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AFFILIATED CLUB



AMATEUR RADIO  
STATION W6OTX

VOL. XIII

1975

# PAARA

## GRAPHS

PALO ALTO AMATEUR RADIO ASSOCIATION, INC.

MENLO PARK CIVIL DEFENSE RADIO CLUB, K6YQT

Dec. 75

OUR NEXT MEETING: is the Christmas Party! It's Friday, December 5, 1975 at the Gold Platter Restaurant, 1000 El Camino Real, San Carlos, California. Happy Hour Starts at 7:00 PM; dinner served at 8:00. Menu is a choice of Roast Beef at \$6.50 per head or Roast Turkey at \$6.25 per head; tax and tip included. The Gold Platter has a large banquet room and will provide bar service for Christmas Cheer. Our neighbor San Carlos (the radio club, that is) will provide the decorations and music.

GIFT EXCHANGE is planned. Bring a \$3-\$5 present for a member of your own gender if you want to participate in the gift exchange. AND there's a drawing for door prizes purchased from joint club funds. WE are looking for prized donations and/or party favors.

INVITE YOUR CRAZY FRIENDS AND EVEN YOUR WIFE! All are welcome to this yearly festive occasion.

\*\*\*\*\*

THE PAARA Board of Directors will meet on the usual wednesday evening the meeting, on December 10 at 7:30 in the Sardine Can, the W6OTX super Christmas Special Trailer. This 8-wheeled abomination has its locus of existence at 333 Ravenswood Avenue, Menlo Park.

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YES INDEEDY! The PAARA net is alive and well on TWO frequencies; 145.24 mHz for the Amplitude Modulators and Andy (since his Two'er hardly sounds like AM) and with Classy, Good-taste, High quality FM (frequency or phase (fase?) modulation) from ICOMS, Drakes, and the ilk up there on 147.45 mHz simplex. This all happens every Monday Night at 8:07 PM. You will be bodaciously amazed at the good things happening here, what with all the Boffo Topics discussed. Real Rag Chew (with nefarious gnawing to boot). Be there.

\*\*\*\*\*

NOTE BENE: This issue is back to 12 pages -- you people did it! Hence, for a New Year's Resolution keep it up and promise to write in at every possible opp'ty. It makes Ye Editor happy, the members happy, gives you a 100% Shot-in-the-Arm Ego Boost, and supplies more paper to wrap fish in, etc. Thanks much for the support.

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PAARAGRAPHS IS THE OFFICIAL ORGAN OF THE PALO ALTO AMATEUR  
RADIO ASSN., AND THE MENLO PARK CD RADIO CLUB.

Volume 19

Number 12

December 1975

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PAARA and Menlo Park CD Radio Club Officers:

President: Fred Canham K6YT 943-9238

Vice President: Andy Korsak VE3FZK/W6 366-5228

Secretary: Terry Conboy WB6GRZ

Treasurer: Paul Churchill W6QBY

Trustee of W6OTX: Fred Canham K6YT

Trustee of K6YQT and M.P. Radio Officer: Bob Allen W6WQD

Property Custodian: Ed Fairbanks W6AIN

\*\*\*\*\*

Board of Directors: Chairperson: Fred Canham K6YT

Members: Paul Thekan WN6IJP

Andy Korsak VE3FZK/W6

Terry Conboy WB6GRZ

Ed Fairbanks W6AIN

Jerry Tucker WA6LNY

Del Philpott WA6YOQ

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- POLICIES:
1. Membership includes PAARAGRAPHS subscription.
  2. Dues are a very cheap \$4.00 per year.
  3. \$1.00 gets you PAARAGRAPHS for a year.
  4. PAY UP NOW! on a calendar year basis.

SEND your money, cheques, loct ,cash, spare bucks, bread  
(rye or whole wheat) etc. to: PAARA Box 911  
in Menlo Park, California 94025

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PAARAGRAPHS PERSONAGES and other Weirdos

Editor-in-Chief: Richard Ferranti WA6NCX

Cover Design: Bruce M.C.T. Rapp

Labels and Mailing: Ed Fairbanks and Paul Thekan

Main Mobileer and Wretched Wanderer: Dave Waters WA6AWZ

Oldtime Radio Nut and Reluctant FM'er: Gary Giampaoli

Chinese Culture Corner Contributor: Cedric T.L. Chan (GMD)

PLEASE LOOKIE AT THIS ISSUE and SEE that people just like  
YOU can make a contributich! WRITE!! Rick Ferranti

WA6NCX 1234 Santa Cruz Avenue Menlo Park, Ca. 94025

Weekdays: 408-246-1400 rm 1001 Weekends: 415-324-1539

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GOOD THINGS TO BUY, SELL, LOOK FOR, CARP ABOUT, ETC;

Anybody got November 1971 QST, or any issues between Jan 5 1950 and Oct 1954? Also, anyone got Ham Radio from March thru June 1968 and Aug 1968, or the RTTY Journal March thru Sept 1974? Terry Conboy at 364-3107 will pay reasonable prices for them or haul them away!

\*\*\*\*\*

FOR SALE: 2 Eimac 4CX300's, New at \$20.00 for the pair.  
Call Ed Fairbanks W6AIN at 322-0319.

\*\*\*\*\*

Note for Web Webster, W6CUN: Bet you thought you would never see your 7/16" box wrench again! Well, it's been located in the bottom of a mess of Field Day Gonk, and Fred K6YT will bring same to the January Meeting.

\*\*\*\*\*

PAARA had three members participate in the March of Dimes Walkathon on Saturday November 15, with the SPECS net. Ed Fairbanks, Jerry Starkey, and Fred Canham helped with communications for the walk which started at Murphy Park in Sunnyvale and came as far north as San Antonio Road. Your work is greatly appreciated.

\*\*\*\*\*

FOR SALE: Regency HR-2 with NB Filter and Mosfet Preamp. Includes crystals for 52-52, 94-94, 34-94, 16-76, 22-82, and 28-88. Firm at \$125.00. Call or write William Thomas WB9KPT/6, Apt C-206, 555 N. Middlefield Rd, Mountain View, California 94043. 969-4897

\*\*\*\*\*

For Sale: 18AVQ, located in Los Altos, taken down and missin' the top hat and one clamp. Parts list and prices included, readily available. Write Charles Chernak, WB6WFW/7 at 1016 Theophilus Tower, University of Idaho, Moscow, Idaho 83843 or Call 968-4530 between Dec. 18 and Jan 5 when he's home in Los Altos. Charlie would also like to hear from someone who can make daytime phone patches on 40 meters into the Palo Alto or Mountain View area for students and himself. Write him at the above address and set something up!

\*\*\*\*\*

PARTICIPATE IN PAARA AND HAVE SOME FUN.

## MORE PAARA PICKIN'S AND GONK

FOR Sale: Swan 500 (10-80 meters SSB/CW/AM transceiver) and Swan 250 6 Meter SSB rig, with Swan AC Power Supplies, both for \$500.00 cash. In fairly new condition, would like to sell both together. Call Lee Smith at 365-1490.

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

FOR SALE: Beautiful Model 19 Teletypewriter/Tapeset. A 5-level Baudot machine great for RTTY or for use with an ASCII interface and one of the new Microcomputers. Runs 65 W.P.M., can punch up tapes, has built-in tape reader and character counter, standard keyboard, Ac magnet supply (solid state), table, and printer. Runs flawlessly all day and night, just oiled, perfect. With 5 rolls of paper tape, 8 rolls of carbon type paper, ready to go. A first-class bargain at \$85.00. Come try it out before you buy! Call Rick Ferranti at 415-324-1539 weekends or 408-246-1400 rm1001 weedays/nites.

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

FOR SALE: SB102 with 400 Hz CW filter, SB650 (digital frequency display), SB600 console, HP23A Power Supply. Recently aligned by Heath, complete with all connecting cables and manuals. Mint condition. Model 15 KSR with table, Power supply, sync motor, and communications keyboard/type basket. Like new. \$600.00 for the lot complete. Fred Heward K6EER, at 1950 Oak Knoll Drive, Belmont, Cal. 94002. 593-2319.

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

NEW MEMBERS: PAARA Welcomes the following new people:

Hugh Byrne WN6DLH 3702 Redwood Circle, Palo Alto  
94306 493-7144 Hugh is on 40 Meters CW

Dave Waters WA6AWZ 1246 Santa Cruz Ave Menlo Park  
94025 321-4257. Dave is on 2 mtr FM and has bugged  
Ye Noble Editor about ham radio since the year 1,  
mainly because he is his next-door neighbor!

HAL MOORE, W6DEF, a good friend of PAARA and former E.C.,  
has a new address way up in the foothills of the Sierra.  
Reach him at 286 Terrace Street, Auburn, Cal. 95603.  
Landline at 916-823-2600. Hal sends along best regards  
in a nice letter to Ye Editor, complete with an article!

## MINUTES OF THE LAST THREE (3) BOARD MEETINGS .....

de WB6GRZ Terry

Sept. 10, 1975: Attending were K6YT, W6AIN, W6QBY, WN6IJP,  
K6FS, and WB6GRZ.

**Business:** 1. Motion carried to retain rules and prices  
of 1974 Auction/Flea Market.

2. Secretary instructed to send letters to many ham busi-  
nesses requesting donations for door/raffle prizes.
3. Drawings of proposed antenna and access to SRI steam-  
plant given to K6FS to forward to SRI.
4. Discussed need for PAARAGraphs Editor. No volunteers  
or suggestions. (NCX to the rescue...)

October 8, 1975: Attending were K6YT, W6QBY, WN6IJP, W6AIN,  
W6FLE, K6FS, WB6GRZ.

**Business:** 1. K6FS reported that antenna-steam plant drawings  
are in SRI's hands and that they had taken no action.

2. Noted that safety belt bill finally received. Amount  
is about \$77.00.
3. Approximate auction proceeds reported by W6QBY, was  
detailed in last issues; net income about \$225.00.
4. Discussed condition and possible use for 1963 Dodge  
Motor Coach. Moved, seconded, and approved by WN6IJP,  
W6QBY, K6YT, W6AIN, and WB6GRZ to favor acquisition  
of this vehicle with the promise to SRI to remove it  
from their premises if it is donated to PAARA/MPCD.

November 12, 1975: Attending were K6YT, W6QBY, W6NIR, and  
WB6GRZ.

**Business:** 1. Christmas Party:

Voted to set \$7.50 limit on dinner

Voted to match San Carlos' \$25.00 for prizes  
Will take place of the December meeting

2. Division Directors Meeting Delegate will be Steve  
Stuntz, K6FS. This is his second year as delegate.
3. Voted to supply up to \$30.00 to Steve (E.C.) for mailing  
S.E.T. announcements.

OUR JANUARY MEETING will be held on the 9th (instead of the  
2nd) to avoid conflict with New Year Weekend holiday.

\*\*\*\*\*

Plans for the Jan 24-25 Simulated Emergency Test are in the  
offing from K6FS. More next issue or 145.24/147.45...

A  
 DAY  
 THATS  
 FULL OF  
 HAPPINESS  
 FOR YOU AND  
 YOURS WE PRAY  
 AND MAY A GLEAM  
 OF FRIENDLY CHEER  
 MELT ALL YOUR CARES  
 AWAY-LET SINGING VOICES  
 FILL THE AIR AND CHRISTMAS  
 BELLS RING OUT. LET PLENTY  
 CROWN YOUR FESTIVE BOARD WITH  
 HEAPS OF FOOD AND FUN  
 AND  
 MAY  
 YOU  
 SAY  
 WITH TINY TIM  
 "GOD BLESS US EVERY ONE"

WISHING YOU A MERRY CHRISTMAS AND  
 A HAPPY NEW YEAR

#:  
 (Courtesy HP and my Model 19 TTY)

COME ONE!!! COME ALL!!! TO THE 1975 PAARA CHRISTMAS  
 PARTY!!!!

DATE: Friday, December 5, 1975  
 Time: Happy Hour Starts at 7:00 PM, Dinner served at 8:00  
 PLACE: The Gold Platter, 1000 El Camino Real, San Carlos  
 Cost: \$6.50 for Roast Beef, \$6.25 for Roast Turkey, per  
 head, tax and tip included.  
 THERE WILL A BAR AVAILABLE FOR CHRISTMAS CHEER.  
 Participate in the Gift Exchange--bring a \$3-\$5 gift for  
 a person of your own sex (how racy).  
 Raffle -- gifts -- Music and decorations by the San Carlos  
 Club -- Good Food -- Good People -- Fun

Saturday, November 8 our new ARE/Emergency Coodinator for Menlo Park-Redwood City, Steve, K6FS, attended the Fall semi-annual meeting of the Regional Disaster Communications Council at the Red Cross Chapter Building in Oakland.

Present were other E.C.'s and the representatives of MARS, CAP, RACES, and at least one CB group. The day-long program consisted of presentations describing effects of Electromagnetic Pulse (EMP) and earthquake damage on communications, and a rundown of State and Region disaster-relief communications planning. Jim Knochenhauer, K6ITL, of San Mateo, was introduced as the new appointee for the post of Northern California Regional Emergency Coodinator, AREC/ARRL. This is a new type of E.C., and is intended to provide coodination among S.E.C's, and improve liason with other services such as RACES, MARS, CB groups, and county and city agencies. More later: perhaps we could get Jim to give us a pitch as part of a PAARA meeting program.

\*\*\*\*\*

By the way, anyone with a November 1950 QST (and everyone's got one of those, right?) should reread all about speech processing; the lead article is by former W1RXX, now K6FS. (Noted in reference in November 1975 QST under the heading of "25 Years Ago...". That long ago, Steve?

\*\*\*\*\*

**FOR SALE:** Gonset VFO for 6, 2, and 220 mHz. Works great, can be modulated for FM. With manual \$80.00  
 E.F. Johnson Phone patch, ready to go \$35.00  
 Turner Crystal base mic, Model 454X, mint \$20.00  
 Realistic CB mobile, TRC-9, 3 channels 9-21-23 new \$37.50  
 G.E. A.C. Load Visualizer, 50 amps. Like new \$35.00  
 Volt-amp meters to 150 VAC, in box. Good cond. \$10.00 ea.  
 2 Michelin tires, radial type steel belted 135-380/  
 135-15X. 1 is new; both together for \$20.00 or offer  
 Lady Vanity Hair Dryer, 4 heat, Model HD2, like new \$7.00  
 Acme Q-Beam Movie Flood lite with mount. New \$10.00  
 Farmer Electric Eye relay. Model PE#3. New \$25.00  
 FT-243 2 meters: 146.142, 146.25, 145.35, 145.76, 146.8,  
 and 146.88 mHz, only \$1.00 each. Call Charles Carpenter, K6HPP, after 5:30 pm wd or anytime w.e. at 325-4845.

The B.H.F. Band an article by Mike Eccles, G3PPE  
(Bodacious High Frequency)

Wonder why I've not been on the old Two Meter net of late? Well, I've found a new band, yes, B.H.F. On this band, I have an antenna with a gain of over 5000, a beam-width of less than 1/100 of a degree, and completely steerable in all directions. Did I marry Howard Hughe's widow and get her to buy me Nevada and cover it with phased arrays? No, I moved up to the 400,000 GHz band -- and that's a lot of Hz. How can you get on it? Easy, just tear yourself away from the two meter Monday night net, go outside and look up. Yes, you will be on B.H.F., the visible spectrum used by optical astronomers!

Seriously, how many of you recognize the planets, constellations, and star clusters? Did you know that you can see another Galaxy, Andromeda, with the naked eye, and that is DX at a distance of 13 million million miles. Remember the early days of radio, when just about every month, a new exciting discovery was made and hams were at the forefront of a growing scientific field? Well, that's how it is today with astronomy, many calling this the "Golden Age" of astronomy.

What, you don't know anything about mirrors, lenses, telescopes, etc.? Light waves are just as electromagnetic as radio waves, only shorter. The same principles apply. For example, did you know that to reduce reflection of light waves at the surface of a lens, a quarter-wave impedance transformer, normally called an antireflection coating, is used and it is designed for minimum S.W.R. using the same transmission line equations we are so familiar with at R.F. Give up ham radio? Certainly not, just extend your frequency range. So, if you always wanted to be amongst the stars, forget about show business and take up astronomy.

---Mike G3PPE

(Editor's note: This was written whilst listening to John Williams playing Rodrigo and Villa-Lobos).

Although Mike's article is 100% Cosmic, his musical tastes could use considerable expansion.....Y.N. Editor.

Good Announcement Dept: Mike and Pam Eccles, our British Odd Couple, finally managed to produce a harmonic, born Saturday November 15. A musically inclined, obviously intellectual boy, Mark Auden Eccles. Congratulations for the fine achievement!

\*\*\*\*\*

The AVQ10 Weather Mapping Radar De Hal Moore W6DEF/6

The AVQ10 Weather Mapping Radar measures distance by measuring the round trip travel time of a radio signal. It is on 5400 MHz, plus or minus 20 MHz. It's combination transmit and receiver antenna sends and receives a steady string of pulses, each two microseconds long. These pulses repeat themselves 400 times a second. During pulse transmission electronic switching simultaneously connects the antenna assembly to transmit and disconnects it from the receiver. After the pulse is transmitted the cycle is reversed. This cycle takes place for each transmitted pulse.

Signals reflected forward from the surrounding storm area paint a picture on the face of the indicator, a CRT. The brighter the picture, the thicker the storm clouds. The center of the indicator screen represents the aircraft. A series of concentric "rings" are painted on the screen by the electron beam, which is electronically synchronized with the antenna assembly so they rotate together. A rubber line is painted from the center to the bottom of the screen at the start of each rotation to indicate that the antenna and screen indication are in sync. Target distance, or range, is represented by the distance of a target picture from the center of the screen. Target direction is shown by the position of the target picture on the screen. This dissertation is by a former Radio-Electronic Mechanic who used to work for a certain "Friendly Airline".

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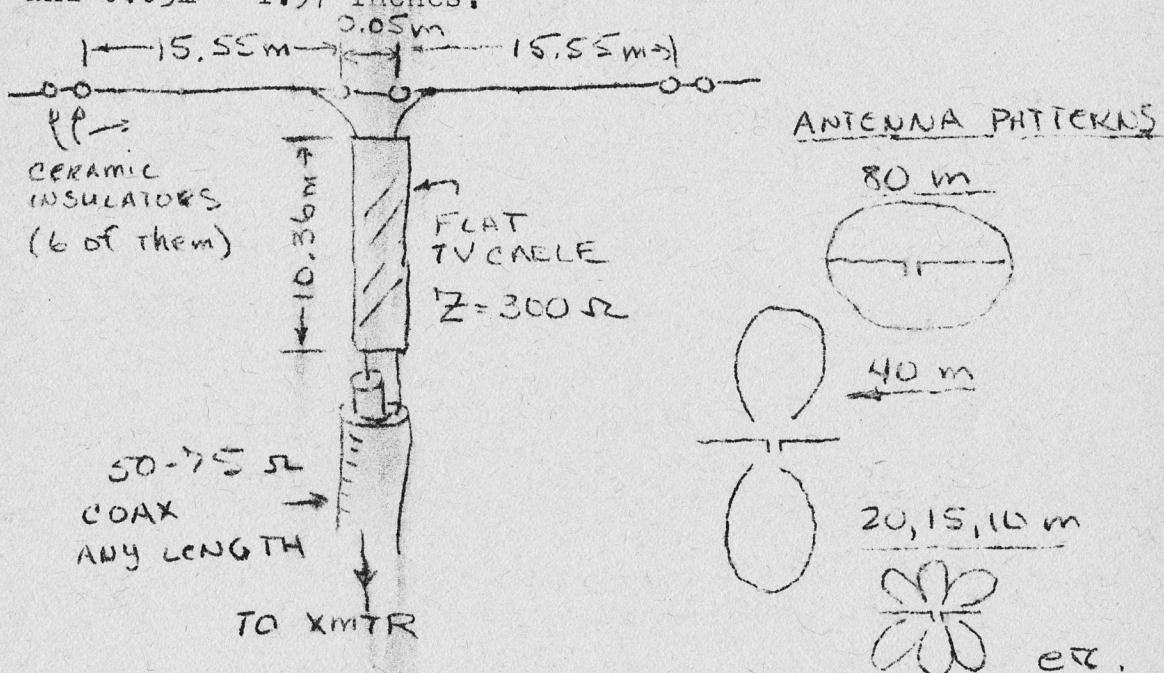
Speaking of airplanes, there is an old joke about a little old lady who asked the captain to stop flashing on the "Fasten Your Seat Belt" sign. She claimed that every time it went on, the airplane got awfully bumpy! (OK, OK, no more airplane jokes....)

A Cheap, Easy to Build, HF Multiband Antenna

By Tony Majster

This antenna is used quite often by European hams, and I used it myself when I was living in Poland. It also makes a good receiving antenna, but disconnect the coax shield (because of the high capacitance of the coax). G5RV designed this antenna.

Dimensions are in meters; for those who are conservative (Go Metric!) here are the dimensions in feet. Took me a half an hour and an HP-35 to figure it out!  
 $15.55 \text{ m} = 612.20 \text{ in.} = 51 \text{ feet}$ ;  $10.36 \text{ m} = 407.87 \text{ in.} = 34 \text{ ft.}$   
 and  $0.05 \text{ m} = 1.97 \text{ inches.}$

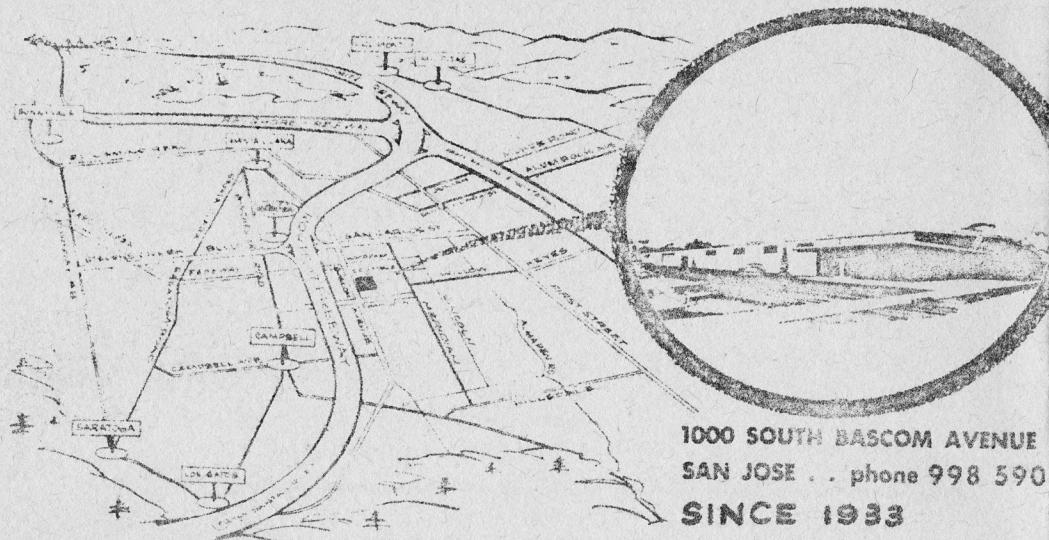


A Practical hint: Ever forgot to bring your solder when you go to fix a friend's radio, armed with a soldering iron? Well, wrap some solder around the end of the power cord, near the plug.

73, Tony

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This issue of PAARAGRAPHS was typed on Saturday, Nov 22, whilst receiving cultural delights by Vivaldi, Bach, and even George Gershwin.



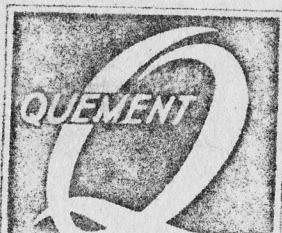
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