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FEBRUARY 1988



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THE OFFICIAL NEWSLETTER
OF THE PALO ALTO AMATEUR
RADIO ASSOCIATION

AND

THE MENLO PARK C.D. AMATEUR RADIO CLUB

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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
3389 Mt. Logan Drive
San Jose, CA 95127

● BULLETIN ●

February 1988

From The Editor's Desk

As the March 12, 1988 Foothill Flea Market draws near for us, be sure to reserve that Saturday for work & bargain hunting! Have a great February and thanks very much to those who contributed to this issue. See you Next Month and at the Flea Market!
-73 de Your Editor

Speaker of the Month:

MURRAY MILNER, ZL2LB Presenting: "Some Aspects of Amateur Radio Activity in New Zealand, Supported by a Selection of Slides..." Emphasis will be placed on the current development of a national microwave system for the linking of repeaters. This system utilizes a multi-channel digital transmission scheme. The system is currently operating between Auckland and Wellington in a prototype form, and the final system is expected to be operational within a couple years. Other aspects of amateur radio activity to be discussed will include: Hidden Transmitter Hunts; Field Day Activities; Antenna Measurement Days; Repeater Development; Club Activities; and Amateur Radio Emergency Communications. In the course of discussing these activities the opportunity will be taken to provide a few scenes of the New Zealand countryside. Don't miss this International Relations special for PAARA on Friday February 5th!

DINNER WITH THE SPEAKER (SPECIAL TIME) 5:45 PM
Friday 5 February at Su Hong's Restaurant, on
the El Camino, off Ravenswood, Menlo Park.....
TALK-IN ON CLUB FREQUENCY: 147.45 SIMPLEX

[Info de Andy VE3FZK, Program Chairman]

SEE ELSEWHERE FOR ADDITIONAL INFORMATION ABOUT
THIS MONTH'S SPECIAL GUEST SPEAKER.....

PRESIDENT'S CORNER

This year we are off to what could only be described as a running start. At our first board meeting we had to immediately start planning the March 12th Flea Market at Foothill College. We were assigned that date this year by our Patrons "The Perham Foundation". Next year we will cycle to April, etc. This makes the good and bad weather dates more equally shared by all. Many important work assignments were distributed, but we still need a chairman of the food service committee. I would also like someone with a medium size van to volunteer to provide a "warming" hut, just in case we have to work around a shower or two.

Jerry WA6LIJ wrote a letter to the board suggesting we take a tougher stand on sending PAARAGRAPHS to non dues paying recipients. This is not as many as might be believed, but it is admittedly some time since the board has screened the mailing list. The board however took the suggestion in good faith and planned to review the mailing list next month. From the past year's list there were only about twenty names that would be considered which would only yield about a \$75.00 yearly savings.

Please plan on volunteering to a Flea Market role at the February Meeting.

de

W A 6 L N V

Meeting: FRI. FEB. 5TH

=More Info on PAARA's Guest Speaker=

MURRAY MILNER, ZL2LB is past president (1986) of the Wellington VHF Group and is manager of research of Telecom Corporation of New Zealand Ltd. He is currently working at Stanford University until June of 1988. He was first licensed in 1969. His wife is Gail Milner, ZL2NZ, who has been a ham for about 6 years. The Milners are currently residing in Menlo Park while Murray is doing his work at Stanford.

[Additional Info de Andy VE3FZK]

PAARA BRIEFS

John Gordano K6JJU reports-

DAVID HARPER WB6JFH in Washington state will be looking for the PAARA Gang on Sundays between 9:30 and 10AM on 7225 to 7250 (40 Meters). Give him a call!

John also says that-

DUSTY K6MPN is having a heyday working the DX with his new rig... He got a new monitor scope for his rig so he's got a First Class station now.

[TNX John for the news! -Ed.]

FRED K6YT has renewed W6OTX Club Station call for another 10 years & will renew it again when the current renewal expires!

KEN DUEKER KB6BPM attended the January Meeting on semester break from his Southern California college QTH! (Great seeing Ken again. -ED)

JOE KB6OWG has announced the "450 Gang on 10 Meters" net -- 28.450 MHz every night at 9PM. The net has a unique leadership structure with 5 presidents, 5 secretaries, 5 treasurers, no dues, no nuthin... Seriously- "the 450 Gang" is meant as a mutual assistance group for those amateurs who participate, and those who do will find the help they need.

SPECIAL QST:

Due to it being PAARA DUES SEASON, this page is devoted to that cause. Next month the KB6ZV QST Feature will return with a double-dose of info.

If you have not submitted your dues, a red streak will appear on the date code on your mailing label, and a stickered return envelope will be included herewith for return of your dues payment. \$6

To stay current and avoid cancellation, please remit as soon as you can!

73 de PAARA
P.O. Box 911
Menlo Park, CA 94026



flea market
ELECTRONIC

The logo for "flea market" features the words "flea market" in a large, bold, sans-serif font. Above the word "flea" is a small icon of a radio receiver. Above the word "market" is a small icon of a television set. Below the word "market" is a small icon of a person. To the left of the word "market" is the word "ELECTRONIC" in a smaller, bold, sans-serif font. Below the word "ELECTRONIC" is a small icon of a person. To the right of the word "ELECTRONIC" is a small icon of a television set.

at Foothill College!!!

BOOK REVIEW

Amateur Radio Communications is a vast field of endeavor with an immense base of technical knowledge and experience. To begin to understand even some of it requires access to the 'facts and figures', and to thoughtful interpretation of theory from the simplest to the most complex. This not just to pass a test, but to be able to attain to truer technical understanding. It is further useful to have at ready hand a technical information handbook for radio communications to augment existing knowledge in practical, nontechnical terms.

The task is mastered rather admirably in a number of books, such as those sourcebooks, for study or for "bench reference"... Notably in the AMATEUR RADIO GENERAL & ADVANCED CLASS STUDY GUIDES, by James Kyle K5JKX, Ken Sessions K6MVH and Joseph J. Carr K1IFV (TAB #'s 1251 & 1227 respectively); and in the AMATEUR RADIO EXTRA CLASS STUDY GUIDE, by the Editors of 73 Magazine (TAB #1443). The information handbook takes the form of the TAB HANDBOOK OF RADIO COMMUNICATIONS, by Joseph J. Carr K1IFV (TAB #1636).

The STUDY GUIDES serve a number of purposes for instruction, information and reference.

In terms of instruction, the authors afford a course of study in radio that is focused, guided by insight and experience, and so presented that it will make the student's absorption of theoretical material gradual and easy. This in an effort to grasp the principles behind the FCC "quiz questions".

In terms of information, the volumes contain some very useful appendices and are fully indexed to those many subjects and topics that are dealt with. It is possible to key on a given area of study and avoid random survey of the contents.

These editions are not meant as "throw aways" or as consumable textbooks or ripoff supplements. Rather, they will serve as theoretical references to fill gaps in understanding long after the test is passed and the ticket is on the wall. There is a thoughtfulness in these radio theory STUDY GUIDES that sets them apart from other texts in the field.

As if you thought you had seen everything in technical publications, then comes along this mammoth volume, the TAB HANDBOOK OF RADIO COMMUNICATIONS, by Joseph J. Carr K1IFV. It is perhaps fair to say that this is in actuality 58-BOOKS-IN-ONE, on all aspects of modern Radio Communications, meant by the author to clarify practical matters that need an answer. There is a practical mission for this big book that will be grown-into as circumstances offer opportunity for it to be of assistance. Not intended as a library shelf ornament, it is designed to be closer to the toolbox. A summary list of contents would read like this: INTRODUCTION TO RADIO; BASIC ELECTRICITY; DIRECT CURRENT; CAPACITORS/CAPACITANCE; MAGNETS/MAGNETISM; INDUCTORS/INDUCTANCE; ALTERNATING CURRENT; PASSIVE FILTERS; VACUUM TUBES; SEMICONDUCTORS; TRANSISTORS; FIELD EFFECT TRANSISTORS; AMPLIFIERS; SEMICONDUCTOR DEVICES; COUPLING/MATCHING; OPERATIONAL AMPLIFIERS; TRANSISTOR POWER AMPLIFIERS; DIGITAL ELECTRONICS; OSCILLATORS; ACTIVE FILTERS; SMALL SIGNAL Rf AMPLIFIERS; POWER SUPPLIES; RADIO RECEIVERS; HF RECEIVERS; VHF/UHF RECEIVERS; TRANSMITTERS; Rf POWER AMPLIFIERS; NEUTRALIZATION; AMPLITUDE MODULATION; DOUBLE & SINGLE SIDEBAND; FREQUENCY MODULATION; SPEECH PROCESSING; TRANSCEIVERS; REPEATERS; RADIO WAVE PROPAGATION; TRANSMISSION LINES; ANTENNAS; HF SINGLE BAND ANTENNAS; MULTI-BAND ANTENNAS; VHF/UHF ANTENNAS; HIDDEN & LIMITED SPACE ANTENNAS; DIRECTIONAL ANTENNAS; ANTENNA & TRANSMISSION LINE MEASUREMENTS; ANTENNA TUNING & MATCHING; RTTY; TELEVISION; MICROWAVE DEVICES; RFI; PORTABLE & MOBILE OPERATION; TROUBLESHOOTING ELECTRONIC EQUIPMENT; OSCILLOSCOPES; DIRECT CURRENT MEASUREMENTS; RESISTANCE & IMPEDANCE BRIDGES; FREQUENCY & PERIOD; TESTING COMPONENTS; SIGNAL GENERATORS; STATION CONTROL; ELECTRICAL SAFETY... [1,048 pages]

For further information on these titles you can contact your friendly ham bookseller or TAB Books Inc., P.O. Box 20, Blue Ridge Summit, PA, 17214. -ED.

ABC'S OF RTTY 5 *

The Baudot Code.

Bit Number 5 4 3 2 1	Letters	U.S. Figs.	CCITT#2 Figs.
0 0 0 0 0	Blank	Blank	Blank
0 0 0 0 1	E	3	3
0 0 0 1 0	Line Feed	L.F.	L.F.
0 0 0 1 1	A	-	-
0 0 1 0 0	Space	Sp.	Sp.
0 0 1 0 1	S	Bell	'
0 0 1 1 0	I	8	8
0 0 1 1 1	U	7	7
0 1 0 0 0	Car. Rtrn.	C.R.	C.R.
0 1 0 0 1	D	5	WRU
0 1 0 1 0	R	4	4
0 1 0 1 1	J	'	Bell
0 1 1 0 0	N	,	,
0 1 1 0 1	F	!	!
0 1 1 1 0	C	:	:
0 1 1 1 1	K	((
1 0 0 0 0	T	5	5
1 0 0 0 1	Z	"	+
1 0 0 1 0	L))
1 0 0 1 1	W	2	2
1 0 1 0 0	H	#	
1 0 1 0 1	Y	6	6
1 0 1 1 0	P	0	0
1 0 1 1 1	O	1	1
1 1 0 0 0	O	9	9
1 1 0 0 1	B	?	?
1 1 0 1 0	G	&	&
1 1 0 1 1	FIGS	FIGS	FIGS
1 1 1 0 0	M	.	.
1 1 1 0 1	X	/	/
1 1 1 1 0	V	;	-
1 1 1 1 1	LTRS	LTRS	LTRS

Bit 1 transmitted first in serial data system.

Table 3 - The Baudot code.

Baudot code.

The simplest RTTY code in use is the 5-bit Baudot code (sometimes called the Murray code). As discussed above, a total of 32 different states or characters may be represented with a 5-bit code. Since this is still not enough combinations to represent all 26 letters plus 10 numbers, most code combinations in Baudot are used twice. We do this with a memory in the printer and keyboard that may be set to either print the LETTERS case or the FIGURES case. This is much like the operation of the shift key on a standard typewriter.-----to be continued----

*Prepared & Written
By Harry Wijtman AEGM, Part 5 of 12.

Amateur Action Line

Some months ago, PAARAGRAPHS contained a list of names and when they last paid their dues. I have heard of no action taken concerning delinquent members. The cost of serving delinquents may be quite significant. 1988 dues were due 1 Jan '88. I suggest this be an agenda item at the Feb '88 meeting and that those who have not paid 1987 dues be dropped immediately. I further suggest the club adopt a policy: "If annual dues are not paid by the end of the April meeting, members be dropped from the PAARAGRAPHS mailing list.

73

Jerry WA6LIJ

.....U.S. COAST GUARD QST.....

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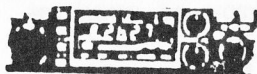


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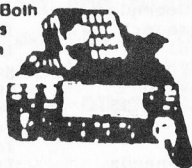
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San Diego Freeway at Victory Blvd

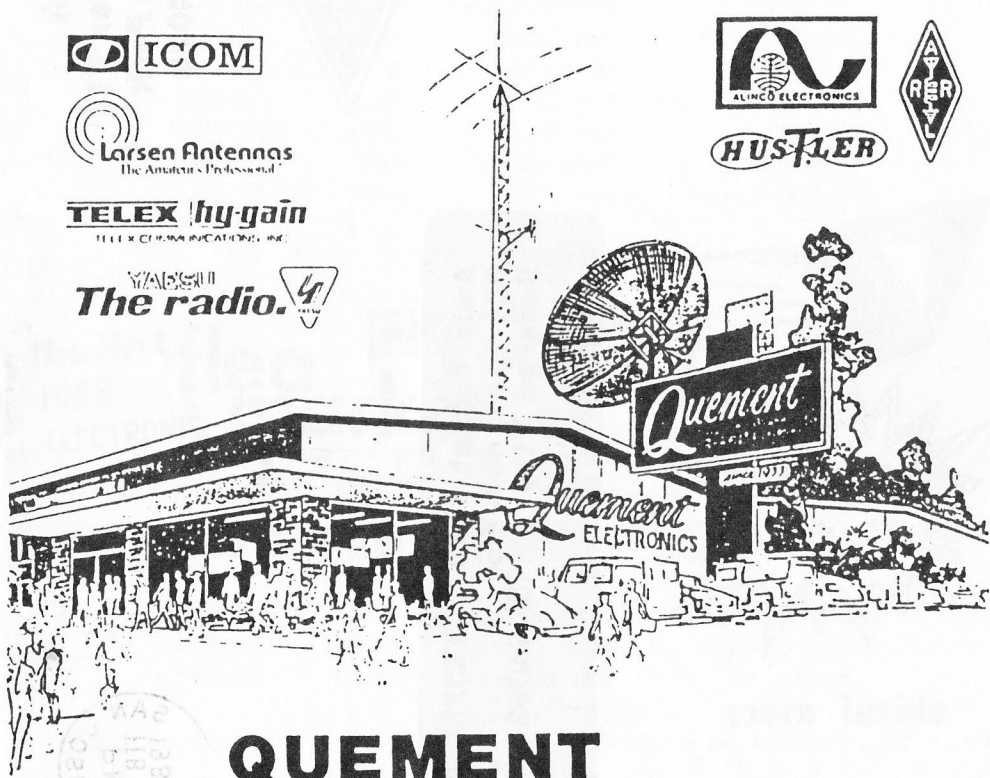
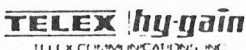
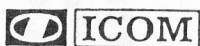


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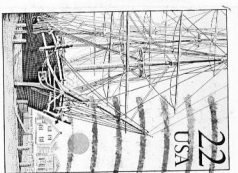
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