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Official Publication Of

PALO ALTO AMATEUR RADIO ASSOCIATION
(PAARA)

W6OTX
Palo Alto Amateur
Radio Ass'n

Affiliated
Clubs

K6YQT
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)

NEXT PLANNED FUNCTION

Date: Friday 7 January 1972: Vets Mem Bldg Rdwd Crt
Bob Cunningham, Public Training & Education
Officer, C-D. The C-D Communications Nets. Vol. XVI

The Programs for 1972 meetings between
the 3 Clubs will be discussed and prepared. No. 1
Come with suggestions for projects and
suggestions for speakers. January
1972

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OFFICERS

ADMINISTRATIVE

Pres: Fred Canham, W6QWF
V Pr: Andy Korsak, VE3FZK
Secty: Les Vickery, W6AKR
Treas: Vance Wardlow, W6FLE

APPOINTMENTS

(To be made by new President)

PAARA

BOARD OF DIRECTORS

Chmn: Fred Canham, W6QWF
Secty: Les Vickery, W6AKR
Member: Hal Moore, W6DEF
" Vance Wardlow, W6FLE
" Ed Fairbanks, W6AIN
" Gerry Laxson, W6OPA
" Bob Allen, W6WQD
" Andy Korsak, VE3FZK

MENLO PARK C-D RADIO CLUB

Pres: Fred Canham, W6QWF Vice Pres; Glen Baker, W6UOK
Secty/Treas: Vance Wardlow, W6FLE
Property Custodian: Robert J. Allen, W6WQD (Trustee K6YQT).
Asst Property Custodian: Glen Baker, W6UOK.

SUPPORT YOUR CLUB

GET INVOLVED

PAY YOUR DUES

PARTICIPATE

BECOME A PARTICIPATOR

Editor: Vance Wardlow, W6FLE. Ph: 854 6803; PO Box 911 Menlo P.
POLICY: Membership includes subscription to PAARAGRAPHS,
subscription rate \$1 per year. Non subscribers will be
dropped as new names are added to mailing list. For your
APPLICATION FOR MEMBERSHIP send \$4 to PAARA, PO Box 911
Menlo Park, Ca. 94025. For information phone 854 0803.

FUTURE PROGRAMS

Wednesday 12 Jan: PAARA Board of Directors, Trailer SRI.
Committees and Appointments.

Friday 4 Feb: Individual Clubs meet. PAARA- Amateur TV
project by Andy Korsak and Bob Allen.

Friday 3 March: To be determined at 7 January meeting upon
development of the 1972 PROGRAM for all Clubs.

SUPPORT YOUR CLUB

PAY YOUR DUES

BE A PARTICIPATOR

S.E.T.

SIMULATED EMERGENCY TEST

Saturday & Sunday - January 28th & 29th

Make your plans now to PARTICIPATE in the SET this year. Bob Allen, W6WQD, has recently been nominated by the City of Menlo Park as RADIO OFFICER(RACES) for this area. Bob is looking forward to a practical demonstration of what to expect from the Amateur Radio Operators hereabouts and how they will fit into the RACES organization. See last months PAARAGRAPHS for the communications organization of RACES as compared to the ARRL Networks.

The simulated EMERGENCY TRAFFIC CENTER will be set up in the Trailer at SRI. Every available mobile station will be assigned areas to cover and messages to pick up.

A major purpose of the TEST is to determine just how much traffic and how many messages can be handled through the EMERGENCY TRAFFIC CENTER and relayed to the EMERGENCY COORDINATOR, Hal Moore, W6DEF. Hal will be set up to take all messages via the Trailer (K6YQT) and relay them to their destination.

Get your name, call sign and phone number to Bob Allen, 124 Lundy Lane, Palo Alto, Ca. 94306, phone: 326 5142 or Hal Moore, W6DEF, 3700 Page St., Redwood City, Ca. 94063 phone: 368 0444. Tell them when you are available and what you can provide in the way of mobile or other facilities.

ALSO don't forget to try for that PACIFIC DIVISION DIRECTOR'S 1972 SIMULATED EMERGENCY TEST AWARD CERTIFICATE. It is available to any amateur in the Pacific Division who:

1. Submits perfect copy of the Pac Div Directors Test Msg via CW or RTTY as listed below; and
2. Originates a message to the Section Emergency Coordinator in his Section in standard message form, telling the SEC of his readiness to take part in emergency communications.

SIMULATED EMERGENCY TEST - Continued;

The schedule of transmissions of the Pac Div Director's Simulated Emergency Test Message is:

Saturday 29 January 7:30 PM PST (0330Z 30 Jan) on
3590Khz CW at 13 WPM.

Saturday 29 January 8:30 PM PST (0430Z 30 Jan) on
3615 KHz RTTY, 850 cycle shift.

Before the deadline, 15 February 1972, send copies of your originated message to your SEC listing call, time and date of station sent to; and text of the Director's SET message to: J.A. "Doc" Gmelin, W6ZRJ, 10835 Willowbrook Way Cupertino, Ca. 95014.

Inform the Editor of PARAGRAPHS when you receive your AWARD and he will publish a complete list.

EMERGENCY

DISASTER

The recent floods and landslides in Southern California serve to point up the fact that it CAN HAPPEN HERE ! ! !

After listening to Bob Cunningham outline the preparations made for Civil Defense Communications we will be better prepared to locate ourselves in the communications chain which becomes so essential in case of EMERGENCY or DISASTER.

Be sure to read the January QST for all the details of PARTICIPATION in the SIMULATED EMERGENCY TEST this year.

* * * * *

PARTICIPATORS

On Saturday December 11th the Annual Childrens Christmas Parade was again held in downtown Redwood City. It was the usual huge success.

The Peninsula Celebrations Association sponsored the parade and the Redwood City Civil Defense and Disaster organization performed a real public service by providing

fixed station and mobile communications along the route of the parade. RACES procedure was used throughout. The Base station, W6WWJ, was operated by the Radio Officer, Dick Collins, K6ANN assisted by his XYL and Junior Op. Ken Leonard, K6DRN, assisted. Others PARTICIPATING were Hal Moore, W6DEF, Glen Baker, W6UOK, Bob W6VQV and Art WB6MED.

THE CHRISTMAS PARTY

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What a great success ! ! ! All hands turned out for one of the finest Christmas parties we have ever had. In fact the turnout was so great that the accomodations were crowded! Harry's Hoffbrau was crammed full to the gunnels! !

Mrs. Pierce and her lovely family had done their usual outstanding job of getting all set up for the party. The tree was set up, tables arranged, napkins out and covers in place. Thank you Mrs. Pierce and all your helpers.

Larry Reed did his usual fine job of MCing the affair while Phil Coombs provided a dandy PA system. Andy Korsak was all involved in getting a closed circuit TV into operation. All hands had the opportunity to see themselves on TV - what a lot of HAMS! !

Pearl Coombs had done her thing in getting some very nice gifts from HURRAHS.

Other donators of gifts were:

QUEMENTS, San Jose VOM mtr;
HAM RADIO OUTLET, Burlingame
SWR Bridge;
BILLS QUALITY ELECTRONICS,
Belmont, Stereo Headphones.

In addition Larry Reed had purchased a number of very fine prizes with Club money.

Everyone brought exchange gifts - which came out even. So everyone PARTICIPATED in the receiving and giving of gifts.

The fine food served by Harry's Hoffbrau satisfied the most meticulous of gourmets.

The finest part of the whole evening was the "eye-ball" QSO's made by all. We all renewed acquaintances, discussed our past experiences and in general got to know one-another.

The installation of officers was a very simple formality. Each of the new officers for the year 1972 was introduced by the departing Presidents.

Andy Korsak, departing President of PAARA took the opportunity to present to the departing President of San Carlos Club the FIELD DAY PLAQUE for 1971. Under the guidance of Gene Sussli, past President of the San Carlos Club, they made the highest score on the west coast. They proved that PARTICIPATION is the key to success. PAARA had baught the Plaque since Redwood City had dropped out of the running early in the game! Hope they can come through next FIELD DAY.

It was a fine party and now to all PARTICIPATORS
A HAPPY NEW YEAR

DALTON

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230 HAMILTON AVE., PALO ALTO, CA.

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BUY A NEW RENTAL

THE RIGHT INVESTMENT IS WORTH A LIFETIME OF TOIL. BUY NOW.

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We are members of the MULTIPLE LISTING SERVICE.

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FOR SALE

7
Surplus Model TDE transmitter. Converted power supply for 115/230VAC. Final has 2 813's. Clamp tube, low level suppressed carrier modulation. This is a "monster" which really puts out. Technical manual with all circuit changes included. Original low frequency half of xmtr not presently used, available for VHF section.

Call Vance 854 0803 write to 1260 Bellair Way, Menlo Park, Ca. 94025 or come see.

* * * * *

Also have a couple of Hammerlund Super Pro's, one with xtal controlled VHF converter.

Vance

WA6IAK told you of some of his fine gear for sale last month. Here is more:
Heathkit 1 chan audio amp
Mod A-7 10W \$4.50
2 M Xmtr AM/FM 6330 final 10W
W/AM Mod less pwr sup \$10.00
2M VFO, home brew, 8Mhz for
Gonset etc \$3.50
8 tube, 10.7Mhz IF stripk
ARR-27, weather balloon . \$2.00
Call Jim Harvey 408 739-3486
or see at 1401 Enderby Way
Sunnyvale, Ca. 94087

DUES ARE DUE

January is the month in which DUES BECOME DUE. Bring your Membership Card with you to the next meeting so it may be certified upon payment of your dues.

PAY YOUR DUES

PARTICIPATE don't PONTIFICATE

FOR SALE

DITTO - Fluid Duplicator, Mod. SWA, Standard. Good condition. Call Ed, 322 0319 \$25

Ed also has an Army type folding cot \$2.00

PAARAGRAPH SUBSCRIPTIONS

One year subscription to PAARAGRAPHS \$1.00. If your address tab on PAARAGRAPHS is plain white with no notation you are a non-subscriber and may be dropped at any time from the mailing list. Membership in PAARA includes a subscription to the paper. Send \$4 for membership. If you cannot join PAARA then send \$1 for a 1 year subscription. The address is PAARA, P.O. Box 911, Menlo Park, Ca. 94025.



ALAMEDA CHEVRON SERVICE

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

PHONE: 854 5354

JACK J. CANEVARI
and
HIS EFFICIENT CREW OF INDUSTRIOUS WORKERS DO

WISH YOU

HAPPY
NEW YEAR

COME IN FOR A FILLUP

LET US SERVICE YOUR CAR

PUT YOUR CAR IN OUR HANDS

CHEVRON SERVICE, ALAMEDA at ASHTON, MENLO PARK. 854 5354

FEDERAL COMMUNICATIONS COMMISSION RULES
AND REGULATIONS SUBPART F

EMERGENCY SERVICE (RACES)

97.161 Nature of this Service.

(a) The Radio Amateur Civil Emergency Service provides for amateur radio operation for civil defense communications purposes only, during periods of local, regional or national civil emergencies, including any emergency which may necessitate invoking President's War Emergency Powers under the provisions of Section 606 of the Communications Act of 1934 as amended.

97.163 Definitions.

For the purposes of this subpart, the following definitions are applicable:

(a) Radio Amateur Civil Emergency Service. A radiocommunication service carried on by licensed amateur radio stations while operating on specifically designated segments of the regularly allocated amateur frequency bands under direction of authorized local, regional or federal civil defense officials pursuant to an approved civil defense communications plan.

(b) Radio Amateur Civil Emergency Station. An amateur radio station which is authorized to operate in the Radiocations Officer or to the

Amateur Civil Emergency Service for the purpose of transmitting and receiving civil defense communications.

(c) Civil Defense communications. Communications or signals essential to the conduct of civil defense activities of duly authorized civil defense organizations, including communications directly concerning safety of life, preservation of property, maintenance of law and order, alleviation of human suffering and need and dissemination of warnings of enemy attack to the civilian population in case of actual or impending armed attack or in any disaster or other incident endangering the public welfare. Such communications may also include transmissions necessary to establishment and maintenance of the radio system and communications essential to the training of civil defense personnel.

(d) & (e)

(f) Civil Defense Radio Officer. The duly designated official of a legally constituted civil defense organization who is directly responsible either to the Communications Officer or to the

HALTEK

New Owner, Jim Trees, invites you to drop in to his place

1690 PLYMOUTH AVE., MOUNTIAN VIEW, CA.

WE ARE NOW SPECIALLIZING IN SURPLUS TEST EQUIPMENT & PARTS FOR ALL ELECTRONIC DEVICES. WE HAVE REARRANGED OUR FACILITIES TO PROVIDE YOU WITH THE MOST EXTENSIVE AND OUTSTANDING SELECTION O F SURPLUS TEST EQUIPMENT IN THE BAY AREA.

COME IN AND LET US HELP YOU SOLVE THAT STICKY PROBLEM.

METERS

OSCILLOSCOPES

TIMING DEVICES

TUBES

TELETYPEWRITERS

SWITCHBOARDS

POWER CONTROL PANELS

TEST DEVICES

AMATEUR RADIO EQUIPMENT

TRANSMITTERS

RECEIVERS

TRANSISTORS

VACUUM TUBES

I.C. BOARDS

BRING IN YOUR EQUIPMENT - LET US HELP IMPROVE YOUR STATUS

HALTEK
ELECTRONICS

1690 Plymouth Ave., Mountain View, Ca. Phone: 969 0510

ELECTRONICS

CENTRALLY LOCATED - NEAR MOFFETT THEATRE

COME IN ON STIERLIN ROAD OFF BAYSHORE HIWAY TO PLYMOUTH

TURN LEFT AND GO TO END OF THE ROAD

JIM STREET SAYS

HAPPY NEW YEAR

AND GOOD WISHES FOR ALL YOUR

NEW PROJECTS

COME IN AND GET ACQUAINTED WITH THE NEW OWNER, WE ARE
ANXIOUS TO PROVIDE YOU WITH THOSE HARD TO FIND PIECES
OF ELECTRONIC TEST EQUIPMENT YOU HAVE NEEDED SO LONG.

MAKE A GET ACQUAINTED CALL

ON

JIM STREET

AT

HALTEK ELECTRONICS, 1690 Plymouth Ave., Mountain View

FCC Rules - Cont'd

Director of such civil defense organization for the provision, organization, maintenance, readiness, and utilization of radio communications facilities for civil defense use.

(g) Radio Amateur Civil Emergency Network. All radio amateur civil emergency stations intended to be included in the civil defense communications plan of the area concerned and which operate, or are to operate, in conjunction with a single control station. Such network may be made up of several separately authorized radio amateur civil emergency stations or units of such stations, or may be made up of several units of the same station operated at different locations. In addition, the same radio amateur civil emergency or any unit of such station may be a part of more than one network; e.g., the control station of one network may also be the control station or a member station of another network operated in conjunction therewith.

(h) Net control station.

Any authorized Radio Amateur Civil Emergency Station unit designated by the civil defense radio officer, with the

approval of the Director of Civil Defense or the Civil Defense Communications Officer, to direct the use and operation of other station units of the same Radio Amateur Civil Emergency Network.

(i) Civil Defense communications plan. The plan under which communications facilities are provided to all branches and phases of the civil defense organization in the area concerned and for all of its activities.

(Describes plan content)

ORGANIZATION

97.167 Organization of Networks.

To supplement or extend other means of communications available to the civil defense organization or to provide necessary communications for which no other means exist, local radio amateur civil emergency station networks shall be organized by the civil defense authority of the area concerned and under the immediate direction of the Civil Defense Radio Officer. Such networks shall include all licensed amateur radio stations which are intended to be included in the civil defense communications plan of the area concerned. In any particular area there may be several such networks

Board of Directors Mtg
12/6/71

The Board of Directors met in a combined PAARagraphs assembling session and business meeting.

Hal Moore explained the score keeping for SET.

The City of Menlo Park has a C-D meeting 16 Dec. at the Emergency Op. Center in the Ad Bldg in the Civic Center. Bob Allen & Vance Wardlow attend. (Very interesting)

Andy will head up the 1972 Program Committee for the Club.

Hal asked for volunteers for the Xmas parade in RC.

A program was suggested for our new novice members.

A membership drive was suggested:

- (a) Contact all SRI hams;
- (b) Presentations at Hi Schools
- (c) Member in each city call and contact new hams. Get transportation for them.

A "Telephone Committee" was appointed. Larry Rice, Fred Canham and Les Vickery.

An "Xmas Greeting" program was discussed. No action.

Bob Allen discussed the ATV program and pointed out the fine progress being made.

Report of prizes received from Quements & Ham Radio Outlets for Xmas party.

Trailer Lic. \$14; Mail \$30.

13 A so. Cal Club has arranged for a 10% discount from Sears on all electronic equipment used in their C-D Program. Bob Allen will check the local Sears store.

No reply received on letter nominating Bob Allen as Radio Officer, (RACES). Will check.

It was pointed out that many of the AREC members are now on the non-subscriber list of PAARAGRAPHS; question - should they be dropped? Hal will investigate.

In receipt of a very nice note from our old friend and neighbor Dan West K6DRX.

Dan is Information Officer for the California Wing of the Civil Air Patrol. He sent along a press release pointing out that the CAP was to celebrate its' 30th year of Public Service on 5 December 1971.

A very fine Public Service with a wonderful record of performance.

Thanks Dan. CUL 73

Our kudos to Ed Fairbanks for his repair job on the electric heater in the Trailer. Sure got cold without it and Ed solved the problem. Also the catch on the door - now we can keep the flies out! Thanks Ed

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1036 Castro Street Mountain View, Calif
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HAPPY NEW YEAR

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ALSO

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OUTGOING PRESIDENT'S MESSAGE

I have thoroughly enjoyed being the President of your club for the past four years, and I will continue~~X~~ actively supporting club activities as technical project promoter, Vice-President, and program chairman. I hope you all give our new president, Fred Canham, W6WF, your support in keeping this club active by participating in the SET, field day, and other club functions and I wish you all ARRL60 and I wish Fred ARRL 28 and 30.

Andy Korsak, VE3FZK/W6

----- 00 -----

TECHNICAL TOPICS de VE3FZK/W6

2-METER PROJECT

John Fogg, K6AO of SRI built the "pip squeak" 2-meter transmitter described not too long ago in QST, and he is using it successfully with about 2-watts (didn't say if that's in or out). He is offering any "brave" soul that would like to try building it free advice to steer him away from errors in the schematics. ARRL '48, John (this refers to any harmonics you might be getting out of it).

I still have not finished tuning up my 2-meter transmitter board of the W6HDO design. I wonder if one of you would have the time to work on it while I am finishing up the TV project.

The latest issue of HAM RADIO has another 2-meter solid state AM transceiver design that some of you may want to try coping. You might write the author for p.c. board layouts.

TV PROJECT

Well, we got the W6OTX camera system working in time for setting it up at the Xmas dinner. One more piece of this Dage camera chain, donated to us by Ken Kerwin, K6UXO, of SRI, has to be completed before we can modulate a transmitter with it. Bob Allen, W6WCD, and I have been spending Saturdays down at SRI and also lunch hours to complete the camera control unit. Boy! I haven't built anything with tubes in years! I was just wiring up the filament connections for the sync and blanking section during lunch today, and I was almost wishing we redesigned a solid state version of the camera control unit so I would have to hookup so many wires! We are building a tube circuit because we decided just to copy the missing control unit out of the schematics

that came along with our camera system, rather than get involved in a dragged out design project (like my 2-meter project).

Elmer Shapiro, WAGMPC, of SRI, also offered to help put our borrowed ART 26 video transmitter on the air on the 420 MHz band. He is coming over to join us at the lab in Bldg. 30 this Saturday and we'll see if we get it going. What we need now is a good 432 antenna - anybody help? If you can join in on this fascinating club activity, call us at EXT. 2853 or 2828 on Saturday, or call me anytime at 854-2759 (nights) or 326-6200 ext. 2853 (days).

Bjorn Forsberg, who is a Swedish ham operating /W6, started on a half gallon for our 432 TV station, but he's been sick lately, so here's wishing you ARRL 82, Bjorn.

I have been busy with the camera control unit, but I started collecting parts and ideas for color encoding, as my ambition is to eventually transmit in full living color. Frank Foge of KGSC, Channel 36, lent me his manual on their color video encoder - it looks pretty darn complicated! I am playing around now with various ideas to try to find a way to encode in NTSC style directly by a variation on the SRI patent for RCA using diffraction gratings, so we would not have to decode and then re-encode in NTSC fashion. By the way, NTSC stands for National Television Standards Committee, which was a committee established back in the 40's (I believe) to set up a means of transmitting color that is compatible with black and white.

I have become quite interested in the theory of color TV systems lately and I have been reading up on it. The NTSC system is a fascinating topic, and I intend to give you guys a lecture on how it works at the February meeting, along with a demonstration of our W6OTX/TV station. I will try to keep the lecture at a suitable level, so don't worry about being snowed with technical details. Of course, I know some of you out there like the technical details, so we'll have to play it by ear.

UHF TV DX ANTENNA

Some of you have been calling me for information on the "back-fire" antenna I wrote about in the November issue, so here are the

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references on it so the rest of you can save your stamps and message units: IEEE Proceedings, P. 1761, Nov. '65, p. 639 June '65, IEEE Trans. Ant. and Propag. May '70, IRE Proceedings p. 109 Jan. '60

Speaking of UHF TV DX, I was driving up to La Honda Road on Sunday, and about three quarters of the way up to Skyline there was a parked car with a huge UHF TV strapped to ski racks with two Hewlett Packard types proddly watching the '49'ers for free, on a car battery operated Sony set, on Channel 30 from Fresno. That's one Channel I can't quite pull in with my 7-foot dish, except maybe late at night when 36 and 44 go off the air. I guess I need a strip-line tuned amplifier for Channel 30 to clear out the cross modulation. But I do pull in Channel 24 from Fresno and 40 from Sacramento just like a local station, so I can watch the Raiders for free on 24.

OSCAR FLY-BY AWARDS

My XYL was amazed, and so was I, of course, when she and I both received in the mail a couple of award certificates for participating in the recent OSCAR transponder fly-bys. The XYL's copy states "In appreciation of her enduring patience through the many late hours of hard work her husband spent on this project without which this test flight could not have achieved its objective of preparing West Coast Radio Amateurs for the earth orbit operations following launch of the AMSAT/OSCAR AO-B satellite in 1972." Now, wasn't that nice of the JPL/ARC AMSAT/OSCAR committee??! Maybe we should give out such certificate for the SET and field day? P.S. TNX to you, XYL, for REPEATER DIRECTORY typing all this article.

Some of you have been asking me for repeater information in the Bay Area. Here are excerpts from a complete ARRL list

CALL	LOCATION	INPUT	OUTPUT	CALL	LOCATION	INPUT/OUT
WB6AAE	Oakland	146.20	146.80	WA6TSM	S.M. Co.	448.45 443.45
WB6AAE		449.50	444.50			Couldn't fit it
W6AEX	Sacramento	144.20	147.85			all in - if you want
WGDX	Danville	147.80	147.06			more info, call me
K6SW5	Oakland	146.34	146.94			or write editor,
WB6EO	Oakland	147.00	146.34			
WA6TSM	San Mateo Co.	146.13	146.73			Andy

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A HAPPY NEW YEAR
FOR REAL HAPPINESS

IN THE SOLUTION OF YOUR POWER PROBLEMS GET

A DUAL 31V CT 20A
transformer

115V
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115V
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31V CT @ 20A M
31V CT @ 20A

5.75" wide x 6.75" long x 6.50" high

EXTRA SPECIAL

\$20.00

BE SURE TO GET YOURS WHILE THEY LAST

RED JOHNSON ELECTRONICS, 440 Pepper St., Palo Alto, Cal.

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SAN CARLOS BUGLE

Gene didn't get around to making up the BUGLE this month but asked me to improvise with some items he gave me over the phone. So here goes! !

The REALLY BIG item of the year was our FIELD DAY win! ! After much effort, blood sweat and tears, with all sort s of dire predictions of defeat and dissapointment ringing in our ears WE CAM E THROUGH! ! ! And boy how we did come through. With the outstanding help and effort of such as Ken Kerwin, Bill Jackson, Larry Daily, Mark Cherry, Bill Burris, Mike Bach,(and his brother) WE DID GREAT.

K6DKK/6 and WN6DVA/6 1149 QSO's --"B" 10-200 watts for a total of 3338 points! That made us 6th in the nation for 5 xmtr Clubs! AND THAT MADE US NUMBER ONE IN W6 LAND ! ! ! It just goes to prove what a dedicated bunch of PARTICIPATW: ORS can do when they get together. CONGRATULATIONS.

Want to take this opportunity to thank PAARA for their attitude regarding the Plaque. The agreement had been that the LOSER would buy the Plaque. As it turned out SCARS was not even in the running so reniged. PAARA came through with a very fine Plaque and presented it to San Carlos on the evening of the Christmas Party and inauguration party.

Another outstanding acitivity during the past year has been the dedicated service of Jack McEnnerney and Jack Pierce in the conduct of the RADIO SCHOOL. Their success has been wonderful in providing the youngsters the potential for obtaining a license. Again we want to thank PAARA for the loan of a receiver and transmitter to allow the youngsters to get some "on the air" training. AND TO YOU YOUNGSTERS - we are all proud of your accomplishments! ! !

Another PARTICIPATOR activity was the PAARA auction in which several of our members gave invaluable service. Of particular value was that of Mike Bach and his brother, Greg Garcia and all the others- we appreciate your help.

Finally we are very happy with the turn-out for the Christmas party. It was most enjoyable to see all the families get together and exchange greetings and renew old acquaintances. HAPPY NEW YEAR TO ALL

Gene WA6NVU

QUEMENTS

"WHERE YOUR FRIENDS AND NEIGHBORS TRADE"

THE AMATEUR RADIO FRATERNITY'S SUPER MARKET

THE MOST COMPLETE STOCK OF ELECTRONIC PARTS IN THE WEST

PARTS FOR ALL MAJOR EQUIPMENTS, COMPONENTS AND SETS

WE CARRY FIRST LINE EQUIPMENTS OF ALL

MAJOR MANUFACTURERS

IN THE USA

OUR MANY LINES OF FOREIGN MANUFACTURERS ARE MOST OUTSTANDING

WHEN YOU NEED PARTS SEE US

AND DON'T MISS

OUR BIG "Q"

LINE

CANNOT BE BEAT AND IS WITHOUT COMPARE IN PRICE

TRY IT

LET US OUTFIT YOUR STATION, TEST BENCH, OR LABORATORY NOW

USE YOUR CREDIT CARD OR OURS

COME SEE

QUEMENTS

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