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AFFILIATED CLUB



AMATEUR RADIO  
STATION W60TX

VOL. XVIII

1974

# PAARA

## GRAPHS

PALO ALTO AMATEUR RADIO ASSOCIATION, INC.

MENLO PARK CIVIL DEFENSE RADIO CLUB, K6YQT

Apr. 74

PAARAGRAPHS -- the official organ of the Palo Alto Amateur Radio Assoc. and the Menlo Park CD Radio Club.

VOLUME 18

No. 4

April 1974

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V. Pres. Mike Eccles G3PPE/W6

Sect'y: Hal Moore, W6DEF

Treas: Paul Churchill W6QBY

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\*\*\*\*\*PAARA-PHS BRANCH\*\*\*\*\*

Editor-in-chief: Rickard Ferranti WA6NCX

Chief Assistant: Gary Perazzo K6LNU

Cover Design: Ed Ripp

Mailing: Ed Fairbanks and his band of hard workers.

Chief Printing engineer: Guido J. Ferranti

\*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\*

Policies: Membership includes subscription to PAARAGRAPHS

Annual dues are a measly \$4.00

Subscription to PAARAGRAPHS only is \$1.00 per year

Pay up! You might be dropped from the mailings!

SEND all negotiables (i.e. Money) to PAARA, Box 911, Menlo Park

94025

Dues are on a calendar year basis.

\*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\*

Anything newsworthy, letters, articles, complaints, old magazines, gasoline, nasty comments, etc. sent to:

Rick Ferranti WA6NCX OR Gary Perazzo

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GET ACTIVE IN PAARA \*\*\* \*\*\* \*\*\* WRITE SOMETHING!!!!

PAARA PICKIN'S ---- ANNOUNCEMENTS AND OTHER GOOD STUFF

OUR NEXT MEETING April 5, 1974. 7:30 PM sharp at the good old Menlo Park Recreation Center.

Program: Mike Talent, W6MXV, will give a very interesting talk and demonstration of Slow Scan Television. DX tape recordings (video), demonstration of cameras and monitors, and also converters from slow scan to fast scan (with digital memory) and vice versa. All you ever wanted to know about SSTV but were either (a) too shy or (b) too lazy to ask!

Coffee -- Donuts -- eyeball QSO's -- raffle -- fun

Board of Directors will meet in our High Renaissance trailer in the SRI parking lot off Ravenswood drive in menlo Park, 7:30 PM and the date is the usual first Wednesday after the meeting, April 10, 1974

THE PAARA NET is on illimitable Admirable Modulation every monday nite at 8:15 PM on 145.24 mHz plus or minus a few zillion cycles (oops, I mean Hertzes). Users, Communicators, Senecas, Clegg's, and even Andy's home-brew rig is welcome -- come on the air and join the gang for a 100% certified useless (but fun) ragchew.

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THERE IS A VERY WORTHWHILE EVENT coming up on Saturday, April 6, 1974. It's called Walk for Mankind and/or Project Concern whereby 1500 people will walk 20 miles from Stanford to Mountainview and back again and collect pledge money for a very worthwhile cause -- helping defray hospital expenses for Mexican-American children at Stanford. WE NEED MOBILES WITH ANY TYPE OF RADIO EQUIPMENT TO ORGANIZE THIS THING AND PROVIDE VALUABLE PUBLIC SERVICE! Starts at 8:30, ends at 5:00 PM. For any information or volunteer work, CALL Andy Korsak, VE3FZK/W6, office 326-6200 ext 2853, or at his home at 366-5228. Help if you can!

MORE PAARA PICKIN'S \*\*\*\* ANNOUNCEMENTS \*\* YES

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PAARA'S planning a super homebrew contest!!!! Yes! do you build any sort of ham equipment??? Aren't you proud of it, even though it came from an article in this magazine?? Then be prepared to show it all off at our contest coming up this summer -- or get started on a VHF rig (for our net, of course) or build a transistorized version of an r390/URR or even transistorize your goldfish! YES! Get Ready!!!

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Ed Fairbanks informed Ye Editor, a student at the University of Santa Clara, that prolonged streaking was the ultimate cause of his recent bout with the flu!!

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The Grizzly Peak Amateur Radio Club, owners of the WB6ABM repeater in these environs, is having a super-duper Auction on April 25th. It will be held in the Eagles Hall, corner Carlson and Central, in El Cerrito. Bring your junk, er..gear, in from 8 AM till 12 noon and the auctioning runs from 1PM to 10PM. After all that time you should be able to bring back twice as much gonk as you brought! This club typically has 100 members at each meeting so there should be quite a turnout. Get together in a carpool with some of your ham friends and buy and/or sell some stuff all together. Save Gas!!!

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HERE'S A GOODIE FOR SALE, TRADE, SWAP OR OTHER BARTER:  
 Makes my AM blood boil -- A full AM kilowatt transmitter, all rackmount, UTC xfmers, 80,40,20,15 meters, 813's in the final, all beautifully homebrewed with manual and notes. Signal Shifter Exciter; needs one 805 modulator (\$5.00 at a local shoppe). Will swap for stereo equipment or sell. Good deal.  
 CALL Ron Teal at 493-2376 and don't miss this one....

5

PAARA BOARD OF DIRECTOR MEETING MINUTES-- MARCH 6, 1974.

Meeting was held at Andy Korsak's home on Lakemead Way in Redwood city. Called to order at 1950 local time. Present were Fred Canham, K6YT, Ed Fairbanks, W6AIN, Bob Baum, W6BFH, Terry Conboy, WB6GRZ, Andy Korsak, VE3FZK/W6, and Hal Moore, W6DEF.

Techincal committee reported that the two meter xmtr had bee tested (two of them) at SRI. By the use of the test instruments a true picture of the output spectrum of the transmitters was shown. More work needs to be done on them.

The next meeting will be Mike Talent W6MXV telling about his development of the Slow Scan Converter.

We are all invited to attend a meeting of the San Carlos Radio Club at the San Carlos City Hall on the third Thursday of March. We are urged to form carpools. Larry Reed will show his latest pictures from round the world.

Field day was the next subject and it will be held on June 22 and 23. We will have three transmitters -- one on VHF, one on CW, and one on SSB. A site has yet to be chosen and team captains yet to be named. Fred will obtain the generator from the person who now has it. Ed will obtain the Brake Controller for the trailer from the property custodian (I thought Ed was the property custodian!) An attempt will be made to work oscar during Field Day.

The PAARA Auction-Flea Market will be held on Oct. 4 and Fred will inform CCRC all about it at the next meeting.

Ed informed us that the new postage rates put the cost of mailing Paaragraphs from 4.8 to 6.1 cents each.

Instead of Greenwich-Mean-Time it is now Universal Coordinated time. The Greater Bay Area Hamfest will be held at the Royal Coach Inn on October 26 and 27. Vekko West K6ORP is the Chairman of the committee in charge. Fred questioned as to PAARA'S interest in it. A motion was made seconded and passed that the representative to CCRC, who is also the president, be authorized to spend up to \$100.00., to be used at his discretion, toward the financing of the Hamfest.

A motion was made, seconded, and passed that Andy be in charge of a Home-brew, Show and Tell contest at the Fest.

CON'T

## BOARD OF DIRECTOR MEETING MINUTES CON'T.....

A discussion was held about the use of two meter equipment for CD purposes in this immediate area rather than the use of the repeater. If a need should arise for traffic to be passed to other cities in the range of the Repeater we should have this facility.

Andy announced that the June meeting will be Lambert Dolphin of the SRI Radio Physics Dept.

de Secretary Hall Moore, W6DEF  
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Taken From "Reducing Broadcast Station Interference"

1970 ARRL handbook, slightly revised.

"...the most direct approach to the problem of broadcast station interference is to plant a bomb between the antenna output of the transmitter and the station's antenna. Such a device provides sufficient attenuation, and prevents the broadcast station signals from reaching the ham receiver's front end, thus solving the cross-modulation problem.

An effective explosive, containing two 'special gelatin' sticks of dynamite in cascade, is shown. It offers sharp rejection to signals in the 500-1600 kHz band but does not impair reception above or below the broadcast band."

(Ed.'s note -- while I haven't been driven to try such a rather drastic measure, I have a feeling it should work quite well!!!)

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The Redwood City Civil Defense and Disaster Communications Net meets every Monday nite at 1930 local time on 145.49 mHz AM. It's a good way to awaken and warm up for PAARA'S net at 2015 local, 145.24mHz. If all you have is FM (and this is not a very well-rounded way to be) then try k\_QFO on Mondays at 2000 local time on 146.25 mHz FM input and 146.85 FM output.

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GET ACTIVE IN PAARA \*\*\* WRITE SOMETHING FOR PAARAGRAPHS!!

MORE PAARA PICKIN'S AND ANNOUNCEMENTS, AND INFO (GOODIES)

Hal Moore, our very active Secretary, with call W6DEF, retires from United Air Lines on April 30th.

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Notice that your postage went up??? Well, so did the postage of PAARAGRAPHS -- even though they should let us send such a great masterpiece for free. So we ask all recipients of this gem (ahem...) to send their subscriptions of \$1.00 if they haven't yet. We really don't want to be fashionable and raise our subscription rate. So -- one measly buck you delinquent subscribers. Anyhow, if you havent' the gas to get to the meetings --- you can read about it here!

\*\*\*\*\*-----\*\*\*\*\*-----\*\*\*\*\*

Our newest member is Fred Heward, K6EER, who lives in lovely Belmont. He joined the PAARA net last Monday night on 145.2<sup>1/2</sup> mHz. Already a good club member!!!

\*\*\*\*\*-----\*\*\*\*\*-----\*\*\*\*\*

Gerald Tucker up-graded from WN6LNV to WA6LNV recently and a very hearty congrats to you!!

\*\*\*\*\*-----

OSCAR 7 is like OSCAR 6 (now up there) only more so. It will have 146 to 29.5 mHz, and 432 to 146 mHz repeaters. In addition there will be beacons on 29.5, 145.98, 435.1, and 2304 mHz.

More OSCAR: All beacons and repeaters are not active at the same time, these being switched from ground control. It is expected to be put into orbit 180 degrees away from OSCAR 6, so to speak. Neat, huh? Lots more luscious ditties and other good stuff in the February issue of QST.

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By the way, the latest is that OSCAR 7, originally scheduled for launching this month, won't go up till summer. Oh, well, more time to get something for 432.....

\$\$\$\$\$\$PAARA FINANCIAL REPORT 2/10 thru 3/11/74\$\$\$\$\$

Total funds on hand 2/10/74 \$1443.12

Income

Dues	\$16.00
Subscription	2.00
Raffle	<u>13.35</u>
	\$31.35

Disbursements

Bank Endorsement Stamp	\$ 1.20
CCRC dues	6.00
SWR bridge for trailer	22.42
DMV -- late fee (tsk!)	2.00
Postmaster	25.00
Raffle prizes	4.90
Donuts and Coffee	<u>3.29</u>
	\$65.31

FUNDS ON HAND 3/11/74.....\$1409.16

Savings account	\$1008.80
Checking account	388.61
Petty Cash	<u>11.75</u>
	\$1409.16

de Paul K. Churchill, W6QBY, PAARA's illustrious treasurer.

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

Report of the Civil defense meeting held at Fire house #3 in Redwood city on February 25, 1974. Dick Collins, K6ANN was the Master of Ceremonies. About 35 people were there, representing the cities of San Bruno, Burlingame, Belmont, Redwood City, Menlo Park, and representatives of the City of Redwood City in the forms of the Fire Captains of the County of San Mateo.

Fire Chief John Kellner, the Fire Coodinator of the County of San Mateo was called upon and he told of the need for cooperations between communities in the case of a disaster. Then he asked that Amateur Radio Operators organise to take care of the overload that will develop during a disaster. He said that amateur radio operators will be called upon by the Fire Department in order to drill and become prepared for the need. He suggested that perhaps

Con't.....

CD MEETING CON'T

an organization be formed and maybe a certain amount of social functions could be planned to help hold the interest of the group.

Another meeting will be called shortly at which time we will decide and/or consider the formation of an official organization.

Reported by Hal, W6DEF, EC for Redwood City, Menlo Park Area.

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Although it was mentioned last issue, I make this special announcement for one of our best old-time members -- and also because he took the time to write me a brief but kind note: Marcellle B. Donovan, XYL of Milt Donovan, W6MFN, passed away at Stanford hospital on Friday, January 18. They would have celebrated their 35th wedding anniversary on April 10th. Our sincere condolences, Milt.

\*\*\*\*\*-----\*\*\*\*\*-----\*\*\*\*\*

### FOR SALE FOR SALE FORE SALE!!!!!!

Both the President (of our club, that is) and the Editor can vouch for the seller of this fine gear -- I've talked to and heard Woody on many times on AM (hooray) on 100 meters. That should say it all. Lots of fine gear from a fine ham:

#### THE FOLLOWING "HAM" AND TEST GEAR FOR SALE

2 ea. Elmac AF-67 xmtrs w/ant. and PTT relay/mute	\$40.00 ea.
1 ea. " PMR-7 dual conversion rcvr.	25.00
1 ea. Pierson KE-93 dual conv. rcvr w/ac and dc pwr	5.00
1 Central Elec. 20A exciter w/VFO for 160m	80.00
1 C.E. 100V xmtr w/160 m operation installed	210.00
1 Hammarlund HQ 170 tri-conv rcvr w/speaker	120.00
1 GPR 90 general coverage .55 to 30 mHx rcvr	90.00
1 Johnson Valiant I xmtr (solid state supply)	100.00
1 275 watt matchbox w/SWR meter; Johnson	35.00
1 Collins R390A(URR) rcvr, digital readout	225.00
1 Realistic DX-150A solid state receiver	90.00

THERE'S MORE ON THE NEXT PAGE .....

\*\*\*\*\*-----\*\*\*\*\*

PAARAGRAPHS IS WHERE ALL THE FUN BEGINS \*\* JOIN/SUBSCRIBE!!

The Following Heath Test Equipment wired and factory tested  
 One (1) each of all the following (new).

Heath deluxe xstr checker IM-36 (\$61.95 kit)	wired	\$50.00
" Impedance bridge IB-28 (\$89.95 kit)	wired& tested	75.00
" Decade resis. Box (IN-17)(\$27.95 kit)	wired	22.50
" Signal Tracer IT-12 (\$25.00 kit)	wired	17.50
" 5" scope 5mHz w/elect switch for dual trace		150.00
" High Voltage regulated pwr supply IP-17		90.00
" Low voltage regulated pwr supply IP-27		100.00
" Solid State VOM IM-16 (\$46.95 kit)	wired	40.00
MERCURY model 2000 tube tester and transistor checker		
including picture tube tester adapter (reg \$160.00)		85.00
I & K picture tube tester and rejuvenator Mod 465		90.00
B & K High voltage probe to 30 KV		15.00
RCA marker Adder mod. WR-70A		45.00
RCA Sweep generator WR-69A (like new)		95.00
Heath RF signal generator SG-2		25.00
Sencore bi-polar and FET checker (like new) TF-17	make offer	
RCA VTVM Sr. (fair)		25.00

Address all inquiries to:

P.W. Pinford WØMRH  
 561 Atherton Avenue  
 Novato, California 94947

There have been inquiries  
 made on some of the above but  
 the first cashier's check  
 received will bag the goodie!

How 'bout that????---an auction right in PAARAGRAPHS!!!!!!

\*\*\*\*\*-----\*\*\*\*\*

Do you think you know how to solder???? You may want to read  
 this well-written article by Cecil DeWitt, WØRMB, taken  
 from the January issue of HAM HUM, and excellent magazine.

SOLDERING      SOLDERING

1. Clean Iron -- oxide does not conduct heat
  2. Size of iron -- The need for the right heat is very important. Too low heat and the solder just dabs on the work -- doesn't flow. Too much heat can destroy parts and printed circuit boards. (esp. xstrs...)
  3. Temperature -- To make a good connections solder has to unite with the metal. To do this enough heat is needed
- Con't.....

to flow the solder and make it unite with the top layers of the metal.

A soldering gun is probably the worst type of soldering tool when it comes to building kits.

The correct way to get heat to the solder and work is to take an already hot soldering iron, well tinned, and apply a small amount of solder to the connections to be soldered. A small amount of rosin-core solder on the iron makes a better thermal contact.

Heat the gun tip, if you use a gun, BEFORE it reaches the work, and as soon as the connection is soldered, remove the hot tip. This lets the wires from the work serve as a heat sink.

#### SOLDER

60-40, 50-50, 40-60. This is the reference to the amount of tin to lead that is in soft solder. 60-40 is 60% tin and 40% lead.

Each mixture of solder has its own best use. 60-40 is about the best all-around solder. 50-50 is for bare metal use when metal has not already been tinned. 40-60 and 10-90 make good fill solders, for auto bodies and such.

Tin in solders helps lower the melting temperature and makes the solder melt easier, flow smoother.

#### WORK SURFACE

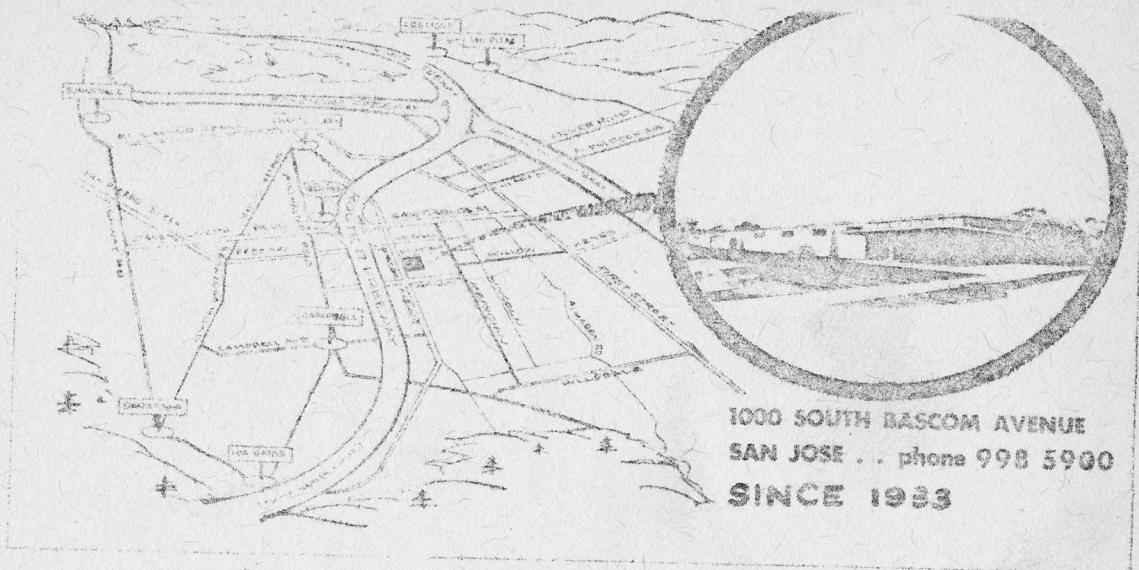
Clean work surface is a must. The metal to be soldered must be free of dirt, oil, finger prints, corrosion, and oxides. Any and all of these will prevent a connection and the unity between the metal and solder will be impossible to accomplish.

#### FLUX

The flux is an aid in cleaning the work surface. Anything that will clean the surface will do. Acid (a definite no-no and guarantee voider in radio work), resin, soap, steel wool, anything that will let the metals combine is classified as a flux.

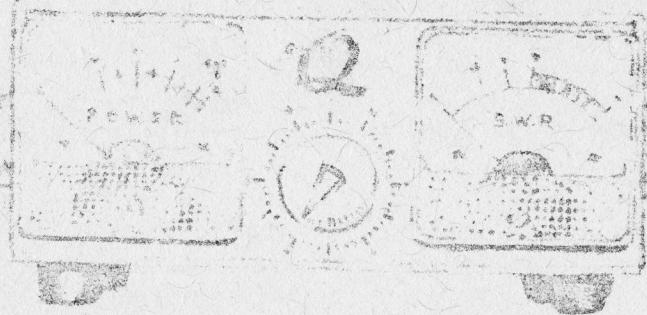
Clean surface, good solder, right soldering iron temperature, and you have a big part of the solder job licked.

(Ed.'s note: There is nothing more pleasing to watch a nice hot glop of solder heat up the metal and finally get sucked onto it. Now if my projects would only work....!)



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