



cross talk

NEWS BULLETIN OF TRW AMATEUR RADIO CLUB



Sponsored by Systems Employee Association



JULY 1982

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

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

A CALENDAR BY ANY OTHER NAME

July 28, Noon	TRW/ARC Club Meeting. Speaker, Stan Brokl (N2YQ).
July 31, 8-11 am	TRW/ARC Swapmeet. Donations to club to be auctioned off.
August 7&8	ARRL UHF contest
August 11 & 12	ARRL VHF contest
August 20, 8pm	URAC meets in Ryan-Pittman Hall, at the San Pedro Pistol Range on Gaffey St. in San Pedro. Gordon West (WB6NOA) will, among other things, discuss transcripts of and reported errors in the 13 and 20 wpm code tests. An open Q & A session will follow.
August 11, Noon	Club picnic, Pollywog Park.
August 25, Noon	TRW/ARC Club Meeting.
August 28, 8-11 am	TRW/ARC Swapmeet.

SWAPMEET REPORT FOR JUNE 1982--Bill Schreck, KE6LB

The June Swapmeet drew a moderate crowd (down significantly from the usual). The obvious reason for the decline was the simultaneous occurrence of Field Day. It was also observed that many buyers and sellers left early, presumably to go to their respective Field Day operations. Considering this, we will probably schedule the June Swapmeet for the third weekend in future years to eliminate this problem.

A reminder: We will hold an auction at the July Swapmeet to get rid of the boat anchors and part company with the valuable junk that we've accumulated. One item of interest is an HP counter with plug ins (originally costing \$3-4K).

Operators working at the June event were Jim Hill (W6IVW), Gary Cooper (WB6RLN), and Pat Dobbins (KA6TRK). Currently on the roster for July are Mike Aust (WB6DJI), Bill Rodner (K6AWS), and one lucky volunteer to be named later. See you all at the July Swapmeet.

NEWS OF NOTE

Pat Dobbins (KA6TRK) has upgraded to Technician. Knowing a good rig when she sees one, she got herself a Yaesu FT-208R to go with it. Congratulations!

If you haven't yet, take a look at the June QST. The League is reorganizing, and Lenore Jensen, local public information officer, is looking for some assistants.

MARC harmonics reports that the Department of Commerce is publishing a booklet on ways to suppress electromagnetic interference affecting mobile radio equipment. The report discusses the sources of EMI in a vehicle, including the ignition, electric control motors, and lamp blinkers. The report is available for \$6.00 from the National Technical Information Service, Springfield, VA 22161. Order by title and Publication No. 82-165259.

Have you ever wondered how to get a copy of the Westlink tapes? The news bulletins, usually available at 2100 on Sunday, can be accessed through (213) 465-5550 in the Los Angeles area.

TRW/ARC welcomes new members Forrest Hurt (W6RZD), Norman Stockwell (N6NS), Chuck Marlett (WB9ZDS), Ira Newman (K3LKF), and Dan Richardson.

MINUTES OF THE EXECUTIVE BOARD MEETING July 20, 1982—Connie Gilmore, WA6SKM.

Emergency Coordinator Dave Gilmore (WB6IDJ) reports that the company will postpone planned emergency drills until fall, because of the large number of company employees on vacation. Dave wants to have check-ins on a regular basis, perhaps at noon on Wednesdays, to see how well we can communicate during real emergencies. Dave will set up a program with the people on his Emergency Communications Committee list.

Gary Komatsu (K6HPD) reported that we operated five transmitters on Field Day, but since we didn't operate 20 CW this year, we can't expect to do as well in the contest. All operators, however, said they had a good time.

Paul Weisz (K6YQ) reported that plans are firming up for amateur radio support of the 1984 Olympics. Thomas Rothwell, of Hughes Aircraft, is in charge. Paul feels that TRW/ARC should get involved.

Paul also reports that the FCC is playing games again with the licensing structure. A new proposal, on which they'll be asking for comments, is to allow some people to have a "Communicator License" that would require no code. Technician class hams would no longer be allowed to use Novice CW privileges. Paul says that as soon as we see it in print, all of us should write to the FCC and complain. (Ed. note: see May Cross Talk on writing to the FCC.) A proposal was made to draft a letter and get all club members to opy it individually and mail it to the FCC. It was felt that this would have a greater impact.

Bill Dews (K6AWO) reported that we have five new members, bringing the total to 137.

Bill Schreck (KE6LB) proposed that we move the Swapmeet up one week in June from now on, to avoid the conflict with Field Day. The double event had a definite impact on attendance. Given this much advance notice, this should be acceptable to all. Bill hasn't received any volunteers for the post of cochairman as yet--won't someone offer to do it for just a particular month? If Bill could get sic volunteers, the result would be the same: to give Bill a break. With 137 members, surely some can donate some time.

The next picnic at Pollywog Park is scheduled for August 11. Do you realize that the members who have been coming to the picnic are getting their dues back through the refreshments?? Think about it, and join us.

Mike Aust (WB6DJI) and his brother are contributing a 450 repeater to the club, and will hopefully have it in operation by next month. Thanks, Mike!

Gary Komatsu is painting the antennas for the Oscar station. Current information says that the launch date for the new Oscar January 1983.

Bill Dews moved that the club purchase an IC4A for 220 and 450 with PL, to be purchased with Swapmeet money. This was tabled until the General Meeting. Bill will research the cost.

TRW/ARC FINANCIAL STATEMENT, Fred Garrett, N6CRW. July 20, 1982

Credit Union QSL Account	\$376.44
General Fund Account	\$319.42
Swap Meet Account	\$1233.15
Total	<u>\$1929.01</u>

THE LATEST ON CLUB QSL CARDS

Mel Erb reports that club QSLs can now be obtained from: Hawthorne Typesetting Co., 4736 West El Segundo Blvd., Hawthorne, CA 90250. Phone: (213) 679-8677. The cost for imprinting your personal information in silver ink on the club's cards is \$22.00 for 100; and \$4.00 for each additional 100 cards. Five or more orders (with different calls etc.) are \$18 per 100 (with the \$4.00 each extra hundred of the same card). Allow one week from the time your order is placed. He also has other styles of cards available, such as the "business card" type.

CLUB BADGES REVISITED

Did you know that you get a free door prize ticket if you wear your TRW/ARC badge to club meetings? If you don't have one with your current call on it, drop Bill Dews a check for \$2.00, along with your name and call. New badges recently sent to their owners are KA6TRK, W6ZVM. and KE6VF--see if you can put a face to the call, at the next club meeting.

RF SIGNALS—Connie Gilmore, WA6SKM, Roving Reporter

Here's a new column for TRW/ARC! The editor and Friend thought that the club would enjoy an expanded activity report; let us know how you feel.

Last month, two officers from the K9 Corps of Redondo Beach came with their dogs and gave a very impressive demonstration, as well as answering a zillion questions. Officer Randy Martin, with Kaiser, and Officer Mike Higashi, with Axel, along with the cadet who "played" with the dogs, Jim Shaw, deserve a great big thanks from not only the club members, but all the residents of the surrounding communities. I know I will sleep better at night knowing such dedicated officers are on duty guarding me and mine.

The June picnic was a huge success. Food and refreshments have been provided by the club at Polliwog Park for the last several months. Watch for your flyers in future months.

The Field Day site was wonderful, and all who attended had a good time. Bob Hume reported 1700 QSOs on 40 meter CW. One of the unsung heroines was Sami Komatsu, who single-handedly provided food for all the Field Day operators, and who makes the food for our picnics. She doesn't have a license (ham, that is) but she's a better volunteer than most of us. I'm sure I'm speaking for the whole club, Sami: Thanks from all of us.

Bill Rodner has been providing superb programs. If you don't make it to the general meetings, you are really missing something. In June, Jim Hoff (KE6EF) District Emergency Coordinator for the LA County ARES, along with Jim Micheals (W6PGM) and Scott Graham (KE6B), showed slides of the "Spruce Goose" move and various activities the ARES Group is involved in—marathons, Olympics-type sports events, sailing, etc, with earthquake and other emergency drills thrown in for "icing on the cake." The group is leadership-activated, not by the ARRL, although it has ARRL support. They asked people to assist and provided a membership form. They also have a local net, Thursday evenings on 145.52 simplex, at 7 pm. They invite you to join in. It sounds very interesting, and they need volunteers in almost all areas.

HOUSTON, THIS IS SAN BERNARDINO—Phyllis Gilmore, KE6TC

Most of us rely on the news media for our "space experience." Unfortunately, the media increasingly consider things like tennis more important. Even when they do have coverage, the commentators' remarks are often ill-timed. Have you ever wished you could turn off the TV's audio and listen directly to Shuttle communications?

Hundreds of Southern Californians were able to do just that recently, through the efforts of the JPL Amateur Radio Club. Taking advantage of the Lab's access to the NASA communications network, the club was able to patch both shuttle communications and NASA bulletins through their W6VIO repeater. Other repeaters linked in, creating a network with a number of frequencies available for anyone with Bearcat-type scanners or the appropriate amateur radio equipment to listen in.

Some extra effort made the links two-way for special question and answer sessions conducted during and following STS 4. The JPL club made phone patches to Houston to enable amateurs to ask questions directly to a NASA flight controller on July 1 and to STS 5 Astronaut Vance Brand on July 7. The questions asked covered flight and orbital characteristics, maneuverability in space, communications, housekeeping, and even whether flight crews would get more pay than mission specialists. One question brought down the house: "When will we be able to have a question and answer session like this, but with an astronaut while he is in space?" The flight controller thought it had possibilities.

JPL ARC plans to continue the networking with the next shuttle mission, tentatively scheduled for November. Listen in on 224.04 MHz or 145.460 MHz—only two of the frequencies available. Start thinking about your questions now.

(The above article was originally written for publication in Tale Feathers, newsletter of the Arrowhead Section of the American Institute of Aeronautics and Astronautics.)

"The most important single ingredient in the formula of success is knowing how to get along with people." Theodore Roosevelt. (Even on Field Day?)

THIS MONTH IN HISTORY: JULY 1973

Paul Weisz (K6YQ) attributed some of the success of Field Day '73 to the two satellite contacts via Oscar 6. He also observed that no one will ever forget that "cool balloon-supported semivertical" antenna.

Licensing classes got underway during the first week of July, featuring a Novice class (of which your editor is an alumna) conducted by Neal Hudson (then WA6VCZ) and Wade Walstrom (WA6TXE). There was also an Extra class, conducted by Al Lee (W6KQI) and Nelson Hayes (W6VBB). From the recently concluded General class, six or seven upgrades were expected.

Rules for the logo contest were announced, with the first prize a \$25 gift certificate for L.A. Electronics (\$25 meant a lot more then, gang).

A lengthy article by Lloyd Williams (WA5PPA) discussed the commercial exams.

WHAT YOU SHOULD KNOW ABOUT ANTENNA GAIN--TNX W6VIO Calling & Jim (WA6KPW)

One of the most abused and misunderstood areas in the communications field is antenna performance measurements. All too frequently gains claimed for some widely advertised antennas are so extravagant they can only be described as imaginative, particularly as no comparison reference is ever provided for the dB gain claims made for these "incredible" antennas. All antenna gain figures depend on a reference before they can be meaningful. In VHF and UHF communications, a vertically polarized half-wave dipole is the most common reference (dBd). Some manufacturers reference the gain to an isotropic source (dBi), a theoretical point source that radiates a signal equally well in all directions. Others reference the gain to a quarter-wave monopole or ground-plane antenna. All of these are excellent references as long as the antenna gain figure is related to one of them.

The following table lists the gain relationship of the reference antenna, also the relative gains of other commonly used antennas. The ground plane reference used assumes a quarter-wave vertical radiator over a sheet metal ground plane on wavelength in diameter. From this illustration, the importance of a gain reference is readily apparent. Without it the gain figures are ripe for misinterpretation.

Antenna Type	Gain over Isotropic (dB)	Gain over Ground Plane (dB)	Gain over Dipole (dB)
Isotropic	0.0	-0.6	-2.15
Ground Plane	0.6	0.0	-1.55
Two Stacked Dipoles	5.15	4.55	3.0
Four Stacked Dipoles	8.15	7.55	6.0

LICENSE EXPIRATIONS THROUGH OCTOBER

WA6VJQ	7-22	K6PUK	7-22	W6IPM	8-2
WB9ZDS	9-82	K3PNL	10-25		

BAYSINGER STRIKES BACK--TNX ARNS and The Round Table (Denver)

Having been stripped of his electronic gear, David A. Baysinger (WBØBAE) is studying ways to protect his home and his station from future acquisitive visitors.

To protect his property in the future, Baysinger has had under consideration the establishing in his home of one or more guard programs including rattlesnakes, tarantula spiders, used car salesmen, Republican politicians, a used Park County Sheriff, or an icosahedron.

Anyone having a Tesla coil or a bassoon should contact Dave direct or on 30 meters.

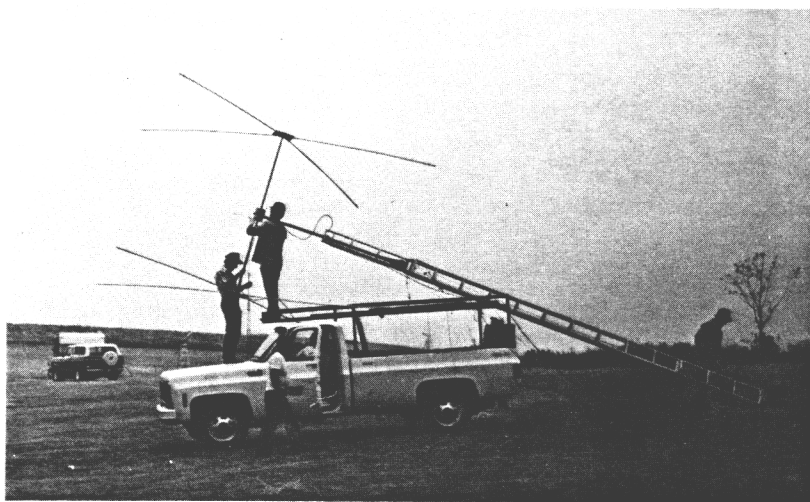
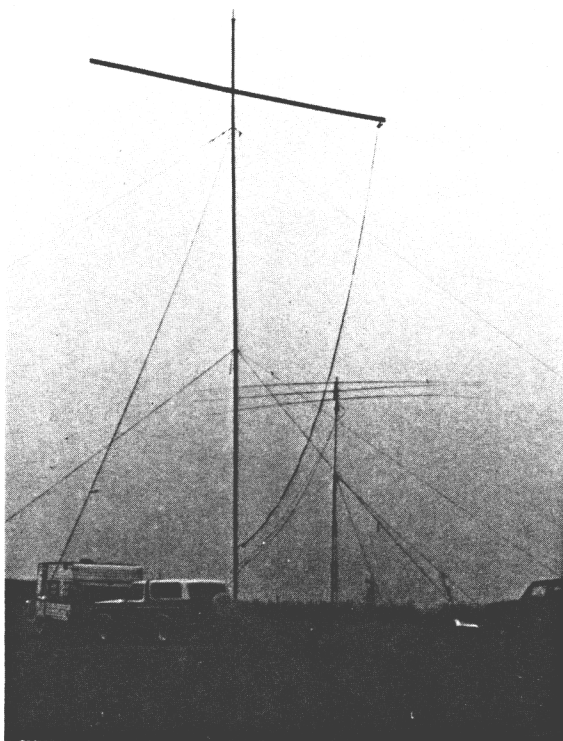
The ham radio dealer in our town has a policy that all business is strictly cash--except for batteries, which may be charged. TNX ARNS.

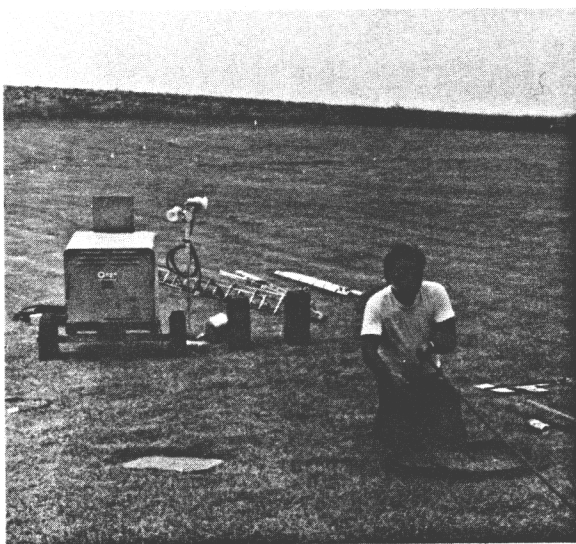
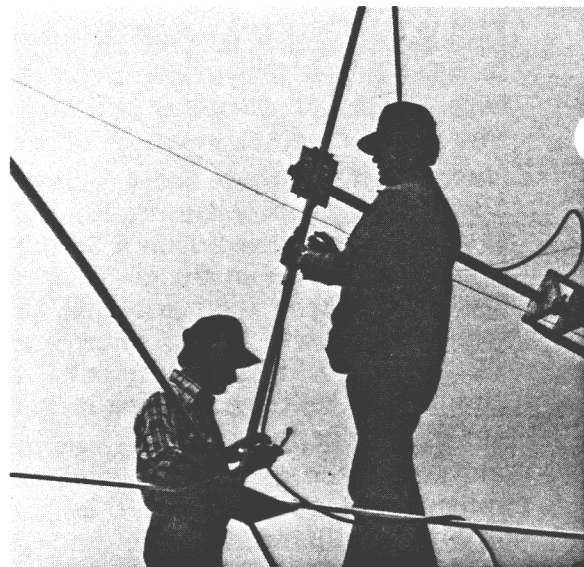
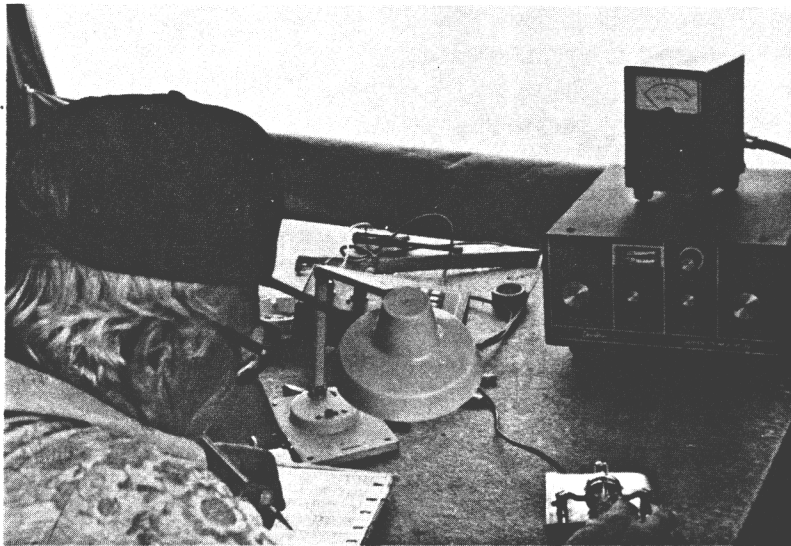
FIELD DAY STRIKES AGAIN--Phyllis Gilmore, KE6TC. Photos by Dave Gilmore, WB6IDJ.

It began Friday night, with the raising of tents and parking of trailers, and the great antennas began to go up. Saturday morning, more intrepid testers showed up, including your editor--who was immediately sent on an emergency run to the nearest Radio Shack.

Next, the team went about resurrecting the quad for Paul Fisk's (KD6NQ) 15 meter CW crew. They made me promise not to tell how the ladder died. The 40 CW team, ably led by Bob Hume (KG6B), relied upon a double inverted-vee arrangement, while the 20 SSB folks sported a beam and relaxed in the comfort of Carl Kennedy's trailer. The 40 SSB experts, led by Ollie Saunders, draped their antennas between two masts. After operations began at noon, I put in some time at the 20 SSB microphone (male chauvinism can be nice in a pileup: "OK, let the YL go first."). I eventually put 2 meters on the air, running the coax from my mobile antenna into my pup tent and hooking it up to the rig from the shack.

Bill Rodner (K6AWS) came in at the last minute, about 11:30 on Sunday, with some solar cells and associated gear--with which we made 11 extra-point contacts on 2. Tearing down the antennas went more easily than putting them up, since the owner of the deceased ladder came up with a brilliant idea--use the truck.







MEANWHILE . . .
 There was this other
 event going on. These
 are historical photos,
 since these guys had
 other duties in June.

