



CROSSTALK

News Bulletin of the TRW Amateur Radio Club

Member, American Radio Relay League

ARRL Club No. 1658

JUNE 1987

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

Garrett/W6TRW Repeater: 145.32/-600(2A-PL) -- UHF: 442.000in/447.000out

CALENDAR FOR JUNE AND JULY

Fri-Sun	June 26-28, 24 hr.	ARRL Field Day Weekend. Friendship Park, San Pedro. Come and join us for a few hours or the entire weekend. Directions to the park can be found in the Field Day article!!
Saturday	June 27, 8-11am	Swap Meet. THE SWAP MEET WILL BE HELD FIELD DAY WEEKEND!!
Tuesday	June 30, noon	Club Meeting, R2/1055. We will probably review Field Day.
Friday	July 3, all day	Company Holiday in celebration of Independence Day July 4th
Tuesday	July 7, noon	Club Picnic, El Nido Park, 182nd St. between Hawthorne and Inglewood. Bring your badge and enjoy the good company.
rsday	July 9, after work	Executive Board Meeting. All members are welcome! At Pizza Hut, 926 N. Sepulveda Blvd., Manhattan Beach.
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 26, noon	Club Meeting, R2/1055.

General Meeting 26 May 1987

Walt Pearson, N6DZM

The meeting was called to order shortly after noon with eighteen members attending. President Chris Wachs called for volunteers to fill the Club Offices of Secretary, Los Angeles Area Council of Amateur Radio Clubs (LAACARC) Delegate, and soon to be vacated Crosstalk Editor. Vice President Steve O'Neal is the Club representative to the 29 August Packet Radio planning meetings. Technical Chairman Rich Sauer is integrating the new ACC controller with the repeater and plans to add touch tone capability. Club members were admonished to keep the Club Station area clean. Membership Chairman Bill Dews introduced new member John Bedoyan.

The guest was Fried Heyn, WA6WZQ, ARRL Southwest Division Director who began his presentation with a video on Field Day by the Hughes Aircraft ARC. Fried then discussed various functions and needs of the ARRL. He requested a person from the Club for appointment as Assistant Director. He also requested that an ARRL booth be permitted at our monthly Swap Meets.

Fried discussed the status of the FCC proposal for usage of the 220 MHz band. He urged support of the ARRL position by writing to the Senators and Representatives involved. Fried reported on the proposed amateur radio museum in Connecticut and status of the amateur radio museum in Palos Verdes. He also discussed progress of the proposed call sign administration and implementation of "Novice Enhancement." Fried had various amateur radio related brochures and other handouts available. The meeting was adjourned after the drawing for door prizes and about 1:00 P.M.

Field Day

Bill Schrecengost, KE6LB

Well, it's mid-June and Field Day '87 is just around the corner. We Field Day band captains had a "Field Day Readiness" meeting on Monday June 15 to discuss where we were in regards to readiness and what we still need to do. There were a number of shortages such as tents, antennas, folding tables, etc. These were all resolved except for a tent for 15M/80M CW. Jeff, N6JII, and Max, NUGU are operating the 15M/80M station and if we don't find them a tent they will be baked during the day and dampened by dew at night. Friday evening (June 26) we will be setting up for Field Day and could use help setting up tents and antennas. This will be accomplished from 5P.M. to 9P.M. Call me (X63316) for directions to Friendship Park, on the southeast side of the Palos Verdes Hill. We likewise need help tearing down on Sunday June 28 at 11AM. See you all at the Field Day site.

(ed. Directions to Friendship Park are: South on the Harbor Fwy to the Gaffee offramp. Turn left at the end of the ramp to continue south on Gaffee for a few blocks to 9th Street where you will turn right and head west. Continue up 9th and after crossing Western Ave the next left turn is the entrance to Friendship Park. Drive up the hill and at the top the road turns 180 degrees to the right and into the parking lot. At the north end of the lot there is a gate that should be open or at least unlocked. Go through the gate and up the snaky road to the very top of the park where we will be. Saturday evening the view of San Pedro and Long Beach is spectacular!)

On June 10, 1987 at approximately 10:00 a.m., Inglewood Police Department unit 2L2 advised the City Communications Center that he had just observed a commercial airliner go down in the area of 104th Street and Prairie Avenue. At the same time, Inglewood Communications received a call from the LAX control tower stating that an ACME Airlines 737 advised that he had a fire on board and was "going down" short of the runway (Inglewood area). Numerous citizens have called on 911 into the Inglewood and Los Angeles Communications Centers advising of a downed aircraft in the area of 104th Street and Prairie Avenue with widespread destruction and many fires. Inglewood Fire and Police Departments along with Los Angeles County Fire and Sheriff Departments have been dispatched to the area.

Thus began a simulated emergency drill involving Inglewood Police and Fire, L.A. County Sheriff and Fire, CHP, Red Cross, NTSB, and RACES (the Radio Amateur Civil Emergency Service). The drill was held the morning of June 10th at the Forum in Inglewood. You may remember the talk given by Sgt. Rudy Lovio at the April Club meeting where he described the Disaster Communications Service and invited those interested to sign up with the L.A. County DCS. Well, that's how I and Rothan Maxwell, N6GU, of the TRW/ARC found ourselves reporting to the Forum at 8:00 a.m. with Vern W6KKU, Mac W6DSY, Tim W6WQA and Pat K6RLL. Altogether, there were probably 50 to 75 people involved in the exercise.

We started with a slide and video tape presentation showing the aftermath of the Cerritos air disaster involving an Aeromexico jet crash. An L.A. County Fire Department unit was on a training exercise that morning and was one of the first units to respond to the crash scene. They had a video camera and recorded the scene minutes after the plane crashed. Looking at the slides while we listened to tape recorded conversations of the air traffic controller as the plane disappeared from the radar screen and Sheriff officers responding to the crash got everyone into a properly sober mood.

The Sheriff's Office had set up its mobile command post in the parking lot and I must say I was impressed. Two 40 foot trailers parked back-to-back crammed with radio gear and telephones and very well organized. We moved out to our positions, manning the Lennox Sheriff station, Inglewood P.D., the command post (yes, the Sheriff Department has provided a console in the trailer for Amateur Radio) and as rovers in "the field".

The first call for RACES came rather quickly. The organizers had set up a field simulation team in the press room in the basement of the Forum. Their job was to represent fire and police units in the field, calling in to the command post by radio. Inglewood Police quickly found out that their radios would not get out from that location. RACES members were dispatched to act as the communications channel until the technical problems could be worked out. We were happy to find out that our 2 meter handhelds worked fine 20 feet or so below ground level. We only lost contact intermittently while walking through the tunnels and corridors inside the Forum.

We continued to pass on health and welfare traffic and basically stand by, keeping an extra emergency communications channel open for all the public service agencies involved.

The exercise was suspended after about an hour and a half and a critique was held with all participants voicing their opinions, concerns and lessons learned. The exercise went quite well with the official critique observers from the LAPD and Ontario Fire Department quite impressed that everything went as well as it did. Everyone rated the morning a success.

From my point of view, here are my comments. This was the first time I have ever been involved in anything like this. I was impressed with the professionalism of everyone including the Hams who took personal time off

their jobs to participate. Going into it, I wondered if us "amateurs" could really do anything useful to help the "professionals." Well, let me tell you. After the exercise and critique were over a couple of the officer came up to me, shook my hand and thanked us "amateurs who volunteer our time. One said "I wish more of you guys were around. You do great work and we really rely on you in an emergency. We need you guys!" That made it all worth while. That's what public service means. It's another aspect of our hobby that I think I'm really going to enjoy.

If any of this sounds interesting to you, let me know. The ECT here at TRW is just getting going and I need volunteers. So does RACES. Let me know if you want to help.

Well, I've rambled on for quite a bit here so I'll give an abbreviated thank you to the folks who've checked into the Emergency Communications Team net Wednesdays at noon: KX6A, W6EKK, N6GU, N6NDS, W6IPM, N6GGE, N6MEL, W6ZWS, K6MAU, K6AWO, K6GLB, K6AWS (in Idaho via K6GLB HF relay!), N6JI, N6JLS, W6GPE, W6AKDL, N6AZY, W6IMQ, N6CRR, and W6TRW. Thanks to you all.

By the way, I need some volunteers to work swap meet communications detail, monitoring the repeater for emergency traffic during the swap meet. (You can do it from home with an HT - you don't even have to get out of bed). Also, we'd like to have club members monitoring in an organized manner all day on the last Saturday of August (August 29th). The TRW/ARC will be hosting the ARRL Digital Networking Conference that day and our repeater will be used by a lot of visitors who will probably have a lot of questions about directions and so on. If you're interested, please let me know. 73's.

From the Library

George Lee, W6IOW

What's new in the June issues of:

QST: The Magic of Moli (Rechargeable Lithium Cell for HT's).

A new chip for charging Gelled Electrolyte Batteries (Unitrode VC3906)

Product review of PAC-COMM TNC-200.

CQ: VHF Special Issue

Review of ICOM uA2-AT.

An easy to build 8877 Legal Limit Amplifier for 6 Meters.

HR: Compact 20 Meter Travelradio

Compact Travel Antenna

Test DBMs for Diode Leakage

73: Review of IC-38A and TM-3530A 220 Xcvrs

The Digital Novice

The following two books have been added to the Library recently:

Yagi Antenna Design by Dr. J Larson, W2PV

The Buyer's Guide to Amateur Radio by A. McKenzie, G3OSS.

Bargains in VS6 Land?

Your Librarian has just come back from VS6 land. What has he brought back? I knew you would ask that question! The time before when he went, about 2 1/2 years ago, he brought back 02 and 04-ATs which cost around \$220. This time the u2 is almost \$300, a portable xcvr about \$800, a TS-940 in the neighborhood of \$2K! A portable Sony 2001, a decent sw/ssb rcvr ran about \$280, about 12% less than stateside price. So after factoring in the type warranty and the customs tax, yours truly found there are now no bargains since the Yen is so high and the cost of living has risen there lately. So the answer to your question is: he bought nothing!! This also holds true for high end photographic equipment. Sorry about that!

The meeting was called to order at 5:30 by President Chris Wachs, WAZKDL. The following board members were in attendance: N6CRR, K6AWO, N6CIZ, W6ATK, KE6LB, W6GPE, W6RAY. Member Paul Lukas, N6DMV and visitor Harold Price, N6GK were also present.

Chris opened the meeting by reminding the board members that there are openings for Club officers and everyone should be looking for volunteers. There is no Secretary and no LAACARC Delegate. Also, John Keller will be giving up the post of Crosstalk editor after the first of the year.

Harold Price, N6GK, gave a short report on the ARRL digital networking conference to be held the last Saturday of August in the TRW cafeteria. The schedule calls for a beginner's session to start at 9:00 with the main conference starting at 10:00 and running until about 6:00. The TRW 2M repeater will be used to coordinate events and as a talk-in frequency. To facilitate this, the PL will be turned off THAT DAY ONLY.

VP Steve O'Neal, N6CRR, is rounding up a speaker for the next meeting but has no speaker confirmed yet.

Treasurer Dave Stockwell, W6ATK, reported on the club's financial condition and that \$100 has been paid to Del Conte's as a deposit on the Club banquet. Due to a price increase, a motion was made and seconded to raise the banquet budget from \$1000 to \$1100 with the money coming from the equipment budget. This would keep the cost to the members the same as last year and leave \$200 for door prizes. The motion passed unanimously.

Activity Chairman Jim Wike, W6GPE, reported on the tremendous turnout for the June Club picnic. About 24 members showed up and contributions reached an all-time high. Thanks to all of you who threw a few shekels in the kitty.

Membership Chairman Bill Dews, K6AWO reported that the club boasts 183 members currently on the roster.

Swap Meet Chairman Frank Cartier, W6RAY, reported that the last swap meet was probably the largest to date. We've added a second "sanitary facility" for everyone's use in response to public demand and received favorable response.

A discussion ensued regarding commercial sellers. The club wants to make it clear to all swap meet participants that if you bought it with a resale license, don't sell it at the swap meet. We do not allow commercial sellers and will remove them from the lot. We've received threats that the state of California will shut us down if we and the sellers don't comply with the law. Please abide by our rules and the laws of local and state governments. Otherwise we may have to shut the swap meet down.

Frank also wants to find a couple of volunteers who would like to work the swap meet every month. The current practice of having new volunteers each month puts quite a toll on Frank training people and answering questions. Two full-time swap meet coordinators would bring a continuity to the event and also help in the transition if a new swap meet chairman were needed.

Technical Chairman and Emergency Communications Coordinator Rich Sauer, N6CIZ, gave a short report on the status of the 2M repeater controller and brought it along for show-and-tell. The controller should be installed before the end of the month.

Field Day Chairman Bill Schrecengost, KE6LB, reported on Field Day plans. We have band captains for all bands but don't have enough troops to man the radios. Call Bill if you are at all interested in keeping TRW on the map in the FD contest. Bill also reported that he has ordered T-shirts for people who participate.

Discussion of Field Day logistics and strategy occurred until the meeting broke up at about 7:30.

Thanks to the help of member Terry Thompson, KB6CUT, the OSCAR station is taking shape. Terry has been working hard to get the necessary supplies together to put up the new antenna rotators. Terry hopes to have the station running in July.

OSCAR 10 has been returned to service. It is operating with its omni antenna only but the satellite is usable. The equipment at the Club Station should work when the satellite is within 20,000 kilometers. On behalf of the whole Club I want to thank Terry for his hard work.

With the combined efforts of the TRW/ARC, the PVARC, the Northrop ARC and Cal Tech, the new Southern California VHF Club climbed to Mt. Pinos for the June VHF Sweepstakes. Here at 8900 feet the N6CA team erected stations from 6 meters to 10.5 GHz. There were 8 bands simultaneously covered, even the new 902 MHz band. The big news of the event was the record 80 mile contact of 10.5 GHz to the South Bay from Mt Pinos using CW. I saw it - I was there (WAZKDL). The other big news was the worldwide opening on 6 Meters enabling N6CA to contact over 150 grid squares!!! This year's June score should be the highest ever West of the Mississippi. Fun was had by all. Even though it was summer, temperatures were in the mid 50's during the day and low 40's at night. Our final score should be around 750,000!!!!

The ARRL 1987 Packet Radio Conference is only two months away! This event, sponsored jointly by the TRW/ARC and the Southern California Digital Communication Council, will be on Saturday August 29th, the same Saturday as the August TRW/ARC Swap Meet. This may be the last conference in Los Angeles for some time. It will be a good chance to meet the people who invented Packet and those that will be improving it in the future. Presentations will be given on everything from HF to satellite Packet. Don't be shy - this is the one to show up for. See you there!!

Tidbits from the Jolly Little S...

I want you to know that I fully intended to put this newsletter into the non-reduced format this month because it was (and still is) my intention to enjoy Father's Day without interruption. I had the newsletter half typed in that format when Rich Sauer passed on to me THREE pages of articles for the newsletter. Normally I would have just forgot about them but Rich is such a good guy to put his stuff on disk in "Wordstar" format so that all I have to do is read the files into the file I build for the newsletter. So a lot of what you read is supplied by Rich because he has been doing a lot. There is good stuff in his articles, especially if you are interested in what is going to be appearing on the repeater or you are interested in emergency communications.

It looks like one of these years I will have to make the pilgrimage to Dayton for the HamVention. Articles in the W5YI Report and Worldradio stated that over 24,000 hams showed up and that there wasn't a motel room to be had for 30 miles around the convention center. All the hot topics were discussed and new equipment was shown for the first time including an Icom 6 and 10 Meter dual bander, an Icom 6(!) bander covering 10, 6, 2 Meters, 220, 420 MHz and 1.2 GHz! The new Icom IC-275 all mode 2 Meter Transceiver is Packet ready too! Not to miss the limelight, the GEARVAKf Bulletin (\$1.00, 356 Coronado Trail, Enon, OH 45323) put out a special issue which included an article rumoring that the Dayton HamVention would be moving (riiight!) and that a \$250,000 federally funded study has identified birds as being a dangerous source of microwave energy. Also noted was that Packets make great gifts, and an attempt to color code the ham bands.

"What's happening with the new controller?" everyone seems to be asking me these days. I've had the W6TRW repeater down for several weeks now trying to figure out how to integrate our new RC-85 controller to it. Yes, I know it's been a while now - longer than I originally thought. Things like work and family commitments have cropped up to keep me from working on this project. But be patient. We'll soon have a new toy to play with. Like everything else in life, it looked simple on paper and was a bear in real life. The W6TRW repeater is a modified Spectrum Communications SCR1000 VHF repeater system containing not only the radios (receiver and transmitter) but a control system consisting of a COR/Timer Control Board, an ID and Audio Mixer Board, a DTMF Decoder Board, ComSpec PL Decoder, Courtesy Tone Generator and a Telephone Controller Board. Additionally, this repeater has lot of front panel controls like timer adjustments, repeat audio volume and extensive metering.

To interface to the ACC RC-85, I removed most of the above, leaving basically a receiver, transmitter and power supply. All control and audio lines were brought out to a connector. A cable connects the repeater to the controller. Altogether, there are some 24 lines to connect to the controller. Gosh, and the block diagram makes it look so simple!

The Advanced Computer Controls RC-85 repeater controller isn't much to look at. I brought it to the last Executive Board meeting and got the reaction I expected: "\$1200 for that?". All I can say is, software is expensive. The hardware consists of a single 9 by 6 inch pc board mounted in an aluminum box on the back of a 3 1/2 inch high 19 inch rack panel. The pc board contains an 8085 microprocessor, 128K byte paged EPROM program memory, 2K EEPROM re-programmable non-volatile memory, and 2K RAM. Also on board are audio switching and mixing circuits, buffered I/O, speech synthesizer, tone generator, Touch-Tone decoder and telephone interface. In short, what we have bought is a complete interface not only between the transmitter and receiver, but an interface between the repeater and the user. The controller's parameters can be reprogrammed remotely using Touch-Tone commands. The repeater responds using it's synthesized voice. Things like timers, ID messages, courtesy tones, access modes and control codes can all be changed easily.

We'll get into it slowly, expanding the basic system as we go along. We'll start out with basic controller functions and add some more exotic stuff as we build up the system. Right away we'll have a talking S-meter so you can see how well you're making it into the machine, a Touch-Tone pad test function, PL and Touch-Tone access modes and a very limited autodial autopatch. Later, look forward to a paging system (you'll have to supply your own pager if you want to be on-call - Radio Shack sells new ones for \$49, I've seen used ones at the swap meet for \$5 every month), remote base (talk and listen on 220 or 450 MHz using the 2 Meter repeater) and and possibly an expanded autopatch. We'll also be linking the TRW and NWP repeaters, providing a satellite receiver for the system. Next year, I'd like to add a digital voice recorder so club members can leave messages on a voice bulletin board.

As soon as the repeater is up and the codes are all set up I'll let the club members know what they are and you can start pushing buttons. Remember that the repeater is an open machine and any licensed amateur can use it BUT the control codes are to be kept confidential and are not to be given to anyone outside the TRW Radio Club. It's been a real learning experience for me and I hope everyone enjoys the fruits of our labor.

New Members - - Old Members

Welcome to the Club:

John Kropp, not a ham - but here's the catch - son David is (N6PLV) and is a Technician class operator. Dav likes to work VHF and wants to help out with the Sw Meet and Field Day!

John Bedoyan, not yet a ham, but looking forward to joining the ranks. We were introduced to John at the last Club meeting and we introduced John to "eyeball QSOs."

Dave (K6AYK) and Dee (WB6EEF) Qualls who hold advanced and Technician licenses respectively. Their interests included HF, VHF, computers (C64) and soon UHF.

Welcome aboard and hope to see you at the next meeting!! It saddens us to report that three members have passed away recently. K6RQT, K6LAT, and W6WET have all become Silent Keys in the past few months. We are becoming an aged organization and it looks like our numbers will dwindle before they increase. It is time for all of us to look around and see what we can do to encourage young people to join the ranks of Amateur Radio. We owe it to ourselves and especially to those who have left our ranks.

It's Time to Say Good-by

Bill Dews, K6AWO

The following names will have to be removed from the TRW Amateur Radio Club membership list if I don't receive the full amount (\$5.00) in the next few weeks. The deadline was Jan 31, 1987 but some of you are slow getting around to sending in your dues. It is long past due and your interest in amateur radio is no doubt slowing to a stop. I would like for you to continue receiving Crosstalk just so you could stay up on the Club activities. Please call X61656 for another membership form if you can't find one.

Roy Adams, WB6TWY

Barry Allen, WA4TTG

Charles Barnett, WB6ZIA

Steven Barton

Stephen Chapman, K16CP

John Koenig, W6KQU

George Lee, W6IOW (Librarian!!)

Gregory Martens, W9EEV

John Pettingell, W6GTYN

Rich Robertson, K6RGW

John Shepherd, WB6VYX

Steven Smith, KA3JZT

Jay Thorpe, W6WZD

I hope to be hearing from you soon!!

Club Picnic

John Keller, N6JLS

And What A Picnic It Was!!! There was no lack of excitement at the June Picnic. Two Dozen members of the TRW/ARC showed up to feast on another great table set by Activities Manager Jim Wike and his able assistant and YF Luella. More than enough food showed up and more than enough was eaten by those that attended. Everyone was "chowing down" and watching the parks department mow the grass covering the baseball diamond and engaging in interesting conversation. About the time that everyone was about enjoy mint chocolate brownies, the same parks department personnel, having finished the job of mowing decided to water the lawn. Unfortunately, they didn't know which valve to open to turn on which sprinkler. You guessed it - the picnickers got drenched!! Everyone scrambled to toss trash cans over the offending sprinklers but before that happened, Pete Lovelock, K6JM, got pretty well drenched. The food was spared and the picnic went on merrily.

The next Club Picnic will be held at the same place, El Nido Park, on 182nd Street between Inglewood Avenue and Hawthorne Blvd, on Tuesday, July 7, 1987 at noon. Come and enjoy the food, the conversation and the camaraderie!

