Roy - WB6MCU, presented the club meeting program, which was his fine video tapes of last year's Field Day activities of the OCARC. The film went into great detail on How-Not-To-Raise a 15-meter antenna and tower.

As there was no further business, the meeting was adjourned.

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# OCARC BOARD MEETING MINUTES

The OCARC held a board meeting on July 8th, at Tina's QTH, with 6 members present.

Discussion was held on this year's Field Day activities, with pro's and con's voiced on some of the operating set-ups we had this year. Possible alternative plans for future Field Day arrangements were discussed, such as incorporating a remote antenna for the Novices.

There was comment on the Amateur Operation booth at the Orange County Fair (7/12 - 7/21), along with a call for help for day-time operating. (For more info, contact Steve Phillips, WA6TVA, Phone 545-6689). The booth will be operating from 10AM until 10PM each day.

Also mentioned was the OCARC Beach Party to be held July 28th at Newport Dunes.

Ken - HHC brought up an idea on the possible use of the Mars Station at the Marine Helicopter Base in Santa Ana for an emergency operating training site. Art-IHB, is checking on getting permission to use the facility. Ken also mentioned, along these same lines, that the Club is interested in obtaining a 5 KW or larger portable generator. (Anyone with any info, please contact Ken.)

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# MEMBER NEWS!!!

OCARC member Ernie Pritchard has finally received that long-awaited call sign from FCC. Ernie now operates as WN6FOW. As luck would have it though, the call arrived the day after Field Day!!! Congrats, Ernie!

Tina, WN6WFV, dropped in on FCC recently and passed both her General and Advanced Class License Exams. She now has a tower and 4-EL beam under construction. WELL DONE, Tina!

Get Well Soon Wishes go out to Rick - OBM, who is recuperating from his fall from a tower on Field Day. Hope to see you back soon, Rick.

FOR SALE: 40 W 2 m amplifier (WA6NMB)

For information, contact Bob - WB6QNU

\$ \$ \$ \$ \$ \$ \$ \$

WANTED: 70 - 72' Free-standing crank-up tower.

Contact Fried - WA6WZO

\$ \$ \$ \$ \$ \$ \$

WANTED: Tower - Roger WA6ARK

**\$ \$ \$ \$ \$ \$ \$** 

WANTED: Tower - Don W600H

ORANGE COUNTY AMATEUR RADIO CLUB, INC. POST OFFICE BOX 95 ORANGE, CALIFORNIA 92688

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FIRST CLASS !!!!!!

DATED MATERIAL !!!!!