



cross talk

NEWS BULLETIN OF TRW AMATEUR RADIO CLUB



Sponsored by Systems Employee Association



WAC
WAS
DXCC
FD*71
FD*73
FD*75
FD*76

JANUARY 1977

TRW/ARC Saturday Morning Nets 10AM LT

Primary	7.280 MHz
Secondary	3.980 MHz
Novice	7.140 MHz
Simplex	147.510 MHz

THE 2 METER PARADOX

In the last few weeks, several of our Southern California repeaters have been in a state of crisis. Some of the users of these "open" repeaters, drunk with the power conferred on them by the purchase of their ten watt riceboxes and quarter wave spikes, have gone completely open loop. These creeps constantly violate published and reasonable repeater rules, FCC regs, and the rules of normal civilized behavior. Deliberate jamming, channel hogging, rudeness, and really raunchy language have become as common on these repeaters as on the CB channels. It is particularly galling that the slobs who misuse the repeaters are never the ones that sweated and strained to get the repeaters going.

There are not many attractive options open to the repeater operators. Closed repeaters (PL or tone access) are not that all closed any more, and take a good deal of the fun and utility from repeater operation. Constant monitoring and breakin by control operators leads to a regimented and irritating kind of kindergarten atmosphere ("I didnt hear a call sign, breaker"). The guy with the switch can shut it down, but he can't impose good operating practices. Two of the local repeaters, WR6ABB and WR6ABE, have shut down for a while, but no real answer is in sight.

The 2 meter amateur repeater is an example of effective applied technology at its best. It can't be beat for efficient use of spectrum and energy. If only the operators could measure up...

JOB OPPORTUNITY: CROSSTALK EDITOR WANTED

Due to the pressure of work, the 1976 editor of CROSSTALK has reluctantly had to resign. Anyone reading this publication can see what a ball it must be to put it together.

For a limited time only, applications for the editor's job will be accepted by Pres Bill Dews; call him at X62692.

THE JANUARY MEETING

Our new vice president and program chairman, Doug Heydon, has discovered that we have a new member with an extensive background in VHF/UHF work. Chip Angle, WA6GUY, will present a program on weak-signal VHF communications (i.e. meteor scatter) and low noise amplifiers.

WEDNESDAY, 26 JANUARY, 12 NOON, R2-1055...DOOR PRIZES

PREZ SEZ

by Bill Dews, K6AWO

When the first executive meeting was called to order, would you believe I was looking at four past presidents (three on the board plus one consultant)! Jim Hill, W6IVW, will have the minutes in this issue. Doug Heydon, WB6WDS, has lined up a fine program and some good door prizes. On the inside back page, you will find the club calendar for 1977, prepared by Gary Komatsu, K6HPD.

We badly need a new CROSSTALK editor, and also a Training Manager. Please call me if you can help.

DECEMBER ACTIVITY REPORT

by Bill Dews, K6AWO

Mike Dehart, WB6KRU, has reworked the club's old Lafayette 2 meter AM transmitter-receiver to give it 147.51 FM capability. Hard to believe, but the old boat-anchor works pretty well. Drop up to the club station at noon and give it a try.

Last years accomplishments include replacement of the tower guys, removal (but not yet replacement) of the Ham-M rotator, installation of a new balun on the 80 meter dipole, and a Ringo Ranger on the tower. The work was done by some newcomers as well as the old standbys.

HF TRANSCEIVER TRADEOFFS

Herewith from the Nittany Newsletter, some comparative data put out by the Kenwood folks. Be the first kid on the block to have a new TS-820...

MAKER	KENWOOD	COLLINS	DRAKE	KENWOOD	YAesu
MODEL	TS-820	KWM-2A	TR-4C	TS-520	FT-101E
LIST PRICE	\$830.00	\$2120.00	\$599.95	\$629.00	\$749.00
MODES	SSB, CW, RTTY	SSB, CW	SSB, CW, AM	SSB, CW	SSB, CW, AM
BANDS	1.8-28 MHz	3.5-28 MHz	3.5-28 MHz	3.5-28 MHz	3.5-28 MHz
INPUT POWER	SSB 200 W PEP CW 160 W RTTY 100 W	SSB 175 W PEP CW 160 W	SSB 300 W PEP CW 260 W AM 260 W	SSB 200 W PEP CW 160 W	SSB, CW 180 W AM 80 W
FINAL TUBES	S-2001 A 2 x (6146B)	2 x 6146 B	3 x 6JB6	2 x 6146B	2 x 6JS6C
RECEIVER SENSITIVITY	0.25 uV 10dB S/N	0.5 uV 10dB (S + N)/N	0.5 uV 10dB S/N	0.25 uV 10dB S/N	0.5 uV 20dB S/N
PLL	YES--(Single Conversion)	NO	NO	NO	NO
IF SHIFT (PASSBAND TUNING)	YES	NO	NO	NO	NO
SPEECH PROCESSING	YES--(RF Compressor)	NO	NO	YES--(ALC Type)	YES--(RF Clipper)
DIGITAL DISPLAY	YES-- Option	NO	NO	NO	NO
DIGITAL HOLD	YES	NO	NO	NO	NO
RF NFB	YES	YES	NO	NO	NO
NOISE BLANKER	YES	YES--Option	YES--Option	YES	YES
IF OUT	YES	YES	NO	NO	YES
MONITOR CIRCUIT	YES	NO	NO	NO	NO
RF ATTENUATOR	YES	NO	NO	NO	YES
RIT	YES	NO	NO	YES	YES
AGC SWITCHING	YES	NO	NO	YES	NO

*All prices and specifications subject to change without notice.

BI-CENTENNIAL CELEBRATION

By ED THORNLEY, W6RXD

QST for December 1976 reported the results of the 1976 Bi-Centennial Celebration, the big ARRL QSO Party held July 24-25, 1976 in honor of our nation's 200th birthday. Scanning the list of entries, we noticed several of TRW/ARC's members calls listed among the many participants who competed in this event. Some 2500 entries were listed in QST, all of whom received a handsome certificate, along with additional stickers indicating that the contestor qualified for extra recognition. These were for: Working all 50 states, 50 or more VHF QSO's, 200 or more QSO's any or all bands, 200 or more DX contacts, 1776 QSO's, or working all of the original 13 Colonies.

Needless to say, any one of those extra awards meant a whole lot of work (fun!) to those who qualified.

Without the use of a computer, we searched the QST list for members calls and came up with the following: (Number behind call indicates total QSO's)

W6RXD (258), W6NHX (212), W6OIC (207), WB6KRZ (201)(+50 VHF),
WB6WDS (200) and WB6JFD (157).

If you were listed in QST and we didn't spot you, just drop a note to your Friendly Acting Editor (whoever he is!) and you'll get your glory in the next issue of Cross-Talk.

Because some of us probably won't be around for our nation's 300th birthday, ARRL is scheduling a "Celebration Plus One" for July 9-10 this year. Another chance for those who missed the fun in '76.

HEARD FROM DOWN UNDER

While counting the ballots for the election of Club Officers for '77, we found the following straight text message penned on the back of a ballot from "Somewhere in Australia".....

HI ED CONGRATULATIONS IN WINNING CLASS 7A WITHOUT HALF TRYING! KEEP UP THE GOOD WORK AND HAVE FUN. SOUNDS LIKE A GOOD GROUP OF OFFICERS FOR THE CLUB NEXT YEAR. SEE YOU AROUND NEXT SEPTEMBER. 73's AL

ME TOO - PASS ON OUR HI'S TO ALL, AND HAPPY HOLIDAYS - JAN

We were glad to hear from Al and Jan Lee. Sounds like they'll be heading stateside and be able to spend the Holiday Season back in the good old USA. On behalf of all our members, the best of everything in '77 and we'll all be glad to welcome them home.

THE DECEMBER GENERAL MEETING

Attendance at the 12-15-76 meeting was down to approximately 15-20 people, probably because the different date didn't allow for the normal Crosstalk meeting reminder.

New officers were introduced. The Activities chairman position turned out to be a close race, with Gary Komatsu winning by four votes. A number of staff positions are still open, and president Bill Dews (ext. 62692) is very interested in contacting members who want to help the club by volunteering to be Crosstalk Editor, Field Day Manager, RACES Coordinator, Swap Meet Chairman, Training Manager, or a member of the new Financial Team.

Why is a financial team needed? The treasurer's report stated the club had \$321 at the end of November, and an estimated \$280 at the end of December. Last year at the same time, the treasury contained about \$600 to \$700. Large expenses are about \$500/year for the Crosstalk and about \$50 to \$75 for field day. If the club operates in a frugal manner, a zero crossing is anticipated in the next year or so. It is hoped that the new financial team will help resolve the reduced SEA support problem.

Three domestic call books were raffled off, and were won by Paul Weisz, ?? (your secretary was busy looking at his tickets, and missed the winner), and Frank Halligan. Frank improved his chances by purchasing \$6.00 worth of tickets. While this psyched the other winners (they were busy watching Frank, and had to be reminded to check their tickets), the overkill approach almost didn't work. Frank won the last book.

A soldering school conflict resulted in a change of speakers, and we were fortunate to hear John Kenton, WB6SCO. John, who is chief of the frequency management staff at the local FAA facility, discussed frequency allocations. Some interesting points of his talk are:

The biggest allocation problems at the 1979 ITU frequency allocation conference will involve the 27-1200 MHz region. Frequencies below 27 MHz will remain relatively unchanged. Determining suitable allocations from the many conflicting demands would be difficult if considered from a purely technical viewpoint - but the final allocations are often political, not technical decisions.

There are 107 countries represented at the conference, each with one vote. Since many of the countries have strong anti-United States feelings and will vote accordingly, we will have a difficult problem.

The United States is proposing a new 10.5-11 MHz ham band. The United States identifies the 220-225 MHz band as CB/ham/ham satellite/radio positioning. If the ITU does not reassign this band, the United States can divide it between these services at they see fit. What will happen to the other ham bands? John expects severe cuts in the VHF and UHF bands.

Business radio is booming, and many of the UHF TV channels are unused. There is a possibility that channels 14-22 and 76-83 will be reassigned to business radio in areas where they are not used for TV.

The 108-136 aircraft navigation and communication band will be changed from 50 kHz to 25 kHz spacing in 1977. Attempts to use more modern techniques such as FM, satellites, etc. have not been successful. Other countries do not have our congestion problems and don't wish to pay for the changeover.

EXECUTIVE COMMITTEE MEETING - 3 JANUARY 1977

The executive meeting was called to order at 12:10 PM in Doug Heydon's office. President Bill Dews, Past President Frank Cartier, Vice President Doug Heydon, Secretary Jim Hill, Trustee Paul Weisz, Activities Manager Gary Komatsu, and Ed Thornley were present.

QSL Card Costs

Minimizing QSL card costs was discussed. Frank Cartier will check and see if TRW will partially subsidize the QSL card costs as part of their advertizing program.

Ham Magazines

At an earlier meeting, it was decided to keep the club's ham magazines in the building S library, and Bill Dews asked Jack Koho to collect existing magazines and send them to the library. At this meeting, Bill asked Jim Hill to contact Pat Lee of the library staff and verify that the library had received the magazines and had them available for use. Methods of reducing magazine losses were discussed and the possibility of having the magazines send directly to the library considered. Frank Cartier mentioned that the Parts and Data Center (R6-1374) has a subscription to QST.

Membership Renewals

Gary Komatsu mentioned that from his experience with other organizations it is important to individually contact those who have not renewed their membership. Since the membership chairman was not present at the meeting, Bill Dews will discuss this subject with him later.

SEA Support

Is the TRW ARC adequately represented in SEA, and are they getting an equitable share of the SEA budget? This subject was discussed, and Gary Komatsu mentioned that other clubs were negotiating with SEA regarding funds. Dave Carson, with assistance from Paul Weisz, will prepare a proposal and submit it to SEA.

1977 Club Activities

Gary Komatsu described tentative activities for 1977 (mentioned elsewhere in Crosstalk). It was suggested that the swap meet be moved to April to avoid a possible conflict with the Lockheed ARC swap meet.

Crosstalk Editor

A new Crosstalk editor is still desperately needed, and methods of finding a volunteer were discussed. Bill Dews proposed placing an ad in Readout in hopes of finding a non-member candidate. Paul Weisz agreed to publish the next edition, and it was decided to make a stronger plea in Crosstalk before trying the Readout.

Future Operation of the Club Station

Bill Dews asked Gary Komatsu and Paul Weisz to make a report on future operation of the club station. Both are involved with the station since Paul as Trustee is responsible for the station license and Gary as Activities Manager is the operating manager.

Door Prizes

A motion to have an ARRL membership (\$9) be part of all future door prizes was proposed by Frank Cartier and seconded by Paul Weisz. The motion was passed unanimously. In view of the depressed condition of the club treasury, there was considerable discussion regarding how much additional money to provide for door prizes. Doug Heydon moved to provide \$35 for the next meeting. The motion passed, with Paul opposed. Doug Heydon will get the door prizes.

The meeting was adjourned at 1:05 PM.

U.S. POSITION ON AMATEUR FREQUENCY ALLOCATIONS

The FCC has issued its third notice of inquiry concerning the 1979 World Administrative Radio Conference, detailing the new amateur frequency allocations to be proposed at WARC. In detail, they are as listed below:

1600 Meters- A new band, 160-190 KHz

160 Meters- 1750-1800 KHz shared; 1800-1900 KHz exclusive;
1900-2000 KHz lost

80 Meters - 3500-3900 KHz exclusive; 3900-4000 KHz shared

40 Meters - 6950-7100 KHz exclusive; 7100-7300 KHz shared

20 Meters - 13950-14400 KHz exclusive

15 Meters - 20700-21200 KHz exclusive

10 Meters - 28000-29700 KHz exclusive

6 Meters - No change

2 Meters - No change

1½ Meters - 220-225 MHz shared

¾ Meter - 420-450 MHz shared

Looking at this scheme as a whole, its obvious that there's good news and bad news. The good news is that we don't lose much spectrum, and that we gain some space on 40, 20 and 15 meters. The bad news is that its going to be difficult to make current transceivers 50 khz down on 40 and 20, and downright impossible to get to 20700.

<p>JANUARY</p> <p>1 SKN (Dec.) 4 West Coast Qual. Run 6-9 SAFOC, Las Vegas 8-9 VHF SS (Dec.) 10 W1AW Qual. Run 15-16 CD Party, cw 22-23 CD Party, phone FL State Conv., Miami 29-30 SET (Dec.) 26 TRW/ARC NOON MEETING R2/1055</p>	<p>FEBRUARY</p> <p>2 West Coast Qual. Run 4-6 DX Competition, phone (Dec.) 4-13 Novice Roundup (Jan.) 12 FMT (Jan.) 12-13 SE Div. Conv., Orlando 15 W1AW Qual. Run 18-20 DX Competition, cw (Dec.) 23 TRW/ARC NOON MEETING R2/1055</p>	<p>MARCH</p> <p>1 West Coast Qual. Run 4-6 DX Competition, phone (Dec.) 16 W1AW Qual. Run 18-20 DX Competition, cw (Dec.) Vero Beach Hamfest, FL Ft. Walton Beach Hamfest, FL 21 W1AW Morning Qual. Run 23 TRW/ARC NOON MEETING R2/1055 BEER BUST/GET TOGETHER</p>	<p>APRIL</p> <p>6 West Coast Qual. Run 14 W1AW Qual. Run 16-17 CD Party, cw 23-24 CD Party, phone 24 W1AW Special Qual. Run 30-May 1 Dayton Hamvention 27 TRW/ARC NOON MEETING R2/1055 SWAP MEET</p>
<p>MAY</p> <p>3 West Coast Qual. Run 13 FMT (Apr.) 16 W1AW Qual. Run 21-22 NY State Conv., Rochester WI State Conv., Lake Delton 28-29 Durhamfest, NC TN State Conv., Knoxville DINNER MEETING</p>	<p>JUNE</p> <p>1 West Coast Qual. Run 3-5 National Conv., Toronto 5 Starved Rock RC Hamfest, Princeton, IL 11-12 VHF OSO Party (May) 12 Six Meter Club of Chicago Ham- fest, Willow Spring, IL 14 W1AW Qual. Run (+40 wpm) 18-19 GA State/Atlanta Hamfest 19-25 Amateur Radio Week 22 W1AW Morning Qual. Run 25-26 Field Day (May) 22 TRW/ARC NOON MEETING R2/1055</p>	<p>JULY</p> <p>4 SKN (June) WV State Conv., Jackson's Mill 5 West Coast Qual. Run 9-10 IARU Radiosport Championship (June) Roanoke Div. Conv., Norfolk 10 Indianapolis Hamfest 13 W1AW Qual. Run 16-17 West Gulf Div. Conv., Austin Western Carolina Hamfest, Asheville 30-31 NW Div. Conv., Seattle Communications Expo '77/Hamfest, Greensboro, NC 27 TRW/ARC NOON MEETING R2/1055 POST FIELD DAY PICNIC</p>	<p>AUGUST</p> <p>3 West Coast Qual. Run 14 Hamfesters Radio Club Hamfest, Willow Spring, IL 18 W1AW Qual. Run 27-28 Radio Expo, Chicago 24 TRW/ARC NOON MEETING R2/1055</p>
<p>SEPTEMBER</p> <p>6 West Coast Qual. Run (+40 wpm) 10-11 VHF OSO Party (Aug.) Melbourne, FL Hamfest 12 W1AW Qual. Run 17 FMT (Aug.) 20 W1AW Morning Qual. Run 23-25 NE Div. Conv., Hartford 28 TRW/ARC NOON MEETING R2/1055</p>	<p>OCTOBER</p> <p>1-2 "Open" CD Party, cw (Sept.) 5 West Coast Qual. Run 8-9 Midwest Div. Conv., Wichita SW Div. Conv., Santa Maria 15-16 "Open" CD Party, phone (Sept.) 18 W1AW Qual. Run 23 W1AW Special Qual. Run 26 TRW/ARC NOON MEETING R2/1055</p>	<p>NOVEMBER</p> <p>1 West Coast Qual. Run 4 FMT (Oct.) 5-6 Sweepstakes, cw (Oct.) 16 W1AW Qual. Run 19-20 Sweepstakes, phone (Oct.) FIELD DAY/AWARDS DINNER</p>	<p>DECEMBER</p> <p>3-4 160-Meter Contest (Nov.) 7 West Coast Qual. Run 10-11 10-Meter Contest (Nov.) 15 W1AW Qual. Run (+40 wpm) 28 W1AW Morning Qual. Run 31 SKN (Dec.)</p>