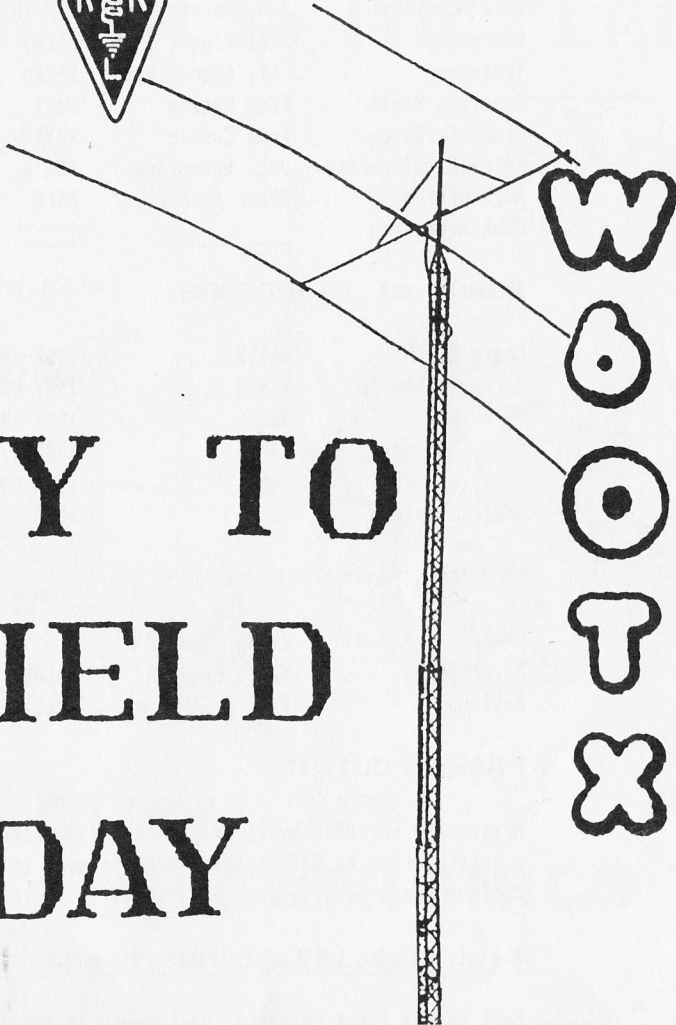


PAARA **Graphs**

JULY 1988



**W
6
O
T
X**

QSY TO FIELD DAY

THE OFFICIAL NEWSLETTER
OF THE PALO ALTO AMATEUR
RADIO ASSOCIATION

AND

THE MENLO PARK C.D. AMATEUR RADIO CLUB

PAARA



1988 CLUB OFFICERS

President	Gerald Tucker	WA6LNV	326-4980
Vice-President	Andy Korsak	VE3FZK	366-5228
Secretary	Bill King	N6CHI	595-0258
Treasurer	Lily Anne Hillis	N6PGM	325-5484
Trustee, W60TX	Fred Canham	K6YT	948-9238
Property/Badges	Fred Canham	K6YT	948-9238
Refreshments/Co-Prop	John Buonocore	KD6ZL	366-1658
ARES Officer	Steve Stuntz	K6FS	322-4952
Club Historian			

BOARD of DIRECTORS

Craig Smith	N6ITW	1987-88	326-8637
Gerry Wagstaffe	W6NIR	1987-88	325-4670
Perry Yelton	WR6E	1987-88	366-9481
Dusty Doster	K6MPN	1988-89	368-8156
Steve Stuntz	K6FS	1988-89	322-4952
Chuck Johnson	nc	1988-89	408-258-4857

PAARAgaphs Staff

Editor	Chuck Johnson	nc	408-258-4857
Advertising	Swede Swenson	N6CHL	368-8503
Mailing	Bill McElhinney	KA6LZI	325-9888

PAARA POLICIES

Membership in PAARA is \$6.00 per calendar year which includes a subscription to PAARAgaphs. Make payment to the Palo Alto Amateur Radio Association, P.O. Box 911, Menlo Park, CA 94026

Club Net 147.45 MHz Mondays 8:30 PM

Meet on the first Friday of each Month at the Menlo Park Recreation Center at 7:30 PM,

Send PAARAGRAPHS correspondence to:

Chuck Johnson, EDITOR
3309 Mt. Logan Drive
San Jose, CA 95127

VOL. 31 JULY '88

FROM THE EDITOR'S DESK

THIS ISSUE FALLS IN THE GAP BETWEEN FIELD DAY '88 AND THE FOURTH OF JULY: THE KEY DAYS FOR AMATEUR RADIO AND UNCLE SAM RESPECTIVELY. TNX FOR THE ITEMS SUBMITTED FOR THIS ISSUE. ALSO: SPECIAL TNX & 73'S TO PAARA'S FIELD DAY VOLUNTEERS, WHO WILL RECEIVE SPECIAL RECOGNITION IN THE NEXT ISSUE. HAVE A SAFE & SANE JULY AND SEE YOU AGAIN IN AUGUST. 73 de YOUR EDITOR...

+ JULY MEETING : FRIDAY JULY 8 +
- LATE-BREAKING QST DE N6CHI
BILL KING, PAARA SECRETARY.

SPEAKER OF THE MONTH

DOUBLE FEATURE

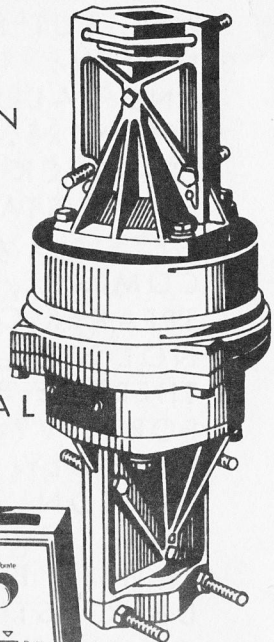
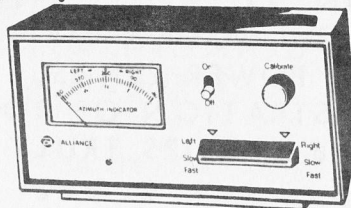
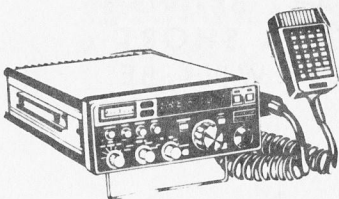
2- METER EQUIPMENT CALIBRATION NIGHT

- A N D -

A SHORT TALK ON ANTENNA ROTATORS BY YOUR PRESIDENT

DON'T MISS THIS SPECIAL TECHNICAL SESSION ON FRIDAY JULY 8TH!!!

-- PAARA PROGRAM QST.



PRESIDENT'S COLUMN

JULY IS RECOVER FROM FIELD DAY MONTH. AS OF THIS WRITING FIELD DAY IS STILL A FEW DAYS AWAY, BUT IF YOU PARTICIPATED COUNT YOURSELF AS A SURVIVOR. A FULL ACCOUNTING WILL ARRIVE WITH AUGUST'S PAARAGRAPHS. DID YOU READ ABOUT WALLY K6URO IN THE 20 JUNE TIMES-TRIBUNE? HE APPARENTLY SPENDS HIS SUMMERS ATOP MOUNTAINS WORKING DX. ALSO CONTINUED ACKNOWLEDGEMENTS TO K6FS AND OTHERS FOR REALLY RUNNING WITH THE BALL IN SUPPORT OF THE BLIND CENTER AT THE VETERANS HOSPITAL. WE NEED MORE CLUB SUPPORT ON SPEAKERS. FOR AWHILE ANDY VE3FZK WAS GETTING LOTS OF INPUT, BUT IT SEEMS TO BE PETERING OUT LATELY. HELP OUT BY GETTING NAMES AND CALLS, ETC., OF OTHER CLUBS SPEAKERS. I WOULD LIKE TO HAVE SOME FEEDBACK ON THE SUCCESS RATE OF THE ATV INSTALLATIONS. I HAVE DIFFICULTY GETTING A SIGNAL AND WOULD LIKE TO COMPARE NOTES. PERHAPS WE NEED A SPEAKER ON THIS (POTENTIAL USES, TECHNOLOGY, COVERAGE, ETC.). SHOULD THERE BE BONUS POINTS AT FIELD DAY FOR ATV? IF SO, WRITE A NOTE TO ARRL. THE JULY MEETING WILL BE A TECHNICAL SESSION. IF YOU WANT A FREQUENCY CHECK OF YOUR 2-METER GEAR, BRING IT WITH POWER LEADS. ALSO, A SHORT DEMONSTRATION OF ROTATORS WILL BE GIVEN BY YOURS TRULY.

de WA6LNV

FROM:

Field Day Rules

QST MAY 1988

THE OBJECT OF FIELD DAY:
TO WORK AS MANY STATIONS AS
POSSIBLE AND, IN DOING SO, TO LEARN
TO OPERATE IN ABNORMAL SITUATIONS
UNDER LESS-THAN-OPTIMUM CONDITIONS.
A PREMIUM IS PLACED ON SKILLS AND
EQUIPMENT DEVELOPED TO MEET THE
CHALLENGE OF EMERGENCY PREPAREDNESS
AND TO ACQUAINT THE PUBLIC WITH THE
CAPABILITIES OF AMATEUR RADIO.

THIS YEAR PAARA RENEWS ITS COMMITMENT
TO THIS IDEAL AS W6OTX. -ED.

QST DE GARY WA6VEF

1830 Polk Street
Concord, CA 94521

(SUBMITTED BY FRED K6YT. TNX, -ED.)

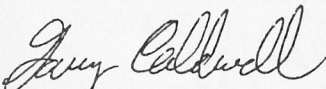
Dear PAARA Members,

On behalf of the membership of the Northern California Contest Club, I would like to thank you for your sponsorship of a trophy for the 1987 California QSO Party.

The award you sponsored, for "Top Club in California," was won by the California Institute of Technology ARC in Pasadena, CA. They were so pleased with their trophy that they are planning to sponsor one of their own for the 1988 contest!

NCCC appreciates PAARA's help in maintaining the California QSO Party as the biggest and best state QSO party on the contest calendar.

Sincerely,



Gary Caldwell WA6VEF
1987 CQP Chairman

PAARA BRIEFS

OSCAR (AMATEUR SATELLITE) NEWSLETTER:
BI-MONTHLY, SEND 6 SASE'S & \$10 TO:
MARGARET NAKAYAMA KB6HWV, P.O. BOX
6700, SAN MATEO, CA 94403.

BON VOYAGE TO ZL2LB MURRAY MILNER
WHO IS BOUND FOR HOME IN NEW ZEAL-
AND, AFTER A STINT AT STANFORD.

FOOTHILL COLLEGE FLEA MARKET DATES
FOR REST OF '88 SEASON: 9 JULY; 13
AUGUST; 10 SEPTEMBER.

CONGRATULATIONS TO LILY N6PGM WHO
ENJOYS A EUROPEAN ESCAPE THIS YEAR
TO FRANCE. A TOUGH CHOICE OVER FIELD
DAY, BUT SHE KNOWS ALL WORK & NO
VACATION MAKES THE TREASURER HATE HAM
RADIO.

TNX TO: JOE HORNE KB6OWG, AND TED
MORAN KB6UDA FOR THE LOAN OF HAM-
BAND RECEIVERS TO BE INSTALLED AT THE
PALO ALTO VA WESTERN CENTER FOR THE
BLIND, IN CONNECTION WITH PAARA'S
ONGOING PROGRAM OF PROMOTING
AMATEUR RADIO AS RECREATIONAL THER-
APY FOR VISUALLY HANDICAPPED STUDENTS.
THIS WILL GIVE THEM A CHANCE TO
EXPERIENCE FIRST-HAND THE KINDS OF
COMMUNICATIONS EXCHANGED BY HAMS
ON THE HF BANDS. -DE K6FS

ARRL LICENSE CLASS HOTLINE :
ALL AREA CLASSES: (408) 971-1424.
TO ADD INFO CALL GLEN WB6W:
(408) 263-9450.



PAARA BRIEFS

1988 MOFFETT AIR SHOW.

OVER 1,000,000 VISITORS ARE EXPECTED TO TOUR THE AIR SHOW ON JULY 2, 3, AND 4. AGAIN THIS YEAR, AMATEURS WILL PARTICIPATE IN THE FOLLOWING AREAS: DEMONSTRATION OF SPECIAL EVENTS STATION TO THE PUBLIC, WITH KIP WZ6N; DEMONSTRATION OF AMATEUR RADIO TO THE PUBLIC, WITH LIVE PACKET, ATV, HANDHELDS, SLIDE AND VIDEO SHOWS, WITH GLEN WB6W; AND PROVIDING SECURITY, COMMUNICATIONS SUPPORT TO U.S. NAVY, OES, CITIES OF MTN. VIEW & SUNNYVALE, WITH TED N6IUU.

PAARA MEETING DATES FOR THE REST OF 1988: 8 JULY; 5 AUGUST; 9 SEPT.; 7 OCTOBER; 4 NOVEMBER; 2 DECEMBER.

PACIFICON '88: LEBARON HOTEL, SAN JOSE: OCTOBER 14, 15, & 16.

BOOK REVIEW

A very useful primer on antennas is provided in THE SHORTWAVE LISTENER'S ANTENNA HANDBOOK by Robert J. Traister (TAB #1487). This book affords a good overview of how receive antennas work and how they can be made (and made to work better), in the at times tough circumstances of urban dwellers. The principles are useful in considering antennas generally, and there are specific examples of unique antenna variations to make the best of one's QTH and equipment. The book is available thru your local ham bookseller or from TAB Books Inc., P.O. Box 40, Blue Ridge Summit, PA, 17214--either of whom can provide more info. -Ed.

ABC's of RTTY #9

A M T O R. (Amateur Teletype On Radio)

<u>Murray Code</u>	<u>Ltrs.</u>	<u>Figs.</u>	<u>AMTQR Code</u>
11000	A	-	1110001
10011	B	7	0100111
01110	C	:	1011100
10010	D		1100101
10000	E	3	0110101
10110	F		1101100
01011	G		1010110
00101	H		1001011
01100	I	8	1011001
11010	J	BELL	1110100
11110	K	(0111100
01001	L)	1010011
00111	M	.	1001110
00110	N	,	1001101
00011	O	9	1000111
01101	P	0	1011010
11101	Q	1	0111010
01010	R	4	1010101
10100	S	'	1101001
00001	T	5	0010111
11100	U	7	0111001
01111	V	-	0011110
11001	W	2	1110010
10111	X	/	0101110
10101	Y	6	1101010
10001	Z	+	1100011
00010	Carriage Return		0001111
01000	Line Feed		0011011
11111	Letters		0101101
11011	Figures		0110110
00100	Space		0011101
00000			0101011
	RQ(Rpt)		0110011
	Beta(Idle)		1100110
	Alpha		1111000
	Control 1		1010011
	Control 2		0101011
	Control 3		1001101

Table 1 - Conversion between Murray Code and AMTQR Code. The codes are transmitted left to right. And 1 represents the higher frequency of the FSK signal.

In a Teleprinter system there are 32 recognizable characters, normally transmitted by the 32 combinations of 5 data bits. If 5 data bits are used, any bit error will transform one character into another, and the error will pass undetected.

In AMTQR, 7 data bits are used, giving 128 combinations, of which only 32 are defined as "recognizable". Careful choice of which 32 are used minimizes the possibility of an undetected error. One would not, for example, have chosen two codes that only differed by two bits.-----to be continued-----

QST DE STEVE K6FS

OPERATING NEWS.

ROB WALKER KA6JLT REPORTS THAT AT 1905 UTC JUNE 2, HE INTERCEPTED A MAYDAY CALL ON 21240 SSB, FROM A VESSEL PURPORTING TO BE NAMED FREEDOM II, AT 122 DEGREES 30 MINUTES WEST, 36 DEGREES 9 MINUTES 2 SECONDS NORTH, IN SINKING CONDITION. ROB RESPONDED, NOTIFIED SAN FRANCISCO COAST GUARD SEARCH & RESCUE; HE WAS CALLED A LITTLE WHILE LATER BY COAST GUARD LONG BEACH FOR CONFIRMATION AND FURTHER DETAILS. BY THAT TIME FREEDOM II WAS QRT, ASSERTEDLY DUE TO BATTERY EXHAUSTION. COAST GUARD LONG BEACH DISPATCHED HELICOPTERS, BUT ACCORDING TO INFO GIVEN ROB WHEN HE CALLED BACK SOME HOURS LATER, WERE UNABLE TO LOCATE ANY TRACE OF A VESSEL AT OR NEAR THE COORDINATES GIVEN. GENUINE CASUALTY OR HOAX? ROB SAYS OPERATOR ON FREEDOM II DID NOT GIVE CALLSIGN OR NAME.

ROB ALSO PASSES ALONG FOLLOWING INFO: HE NOW HAS A PACKET SYSTEM ON THE AIR WITH BBS DEDICATED TO INFO EXCHANGE RE: ATV, AMSAT, ARES, PAARA; FREQUENCY 144.93, CALL KA6JLT-2; SIMPLEX RANGE ESTIMATED 10 MILES. FOR CONNECTS FROM GREATER DISTANCES, ROB RECOMMENDS DIGIPEATING THRU WA6AMT, 144.93 MEGAHERTZ...

de K6FS

WORLDWIDE DISTRIBUTION



HAM RADIO OUTLET

NEW OAKLAND LOCATION

6 STORE BUYING POWER

ICOM IC-R71A



Superior Grade General Coverage Receiver

\$799

SALE/CALL FOR PRICE

ICOM IC-37A



IC-27A (125W 2M F.M.)

IC-27H (125W 2M F.M.)

IC-37A (125W 2700kHz F.M.)

IC-47A (125W 70cm F.M.)

CALL FOR LOW, LOW PRICE

ICOM IC-735



The Latest in ICOM's Long Line of HF Transceivers

CALL FOR LOW, LOW PRICE

ICOM IC-R7000



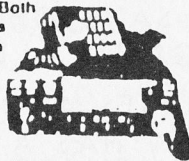
25 MHz-1300 MHz

IN STOCK FOR IMMEDIATE DELIVERY!

ICOM LATEST EDITION

IC-3200A DUAL BANDER

Covers Both 2 Meters & 70 cm



AT GREAT LOW, LOW PRICES

ICOM IC-1271A

NEW



1.2 GHz Transceiver
The First Full-featured
1240-1300 MHz Transceiver

AT GREAT LOW, LOW PRICES

ICOM

HAND-HELDS



IC-02AT
IC-04AT

VHF/UHF



IC-2AT
IC-4AT




IC-3AT

CALL FOR LOW,

LOW PRICE

All Major Brands in Stock Now!


Bob Ferraro WORLD
President
Jim Rafferty NORAJ
VP So. Calif. Div.
Anahem Mgr

ANAHEM, CA 92601
2620 W. La Palma
(714) 761-3033 (213) 860-2040
Between Disneyland & Knotts Berry Farm

BURLINGAME, CA 94010
900 Howard Ave.
(415) 342-5757 George Mgr. WOODSV
3 miles south on 101 from SFO

OAKLAND, CA 94608
2210 Livingston St.
(415) 534-5757 Don Mgr. NORAJ
 Hwy 17 to 23rd Ave. East

SAN DIEGO, CA 92133
5375 Kearny Villa Rd.
(619) 580-4900 Glenn Mgr. NORAJ
 Hwy 163 & Claremont Mesa Blvd

PHOENIX, AZ 85015
1702 W. Camelback Rd.
(602) 242-3515 Bob K7RDM
 East of Hwy 17

VAN NUYS, CA 91401
8265 Sepulveda Blvd.
(818) 988-2212 Al Mgr. NORAJ
 San Diego Fwy. at Victory Blvd

FREE SHIPMENT
on orders over \$75
using UPS

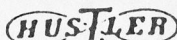
CALL TOLL FREE (800) 854-6046

Toll free including Alaska & Hawaii. Phone hrs: 9:30 a.m. to 5:30 p.m. Pacific Time. California and Arizona customers call or visit nearest store. California and Arizona residents please add sales tax. Prices, specifications, descriptions subject to change without notice.



ELECTRONICS FOR HOME OR WORK . . .
 YOU NAME IT . . . WE'VE GOT IT!

QUEMENT IS THE PLACE!

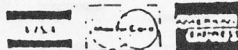


QUEMENT ELECTRONICS



1000 SO. BASCOM, SAN JOSE

998-5900 • Open Mon.-Sat. 9-6



• ANTENNAS • HAM GEAR • CITIZEN'S BAND • COMMERCIAL AND INDUSTRIAL
 PARTS SUPPLY • SERVICE DEPARTMENT • COMPUTERS AND SOFTWARE
 • COMPLETE STEREO HI/FI DEPARTMENT.

PAARA
P.O. Box 911
Menlo Park
Ca. 94026



Radio Confirming
Our QSO Of 19
At Time

Report Freq.

Xmitr.

Rcvr.

Ant.

Remarks:

VE3FZK 87/Ø1
Andy Korsak
504 Lakewood Way
Redwood City CA 94062

First Class Mail

73,
 Pse QSL Tnx