

CROSSTALK

News Bulletin of the TRW Amateur Radio Club

Member, American Radio Relay League

ARRL Club No. 1658

JULY 1987

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

Garrett/W6TRW Repeater: 145.32/- .600(2A-PL) -- UHF: 442.0001n/447.000out

CALENDAR FOR JULY AND AUGUST

Saturday	July 25, 8-11am	Swap Meet, Northwest corner of Compton/Marine and Aviation behind the Chevron station. Don't arrive before 0600!!
Tuesday	July 28, noon	Club Meeting, R2/1055. Tentatively scheduled to have the Downey ARC bring their Emerg. Comm. Van for show and tell.
Thursday	Aug 6, after work	Executive Board Meeting. All members are welcome! At Pizza Hut, 926 N. Sepulveda Blvd., Manhattan Beach.
Friday	Aug 14, noon	Club Picnic, El Nido Park, 182nd St. between Hawthorne and Inglewood. Bring your badge and enjoy the good food!
Tuesday	Aug 25, noon	Club Meeting, R2/1055.
Saturday	Aug 29, all day	ARRL Networking Conference, Building S Forum. More information and directions to Bldg. S see article inside!
Saturday	Aug 29, 8-11am	Swap Meet

Emergency Communication Notes

Rich Sauer, N6CIZ

The news this month is the reactivation of the TRW RACES station 3-Xray-3. Recently, while reading through the Disaster Communications Service manual, I discovered that TRW is indeed a part of the RACES effort here in Los Angeles County. On Monday, July 13th during the RACES Monday night drill, I reported in to the Lennox Sheriff's Station and gave an activity report based on the previous Wednesday's checkins. So now, we have a method of communicating with County officials in case of an area-wide disaster. If you're a RACES member and would like to man the TRW Station for the Monday night drill, let me know. I still need volunteers to help out with the ARRL Digital Networking Conference on August

29th. All it involves is hanging out on the repeater and answering questions from visitors to our site who will be attending the Conference. So far, no one has come forward to volunteer their time.

The new controller has done a fine job of reminding everyone of our Wednesday noontime checkins if quantity is any indication. The checkins for July were as follows: July 1st: W6ZWS, Randy, Net Control, N6JLS, NU6U, W6EKK, W6IPM, N6NDS, and N6JI. July 8th: N6CIZ Net Control at W6TRW, K6AWO, K7JAJ, W6IPM, W6ODI, NU6U, WA2KDL, W6ZWS, W6EKK, N6JI, W6IOW, and K6ZTI. On July 15th: W6IPM, Bill, Net Control, K6AWO, N6CIZ, WA2KDL, W6EKK, W6ZWS, WA6RUZ, WA6ATK, N6NDS, K6MAU, and W6IOW. Thank you all for checking in and I'll look for you next Wednesday.



From the Library

George Lee, W6IOW

What's new in the July issues of:

QST: Some reflections on Vertical Antennas (Ground effects) by W7XC.

Improving the K1FO 8874 432MHz Amplifier by K1FO.

Designing and building simple crystal filters by W7ZOI

HR: High performance Yagis for 432 MHz by K1FO.

Build a 1.0 to 1000 MHz amplifier using the MAR-4 MMIC by WB6BIH

Improved gain distribution for Yaesu FT-726R by K1ZJH.

CQ: The Handy-Pack (Portable power for HT's) by NA7K.

Review of the Icom IC-275 all mode 2 meter transceiver by K4TWJ

Review of the MFJ-949C Versa Tuner II by W1ICP

73: Review of the Yaesu FT-209R II 2 Meter Mobile/Portable transceiver.

Review of the F9FT 9 element 2 Meter portable antenna by KT2B.

AFtronics Super SCAF (Switched Capacitor Audio Filter) by W4THV

2 Meter Transverter Project (use with TS-940) by W6YUY

Big Time Packet by K1TE

We have just added 2 new books to the Library. We also have the Icom, Kenwood and Yaesu Newsletters and Packet Radio Magazine in the shack. The new books are:

The Buyer's Guide to Amateur Radio, by G3OSS from the RSGB.

Yagi Antenna Design, by Dr. James Lawson, W2PV.

If anyone has spotted a sale on magazine files made of sturdy corrugated fiberboard material in the South Bay area, please let me know. The last sale spotted was in the San Bernardino area stationary store (2 for \$0.99).

Executive Board Meeting 9 July 1987

The meeting minutes were taken by someone, but the editor can't remember who so that he could bug them soon enough to get the minutes to the editor so that they could appear here. Hopefully they will appear next month, but only time will tell.

All of the animals, excepting man, know the the principal business of life is to enjoy it. Samuel Butler

Ragchews

Which speech habit drives you the nuttiest? Use of Q signals on phone? The guy who calls everything "fine business?" Or the op whose conversation consists of repeating back everything the other person said, like it's a memory test of something? The word "destinated?" The person who commences every phone transmission with "ROGER-ROGER-ROGER?" Over identifying, that is, saying one's own call 10 times in one minute rather than one time every ten minutes? Lousy diction - "This is Kaay Threee Snorgleframmus?" Did you know (and do you care) what drives me wacko? Raving about other people's habits, of course. Didn't you see it coming?

Thanks to the Downey ARC Q5 who got it from the Mid-Atlantic ARC, Remarks.

General Meeting 30 June 1987

As the position of Club Secretary has not been filled and no one volunteered to take meeting minutes, none were taken, and none will appear here.

Many time a day I realize how my outer and inner life is built upon the labors of my fellow men, both living and dead, and how earnestly I must exert myself in return to give as much as I have received.

Albert Einstein

Wanted -- For Sale -- Freebies

For Sale: Kenwood TR-2600A Handheld 2 Meter Transceiver. No PL. Only used twice. Asking \$250. Contact Connie at (53)63665 at work or 540-0433 at home.

Field Day

Bill Schrecengost, KE6LB

It is Monday June 29th, the day after the ARRL Field Day Weekend, so it's time for some Monday morning quarterbacking and reporting on Field Day while the details are still fresh in my mind. In general, things went well and all participants appeared to be having a lot of fun. We started out with seven stations (Class 7A), plus a Novice station operated by Frank Cartier, Jr. (KB6LSE) and Steve O'Neill (N6CRR). A list of Field Day participants follow. Thanks to each of these people for their hard work and dedication.

2 Meters FM

Phyllis Gilmore, KE6TC

Rich Sauer, N6CIZ

Terry Thompson, KB6CUT

15 Meters CW

Jeff Stewart, N6JI

Max Maxwell, NU6U

John Waayers, K6MAU

15 Meters SSB

John Shepherd, WA6VYX

Ken Edwards, KE6NA

Paul Weiss, K6YQ

Wayne Hogankamp, KI6GM

Skip Bloomer, KD6JA

Shep Shepherd, WA6LTK

20 Meters SSB

Herb Gleed, W6FQ

Jack Clark, WB6TCR

Frank Cartier, Sr., WA6RAY

Novice

Frank Cartier, Jr., KB6LSE

Steve O'Neill, N6CRR

Food Service

Sammi Komatsu, Saturday Lunch

Stockwell Family, Saturday Dinner

John Keller, Sunday Breakfast

We did have one unusual incident that occurred which should be documented in this newsletter. Sunday morning about 3:15 AM two weirdos raced through our Field Day encampment in a 4WD truck, narrowly missing several occupied tents. Bob Hume's 40 Meter antenna was knocked down and destroyed. This hurt us as the 40 Meter CW station was cranking out over 30 contacts per hour and 8 hours of operating time remained. We lost at least 960 points. A letter has been drafted to Deane Dana, Los Angeles County Supervisor, reporting the incident.

In summary, we had a good Field Day with many pleasant memories, some humorous like the erecting of the 60 foot Dale Jensen "wet noodle" dipole mast. (ed. This was captured on video tape). The only thing that remains to be done is computer sifting of the Field

Packet

Chris Wachs, WA2KDL

Computer Logging

Joe Dietrich, WD6DBD

20 Meters CW

Paul Wisiolek, K1TKL

Harry Klebs, WC6M

John Keller, N6JLS

40 Meters CW

Bob Hume, KG6B

Barry Allen, WA4TTG

40 Meters SSB

Paul Lukas, N6DMV

Ollie Saunders, N6OS

Dave Cross, WB5VFK

Bob Wartburg, K0LL0

Power Distribution

Paul Herbert, KG6CR

Day points which Joe, WD6DBD, is doing, and filling the report with the ARRL. A post Field Day memo with recommendations to improve next years Field Day is in work by me and will be submitted to the TRW/ARC Executive Board in the near future.

(ed. As part of this months Crosstalk you will find some pictures of the activity that took place as well as some of the aftermath of our 3:15 AM visitors that felled the 40 CW antenna. The report for Field Day has not been completed, in fact it is being worked on as I work on the newsletter. Next month we will have the results of the Field Day operation and a good idea on how we did with respect to others. By the way, we did operate 15 class 7A this year and we always do well at that level).

New Members - - Old Members

Welcome to the Club:

James Howell, WB7DVD(expired). Not a lot of information was on Jim's application so there isn't a lot I can say except it looks like he is getting back into hamming again.

Don Renkowitz, W6SQF, holder of an Advanced ticket and mostly interested in VHF.

Charles Cowan, KB4TXZ, Technician Class license holder and ARRL member too. Chuck's interests run the gamut of HF, VHF, UHF, Packet and Computers.

And welcome back Barry Allen, WA4TTG, who for some reason remembers to renew his membership about the time Field Day rolls around.

Welcome all and hope to see you at the next Club Meeting, Tuesday, July 28th, at noon in building R2, room 1055.

Congratulations to Jack Koho, the proud recipient of Novice call sign KB6SKD. Jack is now working on his Technician license.

Club Picnic

John Keller, N6JLS

Another fantastic picnic was presented to the attending members of the TRW/ARC by Activities Manager Jim Wike and his YF Luella. The number of persons attending was down quite a bit from the previous month apparently because they did not want to get wet. However the sprinklers were silent this month and all who attended enjoyed the green salad, potato salad, ham or turkey sandwiches, chips and dip, beverages and of course the mint chocolate brownies. The next picnic will be on Friday, August 14th at noon in El Nido Park. See you there!

The Advanced Computer Controls RC-85 Repeater Controller is finally in place and W6TRW/R is back on the air. I'm sure that most of you have heard its synthesized voice IDing the machine and making other important announcements. Right now, its capabilities are limited but there are a few things that it can do. User control codes are available from me. If you'd like a set, and are a member of the TRW/ARC, drop me a line and I'll get them to you. Just remember that these codes are proprietary information. Don't share them with anyone! There are only two codes which are "open" to all users. By pressing "92" on your touch-tone pad you will get an S-Meter reading which will tell you how well you are getting into the machine. Pressing "5" and then a sequence of numbers will read back the sequence to you. This is handy for testing your pad.

As I said, these are "open" commands but if they are abused, I'll change them and limit access to them in the future. Have fun with the system but please ID yourself before pushing any buttons! It is an unfortunate fact of life that there are people out there who like to crack codes and these people don't ID. Don't be confused with them. Access to features depends on those having access exercising discretion and following the rules. One nice thing about the ACC controller is that the system can be made as open or as closed as we desire. I would like to see the system as open as possible, but that depends on you - the user.

Although the TRW repeater is now the primary machine on the air, I'd like to thank Charlie W6NWP, and the Garrett ARC for letting us use their repeater while ours was down. The NWP machine worked flawlessly. It will be back in Building 134 soon, playing the role of backup (just in case...) and eventually will act as a full-time satellite receiver linked to the primary TRW machine.

Another new piece of gear was added to the ham shack this past month. It's an HF remote base designed and built by Mike Aust, WB6DJI. Like his 450 repeater (W6TRW/R on 447.00), Mike has spent his own money and time on this project and has loaned it to the radio club for its use. The system is accessed via the telephone line and controlled from the touch-tone pad buttons on your phone. 10 thru 80 meters can be worked using the KLM triband beam and other antennas on top of Building 65. If you

haven't taken advantage of the gain available from the fine antenna farm the club owns because it was too much of a hassle to get over to the shack, this system will let you do so from the comfort of your home. Contact WB6DJI for further information.

Finally, I'm looking for a used ICOM 3A HT in good working condition. This radio will be part of our remote base system, and accessible through the 2 meter repeater. If you know of one for sale at a good price, or if you'd like to donate one to the club, please let me know. 73's.

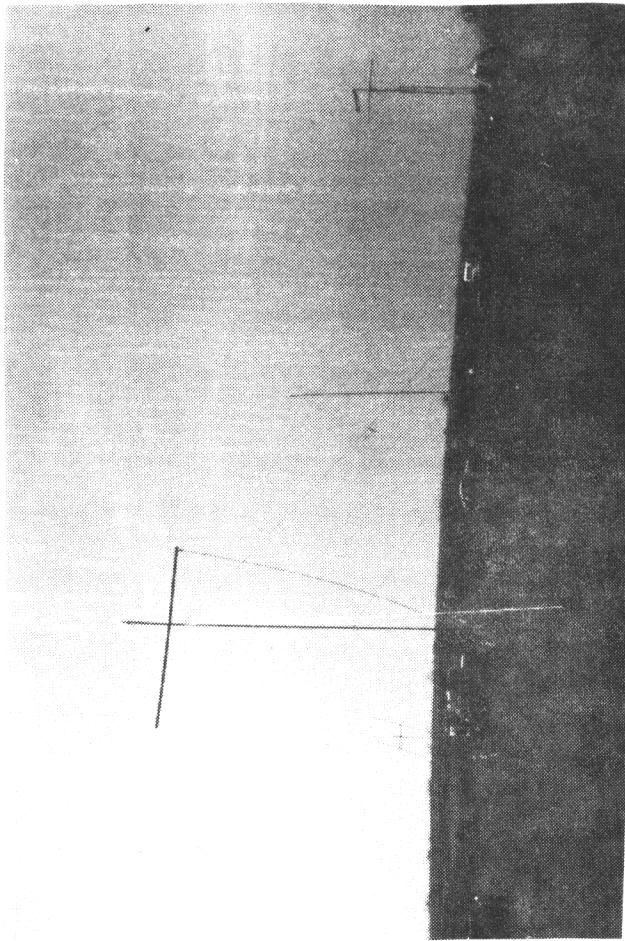
From the President

Chris Wachs, WA2KDL

The big news is the upcoming **ARRL Networking Conference** to be held on Saturday, August 29, 1987 in the Building S Forum. There will be a beginners session and papers presented by the people who invented Packet Radio. This conference, is being jointly sponsored by the TRW/ARC and the SCDDC. If you are or will ever be involved with Packet Radio then be sure to attend.

Not only has Mike Aust set up his telephone controlled HF station to the array of antennas in Building 65, but Terry Thompson KB6CUT has completed the set-up of the OSCAR station in the ham shack. Terry has also loaned his Yaesu FT-726R 2 Meter/440 MHz dual bander as the operating rig for the station. If you are interested in getting on OSCAR at the ham shack please call Chris Wachs (President on the back page) for a walk through of the operation.

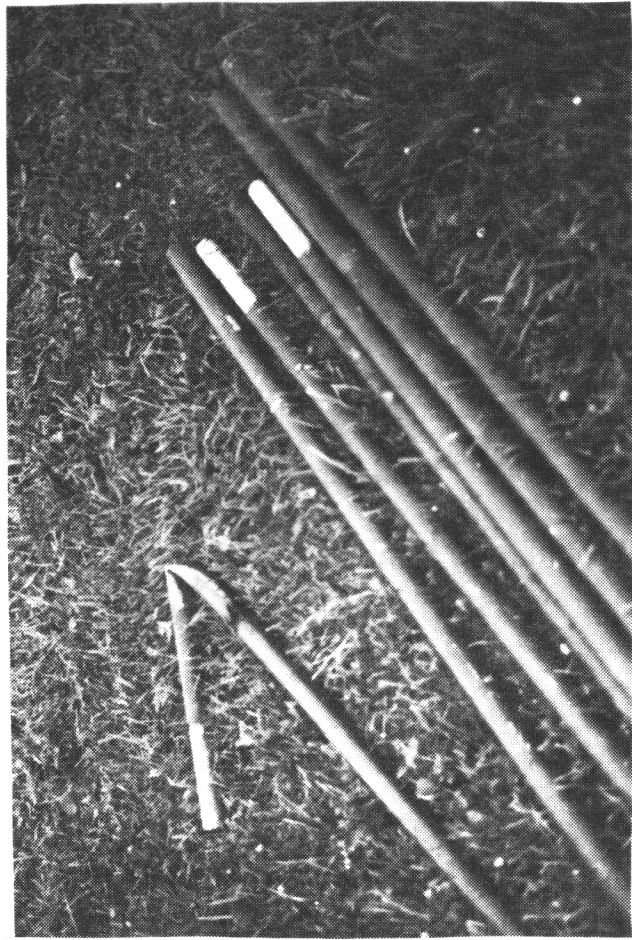
The TRW/ARC is in need of help. The Club is looking for some officers, especially the vacant position of Secretary. We could also use a "High Tech" Chairman. Both positions are good for new members of the Club. Do you have a good computer and know how to use word processing software? The present newsletter editor is retiring at the end of the year and we need to find a replacement now to make a smooth transition. Swap Meet Manager Frank Cartier is looking for some assistants. He would like a few members to commit to show up for 4 to 6 months in a row to cut down on training and to have a continuity of leadership presented to those that are attending. Frank travels a lot and Bill Dews will arrange to schedule you if you will just give him a call at (53)61656. If we get enough people to help, then you would only have to be there for the first half or the second half of the Swap Meet, that is, open up or close down.



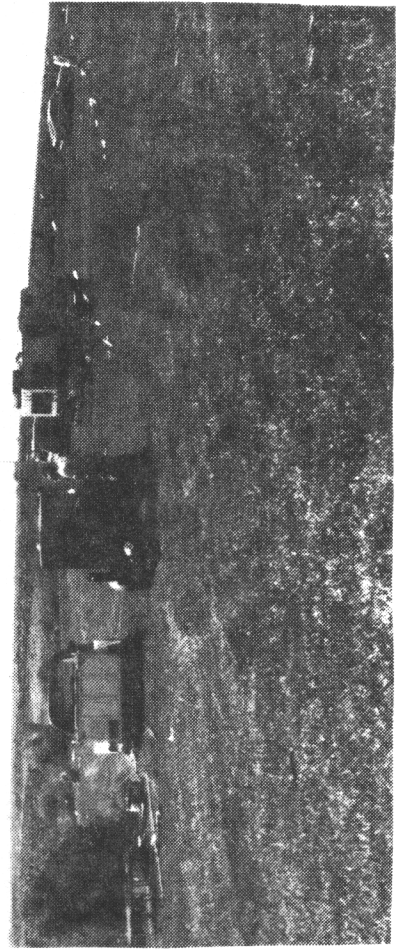
Here is the last known picture of the 40 M CW antenna installation. In the background are the (l to r) 15 M SSB, 40 SSB with the new vertical antenna and 20 M SSB.



Here is some of the aftermath from our early morning visitor. The wooden cross piece that separates the 2 elements of the antenna is completely shattered.



Some more of the aftermath. These are the interlocking poles that made up the vertical support of the antenna. Fortunately only one of the poles is damaged.



Here is the generator which Paul Herbert adjusted while the voltmeter was plugged into the lawn beneath the generator. Paul got it up to 150V before someone yelled.

Tidbits from the Jolly Little S...!

Just before I started typing this month's newsletter, I was going through (oh my gosh) three months of newsletters from other clubs, and came across a few bits of good information.

Ron Phillips, formerly K6MLL and now AH6HN, retired member of the TRW/ARC and active member of the Big Island ARC (BIARC) headed up that organizations Field Day effort. Ron can be heard from time to time on the noon net with Bill Rodner, K6AWS, on Monday, Wednesday and Friday.

From the Lockheed ERC Amateur Radio Club Bulletin we hear that a new ham store has opened in Burbank. The new establishment is the brain-child of Bill Smith, N6MQS, and is called A-TECH. It is located at 1033 Hollywood Way, Burbank and can be reached by phone at (818)845-9203. Bill says his hours are 10 AM to 6PM Monday through Saturday and 11 AM to 3 PM on Sunday. Bill also handles some computer equipment so those of you with dual interests will have only one place to go.

Need a tower man?? While everybody wants a high antenna, almost nobody relishes a fall from 60 feet. That's where KJ6Y comes in. He has all the equipment and lots of experience too. So if you don't want to climb that tower or especially if you don't have the proper equipment give "Skip" a call.

Communications Service Co.
Harold "Skip" Bolnick, KJ6Y
22712 Califa Street
Woodland Hills, CA 91367
(818) 887-3569

From the July 1 issue of the W5YI Report we find the the Novice ranks have expanded sharply! The number of applications for a NEW amateur license in the month of May was 7,065!! The previous high month in the last two and a half years was 2,899 in July of last year. Not only that but the total number of applications that were processed by the FCC on April and May alone have increased a whopping 71.1% and this is after falling off 18.4% in 1984, falling off another 17.1% in 1985 and another 10.55% in 1986. It is apparent that Novice Enhancement is doing the job it was intended to do.

Amateur radio call signs for District 6 issued as of June 1 are: Extra - AA6CP; Advanced - KI6TM; General/Technician - N6PNJ; Novice - KB6SYY. Note that the 2 by 1 format has run out in District 6 and 2 by 2 call signs are being issued.

I do not like the phrase: Never cross a bridge till you come to it. The world is owned by people who cross bridges in their imagination miles and miles in advance of the procession. Bruce Barton

Controlling the Controller

Rich Sauer, N6CIZ

Since the new controller has gone up on the repeater, a lot of people have asked me a lot of questions. So here's some answers. No, I will not be giving all the codes to everybody. Only TRW Amateur Radio Club members can have the codes. The USER codes that is. Some of them we have to keep secret even from the Club members. Contact me directly or at one of the Club functions if you want codes.

There are quite a few ID messages and they have special names and special functions. An Initial ID Message is the "Welcome to the repeater" message. If the repeater has not been in use for six minutes, and a new user comes up, after he unkeys the controller sends the welcome message. If the new user holds his carrier up for a period greater than ten seconds, preventing generation of the Initial ID, the controller will send the Forced CW ID Message on top of him so that the repeater is ID'd.

After the Initial ID or Forced CW ID, the Pending ID timer (six minutes) starts to run. When it times out, the controller looks for no repeater activity or for users to let the repeater carrier to drop. If they do, the controller sends a "Pending ID Message" at the end of the repeater hang time. The Pending ID can rotate between three ID messages for variety. In addition, a "Special ID Message" can be added to the rotation.

If the repeater carrier is not allowed to drop during the Pending ID period (such as if a conversation is in progress), the controller looks for a break between user's transmissions for a period of three minutes to work in the "Anxious ID Message".

Finally, if the controller isn't given the opportunity to ID between user's transmissions, it forces a "Forced CW ID Message" over the conversation in progress. The cycle then repeats and continues as long as there is repeater activity following an ID.

I hope that this helps explain some of what's going on. As more features are added to the repeater, look for more explanations here in Crosstalk.