



cross talk

NEWS BULLETIN OF TRW AMATEUR RADIO CLUB



Sponsored by Systems Employee Association



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

March 1982

Garrett/W6TRW Repeater: 145.32 Receive -- 144.72 Transmit (2A-PL)

IT'S FIELD DAY TIME AGAIN!--Gary Komatsu, K6HPD, President

I would like to remind all of you that Field Day this year is on Saturday and Sunday, June 26 and 27. We are also going back to the Navy Fuel Depot in San Pedro, and the request has been submitted to the proper authorities. Vic Musil, KA6NDN, has assumed chairmanship, provided that we all sign up for Field Day by the May general meeting. If there are not enough participants, the option is that TRW/ARC forego Field Day. Think about that -- we should not let that happen!

Sign up now by calling Vic Musil for Team Captain, Operator, or Logger on the following groups:

10, 15, & 80 Meter CW
40 Meter CW
VHF
15 & 75 Meter SSB
40 Meter SSB

20 Meter CW
Novice CW
6 & 10 Meter SSB
20 Meter SSB

This year, when the contest (or Band) opens, we should have the hottest operators going for us. Studying the statistics tells me that we have the greatest opportunity for contacts when the greatest number of contestants are on the air--namely, when the contest opens.

Let's all get on the bandwagon and give Vic Musil all the support for field day we can.

An excerpt from the Field Day plans for 1982: Equipment Setup (including antennas and tents) will be accomplished on FRIDAY afternoon. ALL STATIONS will be checked out and ready to operate at 1100 PDST on Saturday, June 26.

COMMUNICATIONS NEEDED FOR MARCH OF DIMES WALKATHON--Bob Pickett, N6EYV

On Saturday, April 24, 1982, thousands of people across the nation will join the March of Dimes in its battle against birth defects by participating in a National Walkathon. The money raised will support research and education for the number one childhood problem--birth defects. Over 250,000 babies are born each year with birth defects. Last year the March of Dimes contributed over \$600,000 to organizations for research in Los Angeles County alone.

We need your help to provide radio communication for all groups involved in the mechanics of the WalkAmerica operation.

If you can help, contact:

ARES, EC, Scott Graham, KE6B--(213) 375-7041
or Asst. EC, Bob Pickett, N6EYV--(213) 320-3003

DON'T FORGET

If you wear your club badge to club meetings, you get one (1) free door prize ticket. Those free tickets have even been known to win! If you need to order a badge, drop Bill Dews a check and your name and call, or catch him at a club meeting with the same information.

IMPORTANT: New Badges are ready for GCU, QET, GBX, AGA, and LI.

NEXT MEETING: WEDNESDAY, MARCH 31 (SEE CALENDAR)

SWAPMEET--Bill Schreck, KE6LB

The February Swapmeet drew another fine crowd and the weather cooperated with us again. As I write this the Monday after, it's raining. This rain could have fallen on Saturday and messed up our Swapmeet. We have a charmed event here. Booth operators for the February Swapmeet were Dave Gilmore (WB6IDJ), Stan Johnson (W6EKK), and George Lee (W6IOW). We had unsolicited help from our editor, Phyllis (KA6NFD), Jim Richardson (K6PDR), Vic Musil (KA6NDN), and Paul Fisk (KD6NQ).

Our Swapmeet has become a major amateur radio event in Southern California and is probably the largest regularly held amateur Swapmeet in the world today. This Swapmeet would not be possible if it were not for the dedication of our TRW/ARC members who are willing to give up their free time one Saturday each month to manage the Swapmeet. Thanks to these people--and to our company, TRW, which has unquestioningly allowed us to use the R6 parking lot for our event.

Swap meet operators for March are Bob Hume (KG6B), Bill Rodner (K6AWS), and a new member, Dale Mooney (WA6DLA). Anyone wishing to join the Swapmeet team should call Bill S. at x64464 or x54908 (mail station M4 2192).

GOOD NEWS COMES IN SMALL PACKAGES DEPARTMENT--Phyllis Gilmore, KA6NFD

Your kindly editor upgraded to Advanced on February 24, and is eagerly awaiting her new call. Having finally found the note, it's about time I extended congratulations from the club to Jack Baughman. His upgrade to Advanced took place last September.

Art Roberts, of C & A Roberts fame, has relocated his business. It's now associated with Radio King, on Crenshaw Boulevard in Torrance.

Since we have a nice printout of club members, courtesy of Bill (K6AW0), some interesting statistics are unfolding. Did you know that about 40% of our club members hold Advanced class licenses? TRW/ARC members in the other classes are: General, 20%; Technician, 15%; Extra, 13%; none or undeclared, 10%. We have two Novices. That 10% group has me worried--check the membership listing and see if yours is filled in.

Here's mud on my face: Apologies to Rolland Goulet, whose name I managed to misstype three different ways in the February Cross Talk.

NEWS FROM DEWS

The following people are overdue for renewing membership in W6TRW. Please forward dues so that you may continue as an active member and receive Cross Talk each month.

Barad	Dillinger	Koran	Spagon
Brough	Edwards	Marett	Stevens
Cartier	Fisher	Mocata	Van Hammersveld
Clark	Harbeck	Muratet	Vennie
Conner	Keller	Smith, D.C.	Yutkus

Call me for an application if you don't have one: Bill Dews, x53392.

LICENSE EXPIRATIONS--AS FAR AS WE CAN TELL

First things first. Bill Mc Clellan, N6WK, and Rich Robertson, K6RGW, will have expired licenses on their hands if they wait much longer. Both are due in May.

However, the following folks didn't give us complete information on expiration dates. This is a service, so please let us know what the date is so that we can warn you in time.

WB0GAZ	N6GBX	N6GCU	N6EPB	W6IVW
WA6FLL	W6ODI	W6RDH	K6RL	KE6PI
ED6EZJ	W6CZL	KD6AU	W6VBB	W6KQI
WA6YSK	KA6SIS	N6AGA	WD6FXW	WA6KPC
K6JTU	WA6BRN	N6DMV	N6CRR	KA8KNZ

Some of the last listed folks provided year of expiration, but no month. I plan to give two months at a shot, thusly: March issue covers April and May expiration dates. I'd worry if my license was to expire before the next time membership renewals are up.

MINUTES OF THE EXECUTIVE BOARD MEETING--Connie Gilmore, WA6SKM

March 9, 1982

In attendance were Bob Hume, Bill Ivey, Bill Dailey, Bill Schreck, Fred Garrett, Dave Gilmore, Connie Gilmore, Bill Rodner, and Bill Dews.

The Station Trustee reported that the ticket has been renewed, and W6TRW is good for another five years. It was also noted that the meeting to clean the ham shack has been postponed; it will be rescheduled.

Several swap-meet related items were discussed. It was decided to purchase some car-top carrier to tote large (but not heavy) items. It was also decided to work at making the club booth more attractive. Research will be done on making a banner. The coffee lines will be streamlined, with two lines to be tried. We will continue providing hot water, and will buy some long tea spoons. Of the 104 (at the time) club members, 38 full and associate members will help out at Swapmeets.

Emergency Coordinator Dave Gilmore reported that he has a listing of club members by building. He also discussed the "disaster" that will strike in April: the scenario is for a 6.5 earthquake to strike along the Inglewood/Newport fault, to be centered in Gardene. As planned, there will be 15 to 20 "casualties" at Space Park. Emergency communications will take advantage of the E2 repeater.

Vic Musil has agreed to serve as Field Day Chairman (see related article on page 1).

The club has received a check for \$450 from SEA; see below for further SEA news.

Financial Statement, TRW/ARC

Credit Union QSL Account	\$ 350.00
General Fund Account	530.22
Swapmeet Account	527.77
Total	<u>\$1407.99</u>

REPORT FROM SEA

Bill Ivey, our SEA Rep, reports that the SEA Coordinator is researching the SEA constitution concerning club attendance. The coordinator is also looking into listing the names of the clubs, along with contact persons, in the TRW company phone book.

The word on insurance is that there is no separate policy for clubs, only what is already covered under existing Group insurance. There is no coverage of owned property, unless the club has taken out a separate policy on its own (TRW/ARC has done so). Worker compensation does not cover injuries occurring during club functions, and it is suggested that it would be wise to have personal liability insurance. It was also pointed out that those who handle club monies should be company employees.

CAN YOU TELL US WHERE W6TRW IS?

Many of you have no idea where the club station is located, much less realize that your club gets QST and Worldradio every month. Now, why not try to find W6TRW (it's got to be somewhere) and get to reading some brand new books and newspapers about amateur radio for free! On the back page of this Crosstalk you will find a list of club officers and their phone numbers. Pick up the phone and see if one of them won't meet you at the club station or talk to you on 2 meters for a demo of W6TRW. Plus, you can see the 1982 ARRL Handbook and a new U.S. Callbook.

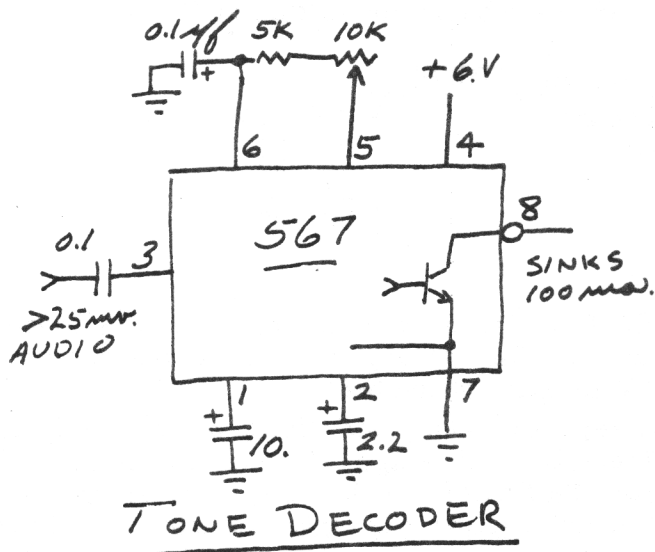
TECHNICAL CORNER

This month's technical corner was provided by the speaker at the February meeting, Jim Richardson, and can be found on the back of this page. Please direct any questions or comments to him. If you have something you'd like in next month, please send it to the Editor.

TONE CONTROL OF RECEIVER SPEAKER

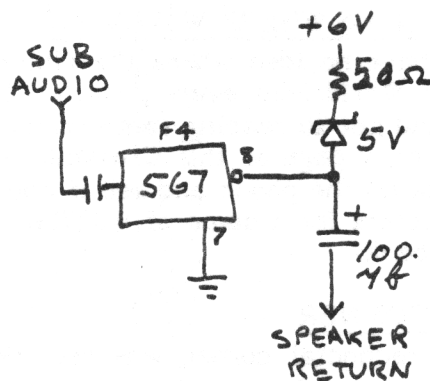
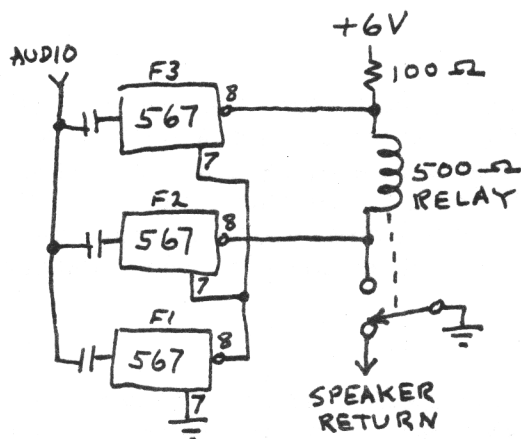
BY JIM RICHARDSON K6PDR

THE DIAGRAM SHOWS TWO METHODS OF MUTING SPEAKER AUDIO BY TONE CONTROL. THE FIRST CIRCUIT USES TOUCH-TONE FREQUENCIES. EACH BUTTON PUSHED SENDS OUT TWO FREQUENCIES AS SHOWN IN THE MATRIX. AS AN EXAMPLE, IF THE * BUTTON WERE CHOSEN TO DISABLE THE SPEAKER, THE F1 TONE WOULD BE 941 HERTZ AND THE F2 TONE WOULD BE 1209 HERTZ. IF THE # BUTTON WERE CHOSEN TO ENABLE THE SPEAKER, THE F1 TONE WOULD STILL BE 914 HERTZ AND THE F3 TONE WOULD BE 1477 HERTZ. ADJUSTMENT OF EACH TONE DECODER IS ACCOMPLISHED BY MONITORING PIN 5 AND ADJUSTING THE RESISTANCE SO THAT THE AUDIO SQUAREWAVE OBSERVED IS AT THE DESIRED DECODE FREQUENCY. NO SIGNAL INPUT IS NECESSARY. AN ALTERNATE MEANS OF ADJUSTMENT WOULD BE TO APPLY THE DESIRED TONE AT THE INPUT PIN 3 AND ADJUST THE RESISTOR NETWORK FOR A LOW OUTPUT AT PIN 8. IN BOTH CASES, TO ADJUST F2 AND F3 YOU MUST GROUND THE F1 DECODER OUTPUT PIN 8 OR YOU MUST HAVE BOTH TONES PRESENT. THE SECOND CIRCUIT USES A PL (PRIVATE LINE) TONE FREQUENCY WHICH, WHEN PRESENT HOLDS THE SPEAKER ON BY PRESENTING A LOW IMPEDANCE TO THE SPEAKER RETURN OR SPEAKER GROUND LINE. YOU MUST MAKE SURE THAT YOUR AUDIO SOURCE HAS SUFFICIENT LOW FREQUENCY RESPONSE TO PASS THE TONE. THE PL TONE DECODE FREQUENCY F4 IS ADJUSTED IN THE SAME MANNER AS THE TOUCH TONE DECODER EXCEPT A MUCH LARGER VALUE OF CAPACITOR AT PIN 6 WILL BE NEEDED. ($\approx 10 \times$) IF IT IS DESIRED TO ELIMINATE THE POTENTIOMETER, FREQUENCY ADJUSTMENT MAY BE ACCOMPLISHED BY USING A NETWORK OF TWO SERIES RESISTORS; ONE LARGE AND ONE SMALL FOR SELECT IN TEST. RECOMMENDED CONSTRUCTION IS ON AN INTEGRATED CIRCUIT BREADBOARD. RADIO SHACK HAS THEM CALLED AN "EXPERIMENTER SOCKET" FOR \$6.49. THIS SIZE BOARD WILL HOLD FOUR OF THE TONE DECODER CIRCUITS WITH ROOM TO SPARE. COMPONENT VALUES ARE NOT CRITICAL. SEE N6CRW FOR BOARD HOOK-UP WIRE. SEE K6PDR FOR A FREE 5V ZENOR DIODE.



1209	1336	1477	
1	2	3	697
4	5	6	770
7	8	9	852
*	0	#	941

TONE FREQUENCIES



MINUTES OF THE MARCH 2, 1982 MEETING OF THE LAACARC--Bill Daley, K6BO

Twenty clubs were represented at the meeting, along with two representatives of the FCC.

The treasurer reported that the balance on hand as of January 5 was \$149.05. Dues were received from 16 clubs, totalling \$160.00. Postage for 65 letters (20¢ each) came to \$13.00, bringing the final balance to \$296.05 to date.

Archie Willis (W6LPS), General Manager of the sixth district QSL Bureau, reported that the total number of QSLs dropped in January and February, with 44,000 QSLs and approximately 4,000 SASEs received. They mailed out 3 to 4 hundred SASEs. The biggest problem is getting those envelopes sent in to the Bureau; they would rather have the money (\$1) instead, so that they can get envelopes of a uniform size.

The public relations rep, Lenore Jensen (W6NAZ), reported that talk show host Bill Pearl (WB6UYW) had five hams as guests on his KMPC program one Sunday in February. They made an excellent pitch for Ham Radio. Bill indicated to Lenore that he would be pleased to speak to Ham Clubs--for more information, phone (213) 396-0345.

A group is being formed to assist the Hollywood Police Department. Those who have 2-meter handhelds and are interested in staying up late on Friday or Saturday nights, call Lenore Jensen. She'll pass your name on to the appropriate people.

FCC reps from Long Beach, Grace Poirier and Catherine Valdez, reported that two Petitions to amend regs on power limitations were denied (RM 3137 and RM 3181). A petition to expand the 20-meter HF telephony subband is being considered.

Stan Brokl (N2YQ), Los Angeles Section Net SCM, has learned that Governor Brown is setting up a State of California Emergency Preparedness Organization.

Peter Von Hagen (W6OXX) was the guest speaker. He discussed the problems caused by restrictive antenna ordinances, suggesting that the way to deal with them is to infiltrate the local government by getting involved in government or by lobbying for favorable ordinances. The Ham is at a disadvantage because he or she is usually outnumbered in the community. The next Threat is in Rolling Hills--for more information, phone (213) 549-9444.

TRW/ARC QSL CARDS, REVISITED--Gary Komatsu, K6HPD

There have been two articles about QSL cards which might have been unclear about what is progressing in this area. One, there are lots (about 2 K) of the old Pioneer QSL cards left, and these are being handled by Mel Erb. Two, Ed Thornley is working on the new QSL cards from TDRSS, and judging from past experience, it will take Ed a while (probably a year)--even with his charm--to promote this with TRW. So, don't hold your breath, use up the QSL cards Mel has in his hot little hands.

DO YOU HAVE ANY OLD PHOTOS AROUND?

Bill Schreck (KE6LB) reports that he donated some photo albums filled with pics of club activities to the shack some time ago, and they have been added to since. What we lack are pre-1976 photos of club-related activities like banquets, Field Day, etc.

NOTICE TO OTHER HAM CLUBS

Please run a note or announce to your members that the talk-in frequency for the Swapmeet will be 145.32 MHz simplex. Club members will monitor this frequency only--so if you get lost, pick up the mike and call for assistance on 145.32.

A CALENDAR BY ANY OTHER NAME

March 27, 8-11 am TRW/ARC Swapmeet. (Note that it's before the meeeting this month.)
Located in the parking lot at the northwest corner of Compton and
Aviation in Manhattan Beach.

March 31, Noon **Club meeting, R4-1041. George Thyden will speak on Emergency
Preparedness.**

April 1-4 SAROC '82, Aladdin Hotel, Las Vegas. For information, write to
SAROC, P.O. Box 14217, Las Vegas, NV 89114.

April 13, Evening TRW/ARC Executive Board Meeting.

April 15, Noon TRW/ARC picnic at Pollywog Park.

April 17 & 18 International DX Convention '82, Visalia Airport Holiday Inn. For
information, contact N6AR.

April 24, 8-11 am TRW/ARC Swapmeet.

April 28, Noon TRW/ARC Club meeting.

Coming up--

May 7-9 West Coast VHF/UHF Conference, Vacation Village Hotel, San Diego.
For information, write Louis Anciaux, WB6NMT, Lunar Electronics,
2775 Kurtz St., Suite 11, San Diego, CA 92110.

June 4-6 HAMCOMP '82, Town and Country Convention Center, San Diego. This
is a combination of this year's Southwestern Division ARRL Convention
and the San Diego Computer Fair. Application blanks were included in
last month's Cross Talk, and some are still available. For more
information, write to HAMCOMP, P.O. Box 82648, San Diego, CA
92138.

CODE AND BULLETINS FROM WIAW

WIAW sends code practice on the following frequencies:

160 Meters	1.835 MHz
80	3.58
40	7.08
20	14.08
15	21.08
10	20.08
6	50.08
2	147.555

The Times are (PST, through April 24):

Slow (5, 7½, 10, 13, & 15)	
MWF	6 am and 4 pm
TThSSn	1 pm and 7 pm
Fast (35, 30, 25, 20, 15, 13, & 10)	
MWF	1 pm & 7 pm
TTH	6 am
TThSSn	4 pm

Code speeds take the order listed above. WIAW sends bulletins in CW on the same frequencies
at 18 WPM Daily at 2, 5, and 8 pm; M-F also at 7 am. Voice bulletins are sent Daily at 6:30
and 9:30 pm on the following frequencies (in MHz):

1.835	3.99
7.29	14.29
21.39	28.59
50.19	147.555

For more information, check with QST--skeds are not printed every month, however.