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Official Publication Of

PALO ALTO AMATEUR RADIO ASSOCIATION  
PAARA

Palo Alto Amateur Radio Assn.      Affiliated Clubs      Menlo Park C-D Radio Club

ORGANIZED FOR  
PUBLIC SERVICE, SCIENTIFIC, EDUCATIONAL AND SOCIAL  
BENEFITS TO AMATEUR RADIO OPERATORS.

A NON-PROFIT ORGANIZATION      INCORPORATED 1956  
Meetings held first friday each month

NEXT REGULAR MEETING

Date: Friday 7 May 1971

Place: Vets Memorial Building 1455 Madison Ave., R.C.  
PROGRAM: MAGIC NIGHT! ! ! Don't miss it! ! Bring the  
family - all will enjoy the performance of  
the finest magicians south of Anchorage! !

**ADDED  
FEATURE**

**ART FURY**

- Results of

- FREE

Hi-Fi Amp. IC's  
will be given away  
at meeting

Also preliminary discussion of FIELD DAY.  
Phase lock loop contest  
Coffee and doughnuts for all - come along.

RAFFLE



Vol. XV  
No. 5  
MAY  
1971

## OFFICERS

## ADMINISTRATIVE

PRES: Andy Korsak, VE3FZK  
 V. Pres: Bob Allen, 66GD  
 Sect: Leo Zalazanik, 66DJJ  
 Promg: Vance Ardlow, 66FLF

## APPOINTMENTS

VP DR: Larry Starkov, 66SLIJ  
 CEAC REP: Wilt Donovan, 66PF  
 CO Capt: Bob Allen, 66GD  
 Asst " : Glen Baker, 66UOK  
 TVE Cons: Glen Baker, 66UOK

## BOARD OF DIRECTORS

Chmn: Andy Korsak, VE3FZK  
 Secty: Leo Zalazanik, 66DJJ  
 Ombr: Glen Baker, 66UOK  
 " Hal Cooper, 66DLF  
 " Vance Ardlow, 66FLF  
 " Ed Fairbanks, 66AII  
 " Gerry LAXSON, 66OPA  
 " Clyde Griffin, 66CDB

Editor: Vance Ardlow, 66FLF, Phone 854 6064, P.O. Box 911

SUPPORT YOUR CLUBGET INVOLVEDPAY YOUR DUESPARTICIPATEBECOME A PARTICIPATOR

\*\*\*\*\*

FUTURE PROGRAMS

Date: Friday 4 June: SCARC host.

Program: A TEFU? A TEFU?AS. Oliver Swan, 66RZK, a real top authority on antennas will explain high gain versatility of the band-pass beam. If you have an antenna problem send your question to Gene Sussli, 3501 Branson Drive, San Carlos, Ca. 94403. He will ask Oliver to help solve your problem.

Date: Friday 9 July: SCARS host: (Note advance in date)

Program: SLO SCAR TV FOR THE CA. Larry Reed, 66CTH will arrange for a discussion and a presentation of slow scan equipment and techniques.

DON'T FAIL TO ATTEND MEETINGS

BRING A FRIEND . . . BRING THE FAMILY . . . EYEBALL

JOIN THE CLUB

BECOME A PARTICIPATOR

DON'T BE A FREELoader

## REPORT OF 2 APRIL MEETING

This was the night of the BINGO!

Gene Sussli, WA6NVU took time to demonstrate a dandy Yaggi antenna for 2 meters he had constructed. Using plastic water pipe with the various fittings Gene has come up with an excellent antenna assembly which is possible of being disassembled very easily. It can be mounted either as a vertical or horizontally polarized antenna. It looks like a real winner - very easily assembled, real portable, true versatility and meets all specifications for an outstanding 2 meter antenna.

Gene also demonstrated a 3 element cubical Quad he had designed and assembled from easily obtainable parts. This antenna is also very easy to disassemble and is thus very portable and very practical for the mobile ham or can be used at the base station for excellent results. Gene had a few statistics on the comparable results from the 2 antennas.

A very fine job Gene, we all appreciate your devoted participation in the 2 meter project. You have given us an excellent demonstration of what a ham can do when he accepts a project and then goes to work on it.

We will all be looking to the day the antennas are in everyday use.

Andy Korsak, VE3FZK, Fred Canham, W6QWF and Lee Zalazanic, WB6BJB got together for a discussion of the potentials for Field Day. Fred has made some studies of the averages made by the various winners over the past few years and has come up with some interesting data on the most probable winners using various numbers of transmitters and receivers. Fred is the "Head Concho" for PAARA this Field Day. He will be contacting all of the members to put together the best possible teams for a high score.

NOW TO THE HIGHLIGHT OF THE EVENING ! ! ! ! ! ! ! !

Larry Reed MC'd the BINGO game. He had a fine selection of prizes running from four pound hams to camera timing device.

Each game was set up to provide a prize of interest to the members and their families who attended. As it turned out we had a couple of real consistent winners. Margurite Reed went home with an armfull of prizes. Running her a close second was Paul Churchill, W6QBY, who almost needed a wheelbarrow to cart off his loot! A distant third was Mariso Camahart who took home enough coffee for herself and family for a month! You can be sure Andy and Rosa Korsak will be in there helping with the consumption! ! ! FINE TIME



FIELD DAY

As you all know a questionnaire was sent out to gather info on those interested in Field Day this year. So far the results are as follows:

Name	Voice	CW	Equipment
Fred Canham, W6QWF	x	x	
Les Vickery, W6AKR		X	Apache, HQ-170, Vertical
Ed Fairbanks, W6AIN	x	x	
Hal Moore, W6DEF		x	Chairs, tables.
Andy Korsak, VE3FZK	x		Low power 2 meters
Jack Troster, W6ISQ (If not out of town)			
Vance Wardlow, W6FLE	x	x	Logger. Pickup truck.

Here is a good nucleus for an excellent team. Any of you others interested send in the questionnaire. Fred will correlate all activities. We will want to discuss it more at the next meeting.

\* \* \* \* \*

DISASTER IN ARGENTINA  
Hams Come To Rescue

Andy Korsak got involved in an emergency situation in which a Bay Area resident's mother who lives in a remote area of Argentina, 500 miles from Cordova, wished to contact her daughter concerning a serious illness of a relative. There has been a postal strike resulting shutdown of all communications. The Argentine relative tried to reach the Bay Area by Ham Radio. A Ham in San Clemente, Cal. was contacted by an LU8 and he phoned the Bay Area resident re the illness. She then tried to find a local Ham to contact Argentina. THEN CAME PAARA!!! Andy finally got her in contact with K6VYJ in San Bruno. He got her patched through to her mother on 15 meters. As a standby ready to help there

was W6EOA of Los Altos, a colleague of Les Vickery, W6AKR, PARRA member. It all worked out fine.

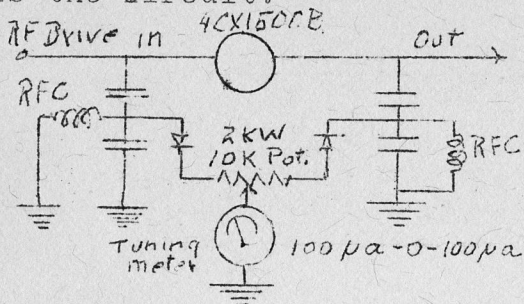
We all know of the fine work being done by Hal Moore, W6DEF, as Emergency Coordinator. If any of you work DX regularly and would like to cooperate in emergencies such as the above drop a line to Hal via P.O. Box 911, Menlo Park, Ca. 94025. He will work with Andy to keep a current record of who is available.

By the way Hal is in there pitching on the regular Monday night 2 meter Emergency Net. If any of you fellers know the meaning of the word "Dysrhythmia" you are elligible to get on the Net and enlighten the crew! The meaning of the word "Electroplasmadynamics" was very well settled a short time back. Ask Hal - I don't know!



A very interesting note from old time member of PAARA, Irv Wolfe, W6HHN re his article in HAM RADIO for April. He has designed a High Power Linear amplifier using a 4CX1500B. Salient features are:

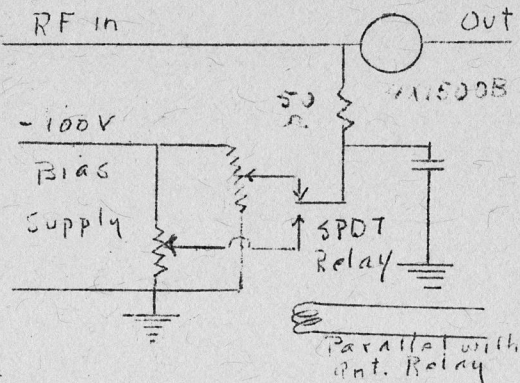
1. Tunes 10 to 80;
2. A zero tuning meter which eliminates the time consuming adjustments of RF drive and antenna loading when changing bands and frequencies. Here is the circuit:



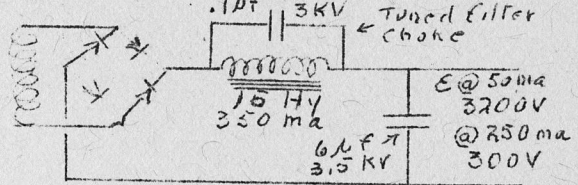
Works like this: The amplifier is tuned in the normal manner using a scope, VSWR meter, etc. After it is tuned up, the 10K pot is adjusted for a zero center meter reading, thereafter when retuning on another frequency, adjust drive and loading for a zero reading on the tuning meter - this can be done quickly and will represent optimum tuning adjustment of drive and loading.

Another feature: To save standby power, the standby resting plate current, which is 250ma at 3KV on 750 Watts the tube is biased off to almost cut-off (50ma). A relay in parallel with the antenna changeover relay changes bias during operating periods.

Circuit nextt column:



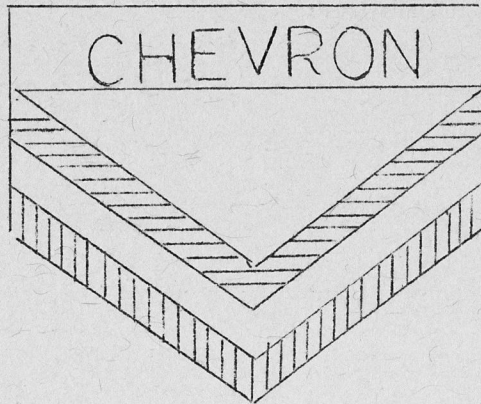
To prevent the high voltage from soaring to about 4KV during the tube cutoff loading (50ma) the filter choke is tuned to the 120Hz ripple voltage. Here is the circuit:



Irv appears to have done a fine job of design on this circuit. If you have any questions give him a call on 327 5363 or write to 3467 Rambow Drive, Palo Alto, Ca. 94306.

\*\*\*\*\*

Andy Allen, an old member and son of an even older member "Doc" Allen, WB6NID, had a horrible experience lately. A near disasterour fire in his home. Andy was draining the gas tank of his auto when a can of gasoline overturned. It spread to the garage floor and was ignited by the water heater pilot lite. Result is a badly burned Andy, and very extensive damage to his home. Real sorry to hear about this Andy. Our very best.



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JACK J. CANEVARI

ALAMEDA DE LAS PULGAS at ASHTON AVE., MENLO PARK, CALIF.

PHONE: 854 5354

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PUT YOUR CAR IN OUR HANDS FOR ALL  
YOUR NEEDS

Hey! Right here let's say

WELCOME ABOARD

to a couple of new members:  
"Wes" H.P. Westler, W6OKQ.

Wes previously held the call WA6CHN, now holds an advanced license, has been on the air since 1933 and is now retired. He has a KWM-2 with a Henry 2K-3 receiver and works mobile with a KWM-1.

Paul K. Churchill, W6QBY

Held calls 6BF & 6BKQ earlier. Now has a general license with a base station consisting of a TR-3, a SB-200 with a 2 element Quad. Now retired and really taking time out to enjoy life!

Glad to have you both aboard. Will look forward to eyeball contacts and participation in projects with you both.

\* \* \* \* \*

THE GYPSIE CARAVAN

Ed Fairbanks, W6AIN is visiting relatives down in the deep south and in Florida. Hope the sunshine boils out some of that orneriness Ed. Will be glad to see you home soon!

Phil and Pearl Coombs, K6OES, left for Europe last saturday. They had firmly decided to go west to the asiatic countries but at the last minute changed their minds and headed east to europe. Hope you have a fine trip folks. Your decision to go where your

fancy dictates is so typical of we hams! The world is our oyster! ! when we start to operate, distance and direction become incidental. The point is to have a good QSO ! !

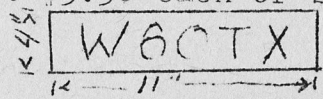
Another traveller is Jan Van Dam, WA6UJW. He is on his way to Switzerland. He and Phil had a fine discussion as to where to go and what to see on the continent. Believe they settled on the Hilton as an acceptable hostlery. In any case - good travelling! !

\* \* \* \* \*

How many of you have gotten a "Lapel" pin with call sign from Doc Laxson? He has them made up at the Veterans Hospital by disabled Vets. A fine project and an excellent product. See Doc at the meeting and he will take your order.

\* \* \* \* \*

Have a letter from Father Hart Chaplain of St. Josephs Hospital in Iowa. He has a machine for making up call signs on plastic with a magnetic tape around the back so it may be attached to a metal base such as your auto or the transmitter. The letters are 2 inches high on a 4 inch base. The letters are raised about a quarter inch and are colored. Against a white background they look real nice. Cost \$3.50 each or 2 for \$6.00.



See Vance



# HEATHKIT ELECTRONIC CENTER

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REDWOOD CITY, CALIF.  
PHONE: 365 8155

NEWNOW IN STOCKNEW

## HEATHKIT WATTMETER/SWR BRIDGE

You asked for a low cost Heath wattmeter . . . and  
HERE IT IS

Two switch selected ranges allow measurement of RF output from 10-200 W & 100-2000 W. Built-in calibrator to 10% accuracy throughout the 80-10 M ham bands. Built-in SWR capability allows proper tuning, transmission line to antenna impedance matching. Ideal for antenna experiments.

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AND

Did you know the famous HW-100 has been improved?

New 0.35 microvolt receiver sensitivity!  
New 36 to 1 ball bearing dial drive!  
New selectable SSB or CW filters!  
New front panel styling for most convenience!

COME DOWN AND TAKE A LOOK AT THIS PROVEN ITEM

YOU CAN'T MISS THE MOST RELIABLE

GET AN HW-101 AND YOU WILL KNOW YOU WILL BE TOP HAND

USE IT AS YOUR BASE STATION OR MOBILE

HEATHKIT ELECTRONIC CENTER

2001 Middlefield Road, Redwood City, Ca. 94063. Come in!

or

Phone: 365 8155

BOARD OF DIRECTORS MEETING  
12 April 1971

Board members present were Glen Baker, Lee Zalazanik, Gerry Laxson, Clyde Griffin, Andy Korsak and Vance Wardlow. Fred Canham attended to discuss Field Day preparations

Since several of those present are new Board members the letters requesting change of Trustee for K6YQT, to the FCC, that requesting designation as a non-profit organization to the Internal Revenue Service and the letter to the Postmaster Menlo Park requesting reduced mail rates as a non-profit organization were passed around for each to read. Also the letter to the California Franchise Board requesting designation as a non-profit organization was read by all.

In accordance with a request by the IRS a motion was made seconded and passed that the Articles of Incorporation be amended to provide distribution of any assets of the Corporation upon dissolution.

Paragraph Two(i) - last sentence reads as follows: "If at any time this corporation should be dissolved or its corporate existence should cease, or its charter should be revoked, no part of its funds or property shall be distributed to or shall inure to the benefit of any member or other individual, but after payment of all indebtedness of the corporation, its remaining funds shall be distributed by the Board of Direct-

ors for the furthering of scientific and educational purposes in the field of amateur radio communications."

The above Paragraph Two(i) was amended by the addition of the sentence: "In case of dissolution described by Paragraph Two(i) of the Articles of Incorporation all funds and material and other property shall be donated to the Recreation Department of the City of Menlo Park, California."

The need for a TVI committee was discussed. Glen Baker volunteered and was appointed Chairman. He pointed out the need for discreet and competent assistants. He will try to obtain such assistance. He will also start design on an interference locator which might also be useful as a transmitter locator.

Funds for Field Day were discussed. No sum was set as planning had not been firmed up. Andy Korsak was compensated the sum of \$12.65 for xtal filters purchased for the 2 meter project. He will prepare a report to the Board on the potential total cost to the Club for that project.

To raise funds for the Club Lee Zalazanik and Ed Fairbanks will conduct raffles regularly at meetings. Gerry Laxson will price name tags to return some amount to the Club.

Aims and goals of the Club were discussed.

# HALTED SPECIALTIES CO.

1690 PLYMOUTH AVE., MOUNTAIN VIEW

PHONE: 969 0510

SURPLUS ELECTRONIC TEST EQUIPMENT AND COMPONENTS  
USED AMATEUR RADIO TRANSMITTERS AND RECEIVERS, CITIZEN BAND

THE LOWEST PRICES IN THE AREA

HOURS: 9 A.M. to 5 P.M.

CLOSED SUNDAY

WE WILL EXCHANGE EQUIPMENT WITH YOU - SELECT WHAT YOU NEED AND LETS DEAL

WE ACCEPT ALL THE MAJOR CREDIT CARDS (OR CASH!)

TAKE ADVANTAGE OF THE ONE-THIRD OFF COUPON BELOW AND GET SET UP

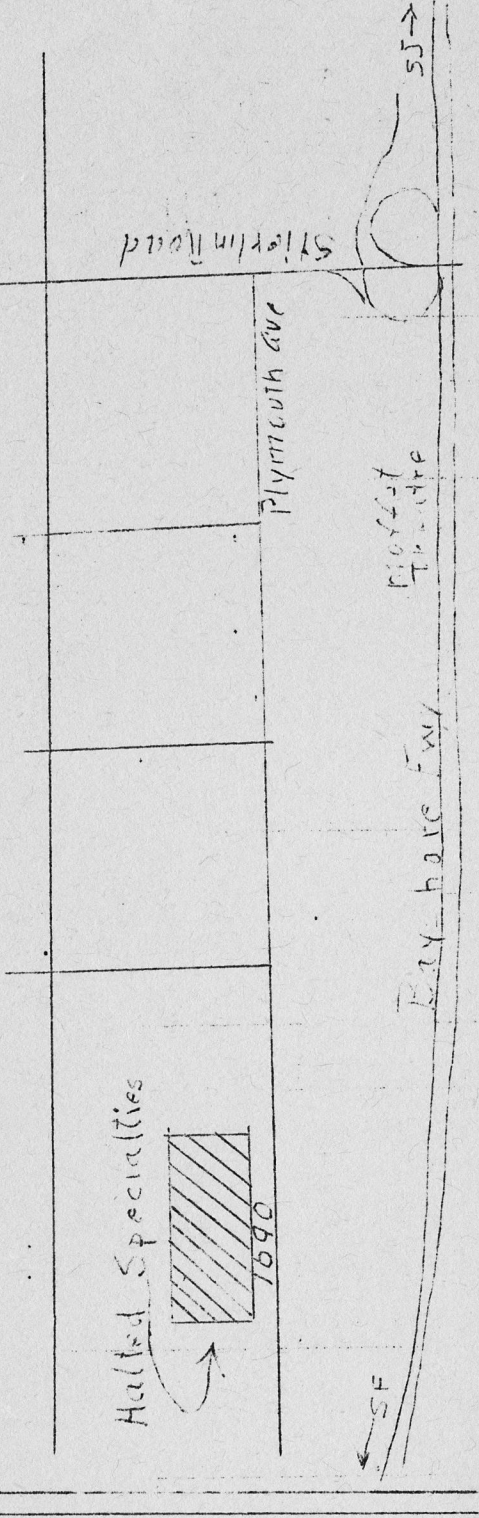
WE HAVE A WHOLE ROOM FULL OF EXCELLENT TEST EQUIPMENT AND A WHOLE SET  
UP OF AMATEUR RADIO TRANSMITTERS AND RECEIVERS AS WELL AS TEST SETS.

OURS ARE THE LOWEST PRICES IN THE AREA AND WITH THAT 1/3 OFF YOU  
WILL NEVER BE ABLE TO EVEN COME CLOSE TO OUR PRICES. LOOK US OVER NOW !!

WE ARE CENTRALLY LOCATED - COME DOWN THE BAYSHORE  
TURN ON STIERLIN ROAD EAST TO PLYMOUTH AVE., TURN LEFT TO  
1690 PLYMOUTH.



IN CASE YOU NEED A MAP HERE IT IS



BRING THIS <sup>0</sup>CUPON TO

HALTED SPECIALTIES CO., 1690 PLYMOUTH AVE., MOUNTAIN VIEW



SAVE 33 1/3% ON ANY COMPLETE PIECE OF EQUIPMENT WITH LISTED P:PRICE  
(Does not apply to parts or pieces)

Any time during the months of May or June hand this coupon to HAL. He will subtract one third from the list price of any equipment in his shop. This includes all types of Ham equipment and all types of test equipment.

# J & H OUTLET

## SURPLUS ELECTRONICS

476 INDUSTRIAL ROAD

SAN CARLOS

PHONE: 591 7113

OPEN DAILY 9 - 5

FOR ALL YOU BUILDERS

WE HAVE THE FINEST SELECTION OF SHEET METAL, BAR METAL, RODS AND EXTRUDED IN THE BAY AREA. ROUND RODS FROM 1/8" TO 3 INCH DIAMETER IN FULL LENGTHS. SAME IN SQUARE RODS FROM 1/8" TO TWO INCHES SQUARE IN ALL LENGTHS. MANY SIZES OF ROLLED STRAP AS WELL AS A VERY LARGE ASSORTMENT OF SHEET METAL. ALL THESE IN COPPER, ALUMINUM, IRON AND BRASS. FOR THE BUILDER WE CAN SUPPLY AN EXTENSIVE CHOICE TO SUIT PRACTICALLY EVERY NEED. COME TAKE A LOOK.

UHF PLUMBING

ALL SIZE WIRE

CRYSTALS

WE CARRY AN EXTENSIVE STOCK OF CRYSTALS. FREQUENCIES FOR EVERY SERVICE. ALL THE STANDARD COUNTS AND TOLERANCES.

POWER SUPPLIES

TRANSMITTERS

RECEIVERS

LOW FREQUENCY METERS & DC 221

OUR LIBRARY OF MANUALS FOR SURPLUS EQUIPMENT IS OUTSTANDING

DO NOT FAIL TO LOOK OVER OUR VERY LARGE STOCK OF OPALS, DIGITAL COUNTERS, SEMICONDUCTORS, TRANSISTORS, DIODES.

J & H OUTLET, SURPLUS ELECTRONICS, SUPERMARKET

JUST OFF THE BAYSHORE

476 INDUSTRIAL ROAD, SAN CARLOS

PHONE: 591 7113

CIVIL DEFENSE

How many of you saw the very fine write up in the Menlo Park RECORDER on 31 March on the Disaster Planning for the County of San Mateo? Mr. James V. Fitzgerald, Area Civil Defense Coordinator, answered questions about the probable effect of a disaster such as the recent Los Angeles earthquake on San Mateo County.

He pointed out that San Mateo Operational Area Civil Defense and Disaster Organization, which coordinates disaster planning and operations for the County and all of its 18 Cities, has instituted a number of measures to cope with both natural and man-made disaster situations.

Of prime importance is the newly-completed microwave communications network. This connects all cities with the county dispatcher in Redwood City by phone and teletype.

Also backing this up is a well organized Radio Amateur Communications Emergency Services group with equipment and personnel located throughout the County.

If you have not recently checked on your responsibility to the community in regards to Disaster Planning for Communications, now is the time to do it.

The City of Menlo Park is now in the process of revising the RACES portion of their Disaster Plan to bring it up to Date. Dave Baker, W6WX, is our Radio Officer and is cooperating with the City.

NAME PLATES

As a continuing service to Club members and others Gerry Laxson, W6OPA, has now arranged to have made up at the Vets Hospital Name Plates with a stand which may be placed on a desk, table or other flat surface. Doc will take orders at the meeting or you can call him at 369 3147. You may also want to order a lapel pin with name and call and Club.

Doc recently arranged to have printed up on heavy paper some signs for the Club to be placed in the stores of our various advertisers. Take a look next time you go into one of their shops.

Speaking of advertisers :- DON'T FAIL to identify yourself as a Club member each time you go into one of their places! ! ! This is important to them and to us - they need the assurance that their advertising money is paying off. AND we need their support of this paper.

Next time you need a gas refill go to JACK CANAVERAI on the Alameda in Menlo Park. If you don't have a Chevron card he will get one for you.

You should all know that HALTED SPECIALTIES makes a regular gift each month as a prize. This month it is a HEATHKIT GW-31 CB transceiver.

Hope none of you tried to find HEATHKIT from the address I gave last month! ! It was WRONG - WRONG -WRONG! ! See this months ad. (Sorry about that Bob)(And thanks for Batty)



SAN CARLOS BUNBLE

## Report of the San Carlos Amateur Radio Club (SCCARC)

The newly elected Board of Directors meet for the first time on April 8, 1971 at the home of Bill Jackson, 604Q. Other members present were Ray Allustiarti, 6J0V, Jack Pierce, 6CCN, Gene Sussli, 6MVU and the secretary of the board, Mike Bach, 6FEC. We all thank Bulls wife, Rowlene, for the coffee, tea and other goodies she baked for our enjoyment. Rowlene, if you keep this up we'll have all Board meetings at your house!

We looked at the present official constitution and By-Laws as well as at some modifications which were proposed about two years ago. After much discussion we found that the official set is in very good order and with the exception of adding the creation of the Board of Directors and defining its functions and scope, may need only some minor adjustments. It was decided to duplicate the official documents and give a copy to each member of our Club for their general education and understanding. Copies were made by Larry Daily, 6Kad and distributed to our Club members at our last business meeting April 15, 1971. So everyone knows what the purpose of our Club is and what we stand for.

Our last business meeting was well attended as usual and we heard reports of the CCRC and Tri-City meetings. Our youngest member Dan Lutz, 6DAA, then gave us a fine report on the Pacific Coast Directors meeting in San Jose, which he attended as a delegate for the Club. Dan got a well deserved round of applause from those present for his fine effort.

Jack McEnnerney, 6LII, gave us a run-down of the code classes which he and Jack Pierce conduct each week at the Fire Station #2 on Industrial Road in San Carlos. Presently we have two classes with 11 and 9 participants respectively going into the sixth week. At this point I would like to thank both Jack's for their tremendous effort they are putting into this project. It takes a lot of time and love for our hobby, to spend several hours each and every week (and this for many years already) to teach those youngsters the Morse code and theory and then see them thru until they get their Novice licenses. Gentlemen you are doing a very fine job and I'm proud to have such dedicated men in our Club. Anyone interested in joining the fun at the Fire Station, please call Jack McEnnerney at 591 8526. By the way I understand our VP has a real great way of getting along with those kids and keep their interest. How do you do it Jack? I always thought you were in the over-30 group and are supposed to suffer from the generation gap ! ! ! !

(SCCWRC Cont'd)

It is my pleasure to report that our friend from Alaska, Bill Holmes, K7PSD, donated a BC 454 transmitter complete with power supply to our Club. This is a 75 watt novice rig. To make it a complete novice station Fred Howard, K6TER, donated an ARC-5 receiver with the AC/DC power supply. Bill Jackson K6OQ donated an insulation transformer for the power supply to the receiver to make it a safe piece of equipment. Bill also volunteered to align the entire station, which we will lend to any new Club member who got his Novice license, but has no money to buy his own equipment to get started.

We concluded our business meeting with coffee and doughnuts and a film from the Pacific Telephone Company. It's title was "The Big Echo". It told about the first telephone conversation from the east coast to west coast via outer space, which was reflected off a 12 story high balloon with an aluminumized outer coating. It was shot up there and circled our globe as a satellite. It was quite interesting and gave us some idea of the work which went into the first E-1-E contact by hams a good decade ago.

By very best 73's

Eugene Sussli, WA6NVU

FOR SALE

HEATHKIT GB-629 Panadapter  
 Ameco TX-62 2.6 meter transmitter.  
 Ameco 2 meter converter  
 TT-63A Teletype Repeater  
 VRC 19 FM transmitter and receiver.  
 Motorized re-Perf tape winder  
 5 foot enclosed rack

The price of all these items is negotiable. The above is for sale to raise some money to pay medical bills caused by illness and death in family. All gear is in good condition. Contact Herb Nesler, W6SA, in San Carlos at 593 6036.

\* \* \* \* \*

If you like the PARAGRAPHS please let us know so we can keep you on the mailing list. All PARAPaid up members will of course continue on the mailing list, as well as all those who have sent in their \$1 for subscription.

We will appreciate it if those of you who do not read or want PARAGRAPHS would let me know. Call Vance 854 6064.

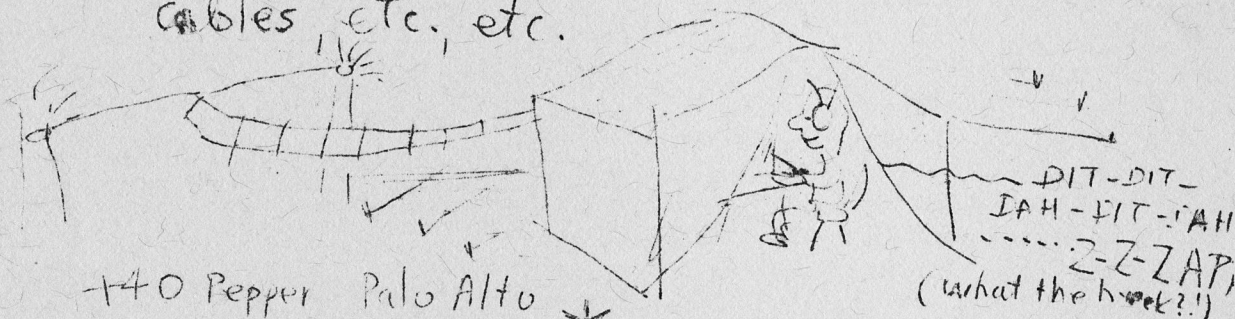
# BE PREPARED!

Don't let MURPHY'S law\*  
ruin your field day, or your fun  
in ham radio any other time.

Go down to

Red Johnson's Electronics

and stock up on FUSES, pilot lamps,  
connectors — he's got just about any ever built  
— sockets, plugs, ~~ex~~ tubes, extra wire,  
cables, etc., etc.



40 Pepper Palo Alto \*

HOURS:

M-F 6-8  
Sat 8-6  
Sun 10-2  
326-6085

\*Of all things that could go wrong, the  
worst possible will, and at the worst  
possible time, in the worst possible pla

CONSOLATION: IF Murphy strikes,  
your friendly RED  
JOHNSON store is open SUNDAY and  
you out



FRESNO HAMFEST

May 7, 8 & 9 at Tropicana Lodge in Fresno. Registration starts at 4 PM on Friday and reopens at 8 AM Saturday. Monitor 7255, 3952 or 146.94 if mobling in.

Make hotel reservations to Tropicana at 4061 Flankstone Ave., Fresno, Ca. 93726. Free color TV in rooms, swim pool, baby sitters available on advanced notice.

Be sure to specify you are with the Hamfest Group.

Rates: \$14.00 single  
17.00 double

Hamfest registration to P.O. Box 783, Dept HF, Fresno Ca., 93712. Pre-registration \$10.00. after 2 May \$12.00.

Swap Tables Comm'l Displays  
VHF roundup Mobile Juding  
Ladies program BANQUET

\*\*\*\*\*

ARRL PAC. COAST DIV. CONV.

2, 3, & 4 July at the Hyatt House, San Jose. Make reservations via Associated Radio Clubs, P.O. Box 6, San Jose, Ca. 95103.

BANQUET SPEAKERS

LADIES PROGRAM QSO'S

DEMONSTRATIONS

\*\*\*\*\*

Have at hand a very nice travelogue from Hal Moore of his trip during "April in Paris". It is very enjoyable and almost makes me want to take off for a trip myself. He and his BW certainly seem to have had a most enjoyable trip. One real problem was to keep Hal on the "straight and narrow" with all those bikini clad beauties around the beaches!! However everything worked out well.

COMMUNICATION PRACTICE

A real problem among we hams is to retain our ability to handle traffic - either by CW or voice.

Now comes Jim W6DEU, with a proposal that a code practice circuit be set up on 2 meters. Jim has a Heathkit twoer (it need some retuning and Jim would like some help) and wants to get som practice on the air. Anyone interested get in touch with him at 851 California St., San Francisco, 94108 or call him on 415 392 3687. He answers to Jim Finnell and loves a QSO - call him!!!

The best practice of all is to originate a message and get it into the AREC. To do it contact Hal Moore, W6DEF, in Redwood City on 145,49 MHz at 1930 local time except Mondays. On Mondays he handles the C-D Net so will take your message about 1920-25. Or later at 2030 he is on 3630 KHz during the slow speed NCN Training Net. If those hours don't meet your daily schedule then Hal is on 3954 KHz, the Weather Net, at 0535 (Boy that is an early hour!) And then he is on 3901 KHz (usually) at 1030 Sundays.

Now don't ever say you couldn't get that message off. Hal is on practically ALL THE TIME!!!!!!

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JOIN THE CLUB

Send in your \$4. It is a deductible item on income tax and will keep the Club able to benefit ALL HAMS.

## PORTABLE 2-METER QUAD AND YAGI PROTOTYPES BUILT

Gene Sussli, W6GNVU, president of the San Carlos chapter of the Tri-city "troika" of ham clubs, demonstrated his just completed 4-element quad and 5-element yagi for 2 meters at the April 2 meeting. He showed how portable his antenna designs are by assembling and disassembling at a speed that amazed even the "magicians" of PAARA.

Gene says the cost of materials amounts to \$1.50 for the beam and \$2.00 for the quad. The two antennas are supposed to be equivalent in gain but the quad is supposed to prove superior for long hauls, e.g. on mountain climbing trips as planned by Gene and myself. On Sat. May 1 Gene and I plan to test out the two prototypes on the air, between the PAARA trailer and somewhere up in the San Carlos hills. We'll take bearings and corresponding signal strength measurements and see if the prototypes are as good as the theory claims.

About a month ago, but just after the last paper was typed, Gene came over to the PAARA trailer with a 2-element quad and we tested it out of the trailer, using a San Carlos station as the signal reporter (can't remember his call). The 2-element version had darn good directivity so we are anticipating some good results from the 4-element one.

Once we test out and finalize these antennas, all interested in the 2-meter project can start on construction of their copies. Looks like the antenna will be the easiest part of the project (and cheapest, and easiest to get to work properly!).

## QRP STATION FOR FIELD-DAY

I plan to have a complete solid state, battery powered 2-meter station on the air in time for field day, using the receiver developed on this project and a transmitter from Cliff Buttschardt, W6HDO, or Bob Moser, W6TUM, or maybe the double sideband-suppressed carrier model Mike Bach is supposed to build, if he has the time between now and then. Gene's antennas will probably be used as well. If any of you can help on this, we'd appreciate it. Somebody could get started building the DSSC modulator I have in mind, using an LM305 voltage regulator-- this is an interesting idea I found in an article.

JOIN IN ON OUR 2-meter project.

Get active — get in on the fun.

We need brains, brawn, and "juts" (mostly).

Sign up for FIELD DAY with PAARA

— be the first on the air with a PHASE  
LOCK LOOP!



## POWER SUPPLIES (PORTABLE AND FIXED)

Les Vickery, W6AKR, reports he is making progress on the house supply for the transceiver. He's got the 18 volt section going and is now attacking the 12 volt requirements-- about half an amp, regulated. He is using two LM305's for the regulation. He picked up an inexpensive 12 and 24 volt transformer at RED JOHNSON'S and I just got two more of those there today for raffle prizes at the MAY 7 meeting.

Lee Zalaznik, WB6BJB, has been having trouble finding a suitable toroid transformer for his design of a voltage doubler in the portable power supply. We haven't heard from Harley Gabrielson, K6DS, down in La Mesa or Frank Robins, K6KUM, about a complementary multi-vibrator for greater efficiency than in the circuit I have working now.

NEW P.C. BOARD BUILT FOR ALL OF RECEIVER EXCEPT PWR, AF OUTPUT AMP, CONV.

— MURPHY'S LAW STRIKES AGAIN!!!!

I laid out what I thought would be the final receiver experimental p.c. board, after having given up on the last board because it was just too doggone small to play with. The present board is 3.5 x 7.5 in.-- it could be somewhat reduced in the final prototype if we want, without causing problem with feed-back, etc., like on the too small board.

But Murphy's law wouldn't let me get away with it. Can you imagine, the darn IF strip oscillating at 170 MHz?!! Well, it did, till I bypassed a certain pin on the product detector IC with a 100pf capacitor. Now, how that solved the problem is still beyond me-- the whole system must have had enough gain and feed-back to oscillate way up there, due to ground loops or some other effect. The circuit worked beautifully in ball-of-wax form and it really baffled me when the neat p.c. board fouled up as it did!

The squelch circuit now has an additional stage of gain in the noise amplifier chain, and is squelching as it should finally. I used a modification of Bill Hearn's circuit published in last month's article.

I'll bring the whole receiver to the next meeting and demonstrate it "on the air".

START PREPARING FOR  
FIELD DAY - Let's put up a ham TV  
station at the trailer - we have two cameras, all  
we need is a transmitter, modulator, and a padded down  
UHF-TV converter. A few years back we picked up  
some real interesting (if you know what I mean) pictures  
on field days - so let's get some of you in on the act!



# QUEMENTS

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