



# cross talk

NEWS BULLETIN OF TRW AMATEUR RADIO CLUB



Sponsored by Systems Employee Association



WAC  
WAS  
EXCC  
FD'71  
FD'73  
FD'75  
FD'76

July, 1978

SIMPLEX 147.51	W6TRW/ARC
SIMPLEX/REPEATER	T147.075-R147.675
REPEATER PV	T146.745-R146.145
REPEATER JAARS	T146.955-R146.355

## DOOR PRIZE WINNERS

Bill Ivey	WA6QET	UHF Antenna
Bill Dews	K6AWO	UHF Antenna
Mac McGrew	K6RL	UHF Antenna
Bill Schrek	WA6EVS	12 Volt Supply
Stan Johnson	W6EKK	VOM

W6TRW  
PICNIC

## NEW MONTHLY EVENT

Starting July 29, a TRW/ARC sponsored "Ham Equipment Demonstration/Exchange" will be held Monthly at the R6 parking lot site. This "Last weekend of Month" event will take place from 8 am to 11 am. This event is being held to provide a regular social outing for our club members and other LA-South Bay Amateurs, and to provide a local meeting place to buy, sell and trade used Ham equipment. There are no fees charged.

To get this thing launched successfully, it is requested that lots of you members attend the July 29 outing and bring along any unneeded equipment you have to sell or trade. See you July 29th.

Bill Schrek  
WA6EVS

## SUNDAY 40 METER SSB NET

The Sunday SSB Net has been struggling along and slowly growing. There have been recent check-ins from N6NW, W6SCL, W6CQ, W6BIY and K6AWO. The net meets on 7280 Khz at 11:00 (local) Sunday mornings and all are welcome to join in.

Neal Hudson  
N6NW

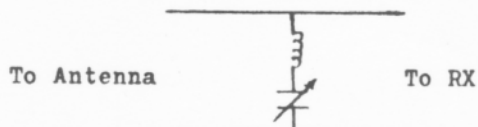
PICNIC EDISON PRK  
JULY 30 1300 HRS

PUNCH COFFEE

\*\*\* MEETING REMINDER \*\*\* R3-2077  
Always the last Wednesday at noon  
Subject: Field Day, Slides  
Speaker: Paul Fist WB6UJX

#### FD RECEIVER OVERLOAD PREVENTION APPROACHES

1. Try to use gear that is not inherently sensitive to receiver overloading.
2. Use antenna transmatch to gain some selectivity. This may be especially applicable to transceivers where separate filtering of the receiver antenna input is not convenient.
3. Use separate RX/TX rather than a transceiver so special receiver input filtering can be used.
4. Use directive antennas for phone/CW. Separate these antennas as far as possible. Adjust the station locations such that each station is at a null in the antenna pattern of the other station. Quad antennas appear superior to Yagi's in terms of exhibiting deep pattern nulls, which can be used for this purpose. Some preliminary field strength testing of antenna patterns may be required to work this out.
5. Use a bandpass filter in receiver antenna lead. A simple series LC shunt circuit across the antenna lead is even effective.



The approach used on 40 CW in a number of previous field days, was to tune the capacitors for minimum phone reception. With filter in/out there is an 8.5 S unit loss on phone signals and only a 1.0 S unit loss on CW signals. This is usually enough selectivity to prevent the phone signal from overloading the receiver while operating CW.

6. For transceivers, the previously described LC antenna shunt circuit must be removed during transmit. This could be accomplished by using the transmit relay output of the transceiver ordinarily supplied for keying a linear amp.
7. Operate QRP as per Bill Dews suggestion.

#### CW ROUND TABLE

For those who might be interested, a 40 meter CW gathering has evolved at 9:00 PM local time most every evening. The frequency is around 7090 Khz with normally strong signals, little QRM and good band conditions. W6SCL & WB6TWY can be found there almost like clock work. If conditions get bad then the group will QSY to 3655 Khz. This informal net has been going strong since June 21. So far W6SCL, WB6TWY, N6NW, W6RLN, W6KQI and WB6UJX have joined in the fun. W6SCL & I even tried 160 meters through the summer QRN and made it. All are welcome and it does make good code practice. QRV?

Neal Hudson  
N6NW

#### FOR SALE

For sale Hallicrafters SX 101 Mark III, a receiver \$100.

Brett Garrett      541-3496

As McDonnell-Douglas went down hill, Jim had the opportunity to purchase test equipment through salvage sales, and soon had a good test lab. He also discovered that that he had a good way to occupy his evenings keeping this equipment operating.

He has been interested in antique radios, and has a very early HRO, a SW3, FBX, SRR (anybody ever hear of that receiver?), HFS, HRO-50, NC-183, NC-57, plus various battery and AC BCB receivers. The current speculation in antiques and the high prices have pretty much stopped this activity.

His main activity (or better, semi-activity) involves Air Force MARS, where he is a member of the SAMSO Base Support Team. He is also interested in SWL-type DXing on the standard broadcast band and the low frequency becon band.

Recently, he discovered a new radio-related activity, negotiating with the Palos Verdes city fathers for permission to install his 58' crank-up tower. Negotiations started 9 months ago, and he expects the final answer to be obtained later this summer or fall. Getting an ok from 26 of his neighbors didn't satisfy the mayor, and a public hearing involving about 50 neighbors will probably occur this coming month. The ironic thing is that the same tower was used at a more exposed location in the same city 15 years ago with no complaints. These negotiations have been pretty much a one ham activity, not to be confused with the high powered antenna battle in a neighboring city, Rancho Palos Verdes.

#### RFI BOOKLETS

Two RFI Booklets written for technicians are being offered free by the EIA. The TVI booklet runs 40 pages, while the one on audio rectification is 14. Send requests to the Consumer Electronics Group, EIA, 2001 Eye St. NW, Washington, DC 20006.

TNX HR Report

#### CONVERSION KITS

Conversion Kits to put SSB CB rigs on the 10-meter band are being offered by American Crystal Supply Co., Box 638, West Yarmouth, Massachusetts, 02673. Fifty-five different kits, ranging in price from \$10 to \$40, enable an amateur to convert almost any CB rig to the 10-meter band. For details write American Crystal, advising make and model of the radio to be converted.

TNX HR Report

### Past Field Day Critique

Al Lee, W6KQI

Final scores have not been determined as of this writing but will be soon because the summary has to be mailed to ARRL by June 24. According to Bill Dews, the total number of contacts made is down from last year, even though we were operating Class 7A as opposed to Class 6A previously. The final breakdown will be presented at the club picnic mentioned elsewhere in this issue of crosstalk.

A big thanks goes to everyone who attended and worked so hard to set up, operate and tear-down the stations, plus all of the kitchen help that Lou Cartier and her crew did. The food and service was excellent. There were over 40 people who signed in to participate plus, I'm sure, many who did not sign in. This is a healthy percentage of the membership but it could have been even better.

We are thinking of possibly operating with ten watts or less at a future field day and possibly each station being battery powered. Think of the multipliers! Let us know if you have any thoughts on such a plan.

### Novice Graduates

Again, congratulations are in order to the several novice class graduates who now have their license. They include the following:

Ralph Clark	KA6AVF
Ralph Dermody	KA6AXY
Mary Lou McJilton	KA6BAI
Ed Wheeler	K6AGA (Tech.)
Sue McGrew	KA6BMT

Don Street and Happy Street have completed their exams, but have not received their licenses as yet, but should any day now.

Several others are reluctant to take their tests so I guess all we can do is try to encourage them to keep practicing and to not give up.

There has been discussion of creating a novice net to encourage those with their tickets to get on the air and get some good practice. It's always easier to communicate with people you know for those initial contacts. If any of you old timers are interested in helping with this, please let me know.

### General Class Course

Al Lee, W6KQI

With field day now out of the way, it's time to think about starting the General Class sessions. The class will begin on Tuesday, August 15, at 6:00 P.M. in R5/1120. We will meet one night a week for three hours. The first 90 minutes will be theory review and discussion, followed by a 15 minute break. The remaining time will be code practice to get everyone's code speed up to 15 or 16 WPM.

Sorry to hear from Ed Thornley that Fred Reed W6UMC is now in intensive care at Garfield Hospital in Monterey Park. I know we all wish him a speed recovery.

Prerequisites are at least four or five WPM code speed and novice level theory.  
Costs will vary depending on the text books already owned by the students.

If you know of anyone interested in attending, please contact Al Lee on  
extension 61673.

#### EXECUTIVE COMMITTEE MEETING REPORT:

Called to order on July 11, 1978, M2-1825. Those present; Mel Erb, K6GWC,  
Crosstalk Editor, Bill Dews, K6AWO, President, Bill Ivey, WA6QET, Treasurer,  
Paul Weisz, K6YQ, Librarian, Al Lee, W6QKI, Training Manager and Gary Komatsu,  
K6HPD, Activities manager.

1. Swap-meet - see report.
2. Crosstalk size - obvious
3. Constitution - Jim Hill absent
4. IC-230 - Frank Cartier absent
5. a. November Dinner - initial report indicates 25 club members will attend.  
b. Noise bridge - required further study.  
c. Rope - field day rope still missing.  
d. Part 97 - Amateur Radio rules available in shack.
6. QSL cards - 1400 sold so far.
7. Treasurers report - see report
8. Picnic - see report
9. New equipment - Our new rig has been narrowed down to TS820, TR7 and FT901.  
Money has been given us by SEA and a new rig will be purchased as soon as  
possible.
10. TRW emergency plan - Mac Grew absent.

#### CONVENTION COMMENTS .

I just previewed a partial list of the prizes which will be awarded at  
the ARRL National Convention in San Diego. The prize chairman,  
Lou Baughman, W6PKA, has not completed his task of procuring ham goodies  
as yet, but the list as it stands is very impressive. To attract your  
attention I am noting a few of the more exotic items from the current  
list of over 75 articles.

Alda 103 Xcvr.  
\*Atlas 350 XL-Dig Xcvr.  
Atlas 210X Xcvr.  
Heath HW-101 Xcvr.  
Heath 2036A Xcvr.  
I-Com. IC-211 Xcvr.  
I-Com. IC-280 Xcvr.  
Kenwood TS-520-S Xcvr.  
Swan 100 Mx Xcvr.  
Yesu FT227R Xcvr.

\*\*Henry 2K-4 Linear Ampl.  
Curtis EK-430 Electronic Keyer  
Dentron MT-3000A Antenna Tuner  
HAL DKB2010 RTTY Keyboard  
HAL RVD 1005 Visual Display  
Jade 8080A CPU Kit  
Jade GRI 756 Keyboard  
Jade Z80 Kit  
Tristao MM-40 Tower  
VHF Engr. 220 Synthesizer

\*Grand Prize

\*\*Exhibitors Prize



#### KNOW YOUR OFFICERS!

James S. (Jim) Hill, W6IVW, is a metrology engineer in the building S Metrology department. He has worked for TRW for about two years. Before then, he worked for McDonnell-Douglas for 22 years. During this time, he was active in the McDonnell-Douglas amateur radio club, W6VLD.

He is a native Californian and was born in Long Beach in 1929. He has moved west since then, living in San Pedro, Lomita, Palos Verdes Estates, Rancho Palos Verdes, and presently in Palos Verdes Estates again.

Jim became interested in radio in the 5th or 6th grade, and early projects involved building battery radios using a 30 or '99 tube in a cigar box. Since 50 kW KNX was only 4 miles away, reception wasn't difficult. The figure of merit for these radios was whether any other stations than KNX could be received. He met a ham in high school and started to become interested in ham radio, but didn't get his license until 1950 when he was a student at Purdue University. Since he planned to return to California, he got a W6 call, but all of his operation at that time was at the club stations, W9YB and W9CLY. Since W9CLY didn't have a good transmitter (the ham that kept the good transmitter operating didn't devote adequate time to his studies, flunked out, and the transmitter was sold), Jim used Command transmitters on 80, 40, and CW. The station transmitter, a WRL Globe King, was used as the power supply. Most low power operation in those days involved Command transmitters. The main transmitter at W9YB was a Temco with push-pull 833A's in the final. The rig supplied a full gallon on 20 cw to a 6 element bi-directional array strung between the old WBAA radio station antenna towers on top of the electrical engineering building. Since the top of the towers were 180 feet above the ground, the station had a potent signal.

Jim's room mate, W8CKW, decided to put the rig on phone. What neither he or Jim considered was the West Lafayette, being 75 miles from Lafayette and 125 miles from Chicago, was in a TV fringe area. Local residents soon discovered what had been bothering them since the first days of TV, and W9YB operation was curtailed. When he graduated, W9YB operation was on 80 cw, a poor compromise between no operation and no TVI.

Palos Verdes Estates was a good 2 meter location, and Jim did considerable operation on 2 back in the AM days using various surplus, home brew, and commercial rigs. The last rig was a Heath Pawnee, which he still has stored in the garage. He operated mobile using a Morrow MB560 and a Morrow converter with a Command receiver IF strip. Best DX was Alaska. Much operating was done on 3995, before the channel was destroyed by W6UGH. He remembers taking a skiing trip to Sun Valley, Idaho, during this time and listening to 3995. The channel was a mass of signals from Los Angeles and San Francisco. He made a few contacts, but QRM was too severe to have a QSO. He later bought a Swan 500, which he still has. Best mobile DX using the Swan was Japan.