



CROSSTALK

News Bulletin of the TRW Amateur Radio Club

Member, American Radio Relay League

ARRL Club No. 1658

SEPTEMBER 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 SEPTEMBER AND OCTOBER

Saturday	Sept 26, 8-11am	Swap Meet, Northwest corner of Compton/Marine and Aviation behind the Chevron station. Don't arrive before 0600!!
Tuesday	Sept 29, noon	Club Meeting, R2/1055. No speaker planned as of press time, might see the new ARRL video tape.
Thursday	Oct 1, after work	Executive Board Meeting. All members are welcome! At Pizza Hut, 926 N. Sepulveda Blvd., Manhattan Beach.
Tuesday	Oct 27, noon	Club Meeting, R2/1055.
Saturday	Oct 31, 8-11am	Swap Meet

From the President

Chris Wachs, WA2KDL

On Wednesday, September 15th, at 5:45 PM the V19 Ariane rocket was launched from French Guiana. With the Phase IIIC satellite scheduled for launch on V21 there is only one more launch to go! This means that if all goes well the V20 mission should be in November and the V21 mission by February. So it is time to dust off your OSCAR gear as the new satellite could be ready for use by March of 1988. Phase IIIC will have Mode B, J, L, JL, S and RUDAK. I will explain the modes in the next "Phase IIIC Countdown."

Has your HT been put out of service because of dead cells in the battery pack? Don't have time to find the bad cell or don't know what to do with it if you find it? There is another way to get your HT back on the air. Periphex Inc. sells configured and wired cells with thermostats and without the case. To replace an Icom BP-3 pack the whole set of batteries can be purchased for \$20. Much cheaper than buying from Icom (or Icom wants

a lot for their cases). They have inserts for all HTs, even Clegg, Santec, Wilson, and Tempo. Yes, even Kenwood. If you have a custom pack they can recreate it for you or build a new custom pack to your specifications. Call or write (with an SASE) to:

Periphex, Inc.
149 Palmer Road
Southbury, CT 06488
(203) 264-3985

(ed. Bill Dews sent me a copy of their flyer and they do have just about everything you could want, including batteries for older units with the case and a couple of packs for the Icom that are specials; the BP-7S is 13.2V @900ma double the capacity of the Icom BP-7 and the BP-8S 9.6V @1200ma, 50% more capacity than the BP-8 from Icom. Both units are base charge only - no trickle charge here. CAUTION: no one in the Club has purchased batteries from them yet so their quality is unknown.



Repeater Etiquette

The Palomar Amateur Radio Club recently ran an item on repeater etiquette in their newsletter, Scope. It is so good I thought that it bears repeating (no pun intended). IGNORE JAMMERS. Work over or through them. Don't acknowledge you even know that they are there.

BREAK WITH YOUR CALL SIGN. Use the term "BREAK" only if urgency is required. Use "BREAK BREAK" only if there is an extreme emergency.

BREAKING ON A CONVERSATION and then not turning it over to someone by call or name. Don't add to the confusion of the break.

BREAKING ON A CONVERSATION and then ignoring the rest of the stations in the original QSO. Be considerate!

BREAKING ON A CONVERSATION and interjecting comments without giving a call sign.

TALKING FOR LONG PERIODS and resetting the timer (alligator). The repeater presently has a 3 minute timer but can be set to 30 seconds.

QUICK KEYING - rapid fire conversations that don't allow for breaks and, unless you get the courtesy beep, don't rest the timer.

LONG CONVERSATIONS during peak hours; during the morning and evening driving periods.

LONG CONVERSATIONS between stations that are within simplex range of each other.

LONG CONVERSATIONS without asking if anyone needs to make a call.

"DRAGGING YOUR FEET" to allow someone to break and join the conversation.

USING POWER higher than is necessary. Remember that we can affect the operation of the repeater in San Diego during periods of "ducting."

CONTROVERSIAL SUBJECTS draw out the crazies and the self appointed police and ultimately result in jamming.

ID ON FIRST transmission and on last transmission.

LISTEN for 30 seconds before making a transmission.

RUDE BEHAVIOR to people using the repeater. Always be friendly. It pays.

BEING CRITICAL of another ham or other repeater on our repeater.

IMPROPER LANGUAGE (free speech) draws jammers. Keep it proper.

DISCUSSING OBVIOUS BUSINESS items over the air. This is an FCC no-no! This includes getting another ham to call your office to tell them you will be late.

BROADCASTING: Another FCC no-no!

IMPROPER CALLS: W6ZZZ this is W6XXX are you out there Buzz? Don't give messages with

your call.

TESTING on the repeater. Test on simplex. Requesting audio reports is ok.

HT WITH RUBBER DUCK inside a car. Use an external antenna.

TALKING SIMPLEX on the repeater input or output frequencies without good reason.

BAD AUDIO and/or excessive deviation.

INCOMPLETE UNDERSTANDING of how the repeater works. Contact a control operator if you are new to the machine.

REQUESTING ASSISTANCE and then leaving the frequency before someone has a chance to answer. Give some time to let them get to a transmitter.

TIMING OUT the repeater. 3 minute alligator is more than enough time. Give others a chance to join in. Keep it short.

KERCHUNKING to make sure the repeater is still working today.

SENDING TOUCH TONES to the repeater with identifying the transmitting station. ID first, then send tones.

New Members -- Old Members

Welcome to the Club:

Wayne Bell, N6PLV, holder of an Advanced Class License and a ham less than a year. Wayne's interests lie in VHF, Packet and computers with a jump into UHF and HF in the near future.

Mary, Steven and Michael Swenson. Mary is the only one without a ticket as Steven is waiting for his Novice and Michael holds a Technician ticket and call sign N6PQU. Interests include HF, VHF, UHF, Packet and computers.

Bill Doheney, KI6UJ, holder of an Advanced ticket and a ham less than a year. Bill likes HF and VHF as well as computers.

Les Matson, K6SFX, holder of a General ticket and a ham for 32 years (was W9ATG in 1930). Les likes to hang out on 2 meters and 440 MHz.

Hope to give you all an "eyeball QSO" at the next Club meeting, Tuesday, Sept. 29th at noon in R2/1055.

Wanted -- For Sale -- Freebies

Wanted: Drake C4 Console, 4NB, 34PNB, R4C, FL250, MN2700 Antenna Tuner, B-1000 Balun, UV3 Xcvr and modules. Icom IC-SP3, IC560 meter all-mode. Kenwood HC-10 clock, DM8. grid dip meter, R2000, SM220. Yaesu YO-100. Contact Tony Musero, K3UKW, (215)271-8898 or write to 1609 So. Iseminger St. Philadelphia, PA 19148.

Tidbits from the Jolly Little S...!

It is my time to harp again about finding a replacement for me as Newsletter Editor. I guess that I can blame myself for having no one want to jump in and take over because have been making this newsletter look so good over the past three years. It really isn't that much work, in fact it is only as much work as you want to do, or that you can't get others to do for you. Yes, you need typing skills or someone to help that has typing skills. Knowledge of a word processing program definitely helps but is not mandatory. As much as some of you think you can talk me into staying on you are mistaken as other things that I have responsibility for have begun to suffer and I don't have the time or the interest to continue on in this role. So, who is it going to be? Who will step forward? Who is going to get involved? Over 200 members and we can't get a Secretary or Newsletter Editor. That is a really sorry statement about YOUR Club.

Gordon West has another set of classes going for those interested in becoming hams or upgrading. Many different classes are available. Tuesday evenings at Coastline Community College in Huntington Beach with get a Novice ticket for \$42 and 8 weeks time or a Technician ticket and General code capability, also \$42 and 8 weeks. If you have your Novice license there is a one weekend course that will get you your Technician ticket for \$75 and one book. If you can copy 10 WPM there is a weekend course to get you to 13 WPM. It costs \$95 but include a continental breakfast and deluxe lunch both Saturday and Sunday. There is also a one weekend Novice class. All classes conclude with exams for the license grade you have been studying for. For further information contact the Radio School at (714) 549-5000.

Murata-Erie North America, Inc. has introduced a new line of double layer capacitors for use in battery backup applications. the 0.1 Farad (no, the micro is not missing) cap is capable of supplying 10 microamps for 1000 minutes or 100 microamps for 100 minutes. Charge time is typically 60 minutes and self discharge is 240 hours.

Bill Dews sent me a copy of the annual report we make to the ARRL. We have 200 total members, 195 of which are licensed amateurs. 112 are voting members and 69 of those are ARRL members. We must have 51% of our membership be ARRL members to maintain

our ARRL affiliation and we are just making it. Isn't it about time you joined the ARRL? If so contact Bill and he can help you out and get some money from the ARRL for the Club.

The new Russian satellites RS-10 and RS-11 have been found fun to use and very sensitive. Over the 4th of July weekend it was reported that W2RS worked W1NU on Mode A with W2RS using a 2 meter HT with rubber duck antenna and 100 milliwatts of power! This was reported by KA1M in the Amateur Satellite Report.

5 by 9, the newsletter of the Monterey Park ARC reports that there is a new law concerning the use of portable generators in the home. A flyer from Southern California Edison states that a generator can be connected to the house wiring only after the main switch has been opened. A generator permanently wired into the house must have a double throw switch in the circuit. and if you own, rent or lease a generator you must notify Edison of the location of the generator. Edison is worried about your generator getting back on the main lines during an outage and being a hazard to the persons working on the lines.

The Baldwin Hills ARC reports in their newsletter that they conduct a Science Fiction Net on the last Wednesday of the month at 7:30 PM on the W6TFD repeater (146.925 (-.600) PL-2A).

Those of you that were listening on the repeater on Tuesday September 15th got treated to some live reporting of the goings on at the Papal Mass at the Coliseum. Yours truly was sitting in the 70th row on the north side of the Coliseum and had no problem getting into the repeater on low power with a rubber duck antenna. The entire afternoon and evening were quite an experience, even with the wait in line to get into the Coliseum due to all of the security searches that were being conducted by the Secret Service on the attendees of the Mass.

The BIARC Bulletin reports that Ron Phillips, AH6HN, (formerly K6MLL) has received the ARRL Golden Jubilee Award for working 100 countries between January and December 1987. Ron is still a member of the TRW/ARC.

Answers Given by Children

Benjamin Franklin produced electricity by rubbing cats backwards.

A liter is a nest for young animals.

Letters, We get letters...

Having just read the title of this little piece, how many of you thought of the Perry Como Show?? If you think that your Editor is too young to remember, well, I will be 40 before the next newsletter comes out. Anyway, one letter that we got was from Carl Kennedy, WB6TDE, who was supposed to be Field Day Chairman with Bill Schrecengost but moved to Sacramento instead. Carl said that he made contact with W6TRW on Field Day on 75 meters and the 40 Meter Phone station but had no luck with 20 meters. Where he is living now he has antenna restrictions so would like any info Club members may have on hidden antennas. Carl says that he missed not working with us this year but will try to make it back next year.

The other letter came from retired member Frank Mullen who now lives in Pebble Beach, CA. As you may remember, they had a terrible forest fire in Pebble Beach and lost many expensive homes. Frank and his wife, Jess, were sure that when they were evacuated, their home would be lost. 16 hours later they returned and their home had been saved. They had been interviewed by many reporters including one for A. P. that got back to them from friends in Tampa, Florida with clippings from their local paper. Their favorite story however was in the Salinas Californian and told about the return after the fire of a blue jay that begged daily for peanuts by tapping on their sliding glass door.

Frank reports that the radio club did not make out as well. About \$8,000 of equipment was lost including two repeaters, an emergency battery bank, two expensive controllers and associated equipment that was in the repeater building. Lesson learned - don't put all your repeaters in one "basket." Both repeaters are used in public service. The 440 MHz repeater is the only one where the fire officials can hear what is going on and is used strictly for fire department administrative purposes where we are in direct contact with the fire officials. All other business is handled on 2M phone or 220 MHz digipeater. The California Department of Forestry is well aware of the accurate communications that can be set up in minutes. Frank says that the first person notified in case of a fire is the Ham Emergency Coordinator for their area.

Frank closes with: "Please give my 73's to all in the club who know me. The Club Letter is greedily devoured each month. I

...more Letters

appreciate the contact it provides. I am sure the other retirees do, too!" (ed. Now you know why I feel a newsletter is important and why I have given it my all for the past three years -- Thanks Frank!)

Executive Board Meeting 3 Sept 1987

Dave Stockwell, W6ATK

Only one of three elected Club Officers showed up for the meeting. President Chris Wachs was on vacation and Vice President Steve O'Neal got his dates mixed up. The Treasurer opened the meeting in the absence of the other Club Officers. The Treasurer also volunteered to take the meeting minutes as the Club still does not have a Secretary. A quorum of members of the Executive Board was not present so nothing could be voted on. Nevertheless those present discussed items of concern and interest to the Club. The Treasurer reported that the Club treasury is in excellent shape and is ready to spend money on equipment. Membership Chairman Bill Dews reported that the Club has 201 members, 114 of which are TRW employees. Rich Sauer reported that the use of our repeater with the PL turned off worked out well during the ARRL Networking Conference. Steve Ng reported on the first LAACARC meeting that he attended as the TRW/ARC representative. John Keller urged that everyone in the Emergency Communications Group become RACES/DCS members. Emergency Communication Group Chairman Rich Sauer stated that he is still working on the plan to coordinate our Club with Security's emergency response plan. Steve Ng, N6IQA, got his picture in the September issue of Worldradio (page 22). Jim Wike announced that the next Club Picnic will be September 15th. This will be the last picnic for the year. Jim announced that he will be quitting as Activities Chairman at the end of this year. He felt that it might be easier to replace him if there were two members, one responsible for picnics and the other for Club meeting door prizes. Rich Sauer reported that the last Swap Meet was the biggest yet and that Security threatened to close it down due to the blocking of Aviation Blvd and Marine Ave. A suggestion was made that a special meeting be called to discuss the Swap Meet problems and come up with a plan of implementation before the next EBM. The meeting adjourned at 1918 hours.

Duct Opening to the Mainland on VHF & UHF from the BIARC Bulletin

On August 1st & 2nd the ARRL UHF contest was held. For the first time this contest and a "Duct" opening came together. Paul Lieb, KH6HME, was able to make one contact on 1296 MHz with W6CPL in Los Angeles and 13 contacts with other mainland stations on 432 MHz. This gave him a total score of 315 points. While this is not much in comparison to some stations, it is great considering that all his contacts averages 2500 miles in length.

Now of the rest of the story! During the period of Aug. 1 to Aug. 4 he made 12 1/2 pages of contacts (about 300 stations). Most of them were made on 144 MHz but two were on 220 MHz. Later in the month on Aug. 11 & 12 there was another opening in which he made 64 contacts on 432 MHz and 144 MHz. One of these contacts was in Oregon. There was a third major opening Aug. 18 to 26 but Paul was unable to take advantage of this one. It was also reported that several short openings took place throughout the month and may in fact still be going on from time to time. Last year Paul made his World Record contact on 1296 MHz with WB6NMT in San Diego.

Mauna Loa, an active volcano over 13,000 ft. elevation, is the site of several commercial installations, three KH6HME CW beacons and the AH6J 2M FM repeater. The elevation of the "shack" is 8,200 ft. The 144 MHz beacon runs 60 watts into a 7 element horizontal Yagi antenna. The 432 MHz beacon runs 100 watts to a pair of 18 element horizontal Quagis. The 1296 MHz beacon runs 20 watts to a 4 bay set of 25 element loop Yagis. Although there is no beacon running 220 MHz, Paul has a rig running 25 watts to a 5 element horizontal Yagi that he can use.

The building is 49 ground miles (27 air miles) from Hilo with a driving time of 1 1/2 hours. It can get below freezing and sudden storms are not uncommon. The change from sea level to 8000+ feet causes some problems with altitude sickness.

A high power 2M FM station in San Diego was able to access the Kulani repeater. Kulani Cone is about 6000 ft. elevation. It is believed that when the dual inversion "duct" exists it centers near sea level on the mainland and at about 8000 ft. in Hawaii. It tends to start in the South (San Diego or Mexico) and work its way north usually no further than San Francisco. There is a history of long distance TV, FM Radio and aircraft communications in this area. With

the beacons in place and people listening 24 hours a day, these unusual openings are becoming more understood.

Thanks to the BIARC Bulletin of the Big Island Amateur Radio Club, Hilo, Hawaii.

ATTENTION TECHNICIANS

If you have any plans to upgrade to General Class, remember that you must show that you were licensed on or before March 21, 1987 or you will be required to take the written portion of the test (Element 3B). So, please keep your ORIGINAL license in a safe place even if you renew as a Technician. NEVER THROW IT AWAY as the renewal license will not show the date you first received your Technician license.

Thanks to Worldradio who got it from the Ole Virginia Hams ARC, Manassas, Virginia.

ARRL Networking Conference

Chris Wachs, WA2KDL

The 1987 ARRL Networking Conference was a smashing success. More than 200 people were in attendance. Over 15 papers were presented with 10 demonstrations. Speakers were from all over the world as well as the United States. In was the largest conference in Packet history. Special thanks to all who made it so successful:

Rich Sauer - directions over the repeater and clean-up; Paul Herbert - getting approval for use of the TRW Forum; Steve O'Neal - Cold drinks!; Terry Thompson - finding the lunch truck and clean-up; John Keller - getting the word out in the Crosstalk and helping with directions.

It went so well maybe we should try this again for an AMSAT or SCDCC meeting!

General Meeting 29 Sept 1987

No official meeting minutes were taken, however, the Editor's recollection of the meeting was that two excellent presentations were given by Club members and the most interesting one was by Rich Sauer, who also passed out information on controlling the repeater. That is not to say that the OSCAR station presentation by Terry Thompson was not good, just not well timed. Due to problems with the memory on board the OSCAR 10 satellite and the inability to properly orient it for the change in sun angle with the change in the seasons, the batteries will not charge properly and the satellite is presently not available for use.