

# CROSSTALK

News Bulletin of the TRW Amateur Radio Club

Member, American Radio Relay League

AUGUST 1985

\*\* 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 AUGUST AND SEPTEMBER

Tuesday	Aug 27, noon	Club Meeting, R4/1041. Speaker will be Bill Buchanan, KF6TE, of the Independent Space Research Group and the topic will be the Amateur Space Telescope Project.
Saturday	Aug 31, 8-11am	Swapmeet, Northwest corner of Compton/Marine and Aviation behind the Chevron station.
Monday	Sept 2, all day	Labor Day! Have a safe 3 day weekend!
Tuesday	Sept 10, after work	Executive Board Meeting. All members are welcome! At Shakey's Manhattan Beach, 2000 N. Sepulveda Blvd., just south of Marine.
Thur,Fri	Sept 12,13 all day	Thompson Products Division, TRW Canada Ltd. Open House. Contact Station VE3CBG on 14.160 and 7.200 at 0000 UTC and 0100 UTC those days. More info inside!
esday	Sept 17, noon	The LAST Club Picnic for 1985! El Nido Park, 182nd between Inglewood and Hawthorne.
Tuesday	Sept 24, noon	Club Meeting, R4/1041.
Saturday	Sept 28, 8-11am	Swapmeet and Family Day and Open House. TRW/ARC booth. More info inside.

## TRW Family Day

The Space Park TRW Family Day and Open House will be held in Space Park on Saturday September 28th. There will be tours through the satellite assembly buildings as well as Club Booths set up by the various SEA affiliated Clubs, of which we are one. We need to get a good low band station as well as some Packet or AMTOR activity. But before I get into that any further here is a real good kicker. The Thompson Products Division of TRW Canada Limited is having an Open House on September 12 and 13 and will have station VE3CBG operating from the site. They would really like to make contact with TRW Amateur Radio operators and the W6TRW station during their Open House. They have suggested that a schedule be set for 14.160 MHz and/or 7.200 MHz at 0000 UTC and 0100 UTC on those dates. We got this information from a telex that they sent to the Corporate Offices in Cleveland that got FAXed to Space Park, going to the Sentinel office before it got to us. I think that this would be a great way for us to share some of those great QSL cards that we recently got printed up and I'm sure that they will be willing to reciprocate on our Open House later in the month. So let's get the 20 and 40 Meter equipment in top notch order as the way the bands have been recently it may be a challenge to reach St. Catharines, Ontario. Hopefully we can get enough of the KT34XA in the air to put out a booming signal. Or maybe even that 40 Meter Quad Bob Hume has been dreaming up! Now about our Open House on the 28th of September. The last Family Day and Picnic combination was a mixed success as the vertical low band antenna was a little balky and the computer screens had a tendency to wash out in the bright sunlight. So we learned our lesson last

year and this year should be better. Since a lot of this came up at the last minute and we don't have any volunteers ready to jump into the fray, I, John Keller, will volunteer to organize this thing until somebody agrees to take it from me. Here is what I think we need and should show:

- 1) A low band station with a reasonably good antenna. I'm thinking either a Field Day Quad or the 20 M beam or Ollie's Folly on 40 M or a combination of the above. Really need an external speaker for audio.
- 2) A packet radio setup. Last year we linked up with the Computer Club, this year I don't think that will be necessary as LA is a hotbed of Packet activity.
- 3) An Oscar station setup that does not need to operate, we can always say that the satellite is out of view, but if it does that's great. I think the beam antennas will be a good drawing point.
- 4) We need brochures from the ARRL and the TRW/ARC about Amateur Radio. The ARRL ones we can get as they will be there for the Swapmeet and we already have something for the TRW/ARC.
- 5) We need signs. Big BIG signs. Easy to read. Attention getters! Can you or your family work on something if we gave you what we want on it???
- 6) We need **PEOPLE**. Everyone wants to operate and everyone should get a chance but we also need people to answer questions, pass out information, etc.

So volunteer **NOW!!!!** Call me at work (53)62303 or home (545-4019) and tell me what you would like to do. I have an HF rig and antenna tuner that I can lend. Don't make me call you, YOU CALL ME -- **NOW!** Let's really wow 'em both here and in Canada!



### Useful Knockdown Table Is Easy To Build---No Nails

Ever since I built this handy table for our novice school - actually I built three - people are after the plans. And it couldn't be simpler. The illustration below is approximately to scale. It is made from one 4-x-8-foot plywood sheet, with no waste. Although you can use particle board, I would not recommend it, as it will not stand up to a lot of setting up and taking down.

Five-eighths thick, sanded on one side, is the ideal material. Be sure to sand all edges smooth to avoid splinters in the fingers. A two-coat varnishing would also help the splinter problem.

These tables have served our club many times in schools, hamfests, flea markets and Field Day operations. Storage and/or transportation presents no problem.

Remember the slots are 6 inches deep, and as wide as the material is thick. Most of the cuts can be with a table saw, using a plywood tooth blade. Use a sabre saw for the slots so that the bottom of the slot will be square. The slots can be deepened slightly if the table does not level up correctly.

The whole structure lays flat after disassembly and can be stored in a minimum of space until needed again.

Thanks to Jack, WA4JET, and the Oak Ridge ARC Newsletter.

### Executive Board Meeting 6 Aug 1985

Paul Lukas, N6DMV

Present were: Frank Cartier, Jim Cox, Bill Dews, Paul Herbert, Bob Hume, Bill Ivey, John Keller, Paul Lukas, Walt Pearson and Jim Wike.

At 1745 local time TRW/ARC President Walt Pearson called the meeting to order. The minutes of the last meeting were approved as printed in the Crosstalk. Paul Herbert handed out the semiannual Financial Report draft. Jim Wike reported on the last Club picnic: only \$22.28 was spent for the excellent food he and his XYL served. Bob Hume indicated that the antenna tower is about to arrive. The logistics of receiving and storing the tower sections were discussed. The tower base situation is being worked by SEA officials. Walt reported that Joe O'Brien is working on a speaker for the next Club meeting. Bill Dews reported that the Club has 153 members. He suggested an ARRL membership drive. Bill Ivey reminded the Executive Board that the deadline for the mandatory semiannual financial report is August 15th, including the 1986 planning forecasts. Bill further stated that TRW SEA is willing to print up 7000 club membership drive leaflets for posting on bulletin boards. There will be a Family Day at TRW on the 28th of September. It was proposed that the Club participate by providing communications for the event. It was also pointed out that the Club Swapmeet is that day. Frank Cartier, our new Swapmeet Manager recruited 3 people to handle the upcoming Aug. 31 Swapmeet: Charlie Darrow, Ed Koran and Darwin Salisbury. Jim Cox gave an account of the 2 Meter repeaters: W6TRW is back on duty with a new tone decoder and courtesy tone. Control codes were given to John Keller who is one of the control operators. Jim said that the previous failure of the repeater was traced to a tripler-driver which drifted out of adjustment. The repeater is working now with a reduced power output due to the unavailability of a replacement driver transistor. Needed is a 2N4427, and donations will be cheerfully accepted. Both repeaters need special lamps to replace ones that have burned out. Tentative approval was given to purchase the required lamps pending determination of cost. The new decoder has 3 separate on/off functions; repeater on/off, PL on/off and a spare on/off function. A spare decoder purchase was requested by Jim at a price of \$65. The board voted that Jim could purchase the decoder. Jim proposed to have a general technical/operations discussion on the repeater. Jim will schedule it with Joe O'Brien for a Club meeting. (ed. The following is printed under protest) A special commendation was extended to John Keller for his super job in typing, editing, collating, organizing, computerizing, and expediting our Club paper, the Crosstalk. Jim Wike will monitor the preparations for our upcoming Annual Dinner. Jim Cox suggested that the best way to handle malicious interference on the repeater is to ignore it! Walt adjourned the meeting at 1910 hours local time.

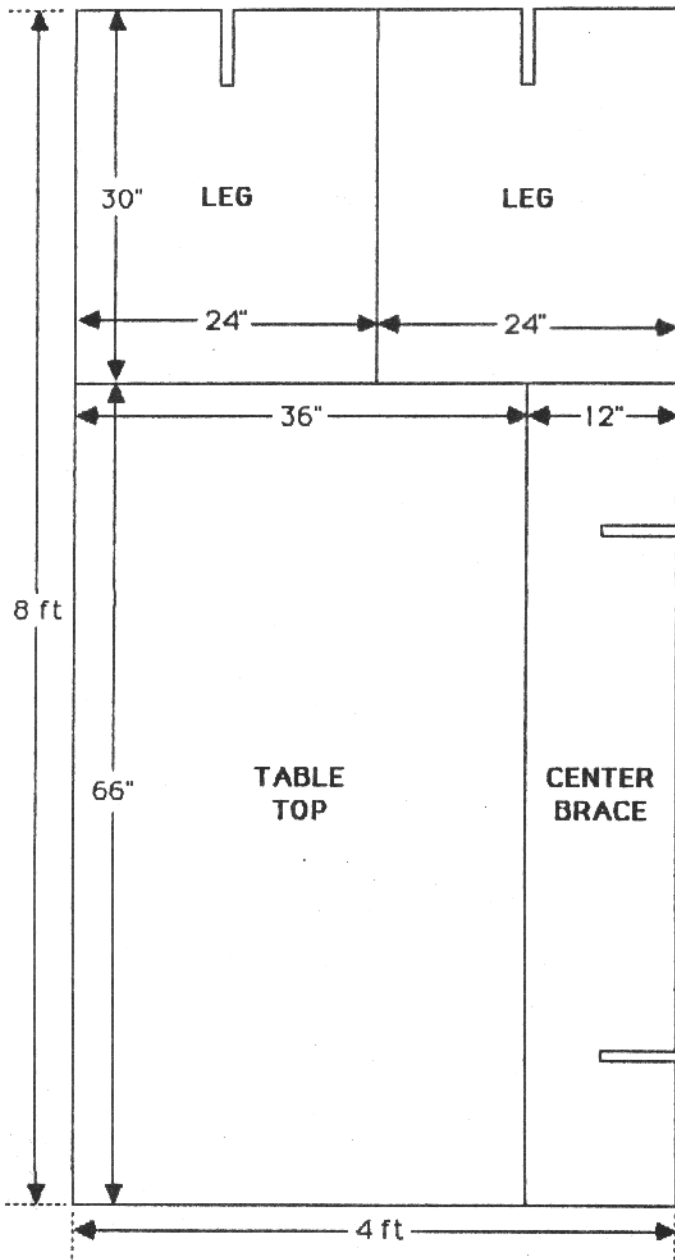
The budget is a mythical beanbag. Congress votes mythical beans into it and then tries to reach in and pull real beans out.

### Early Breakfast

Bill Dews, K6AWO

Each and every Friday, at 07:00 in the S Cafeteria, let's get together for a little informal meal and conversation. Time to meet the face that's behind the voice on the repeater. If you spend more than \$2.00 you are eating too much! And you'll still have plenty of time to get to work by 08:00. The time is right, the food is good, the cost can't be beat, the company is great, and the conversation is all the topic we love best - Amateur Radio. See you on 145.32 MHz at 06:50 and give you a "eyeball" QSO at 07:00!

(ed. Bill sent along a register stub totaling \$1.97 just to prove that you can get breakfast for under \$2.00!)



President Walt Pearson called the meeting to order and pointed out that neither the Secretary nor the Treasurer were available to give their reports. Bill Schrecengost, W6LB, suggested that an Ad Hoc committee be formed to assist the wife of a Silent Key with the disposal of Amateur Radio equipment. Joe O'Brien introduced Irv Emig a long time friend of the speaker who introduced Fried Heyn, WA6WZO, ARRL Southwestern Division Director. Mr. Heyn reported on the recently held Directors meeting in Connecticut and reviewed the replies to the questionnaire that was sent to ARRL members a few months back. Fried also brought along a few ARRL publications that were used to augment the already great door prizes. The meeting was adjourned shortly before 1300. 24 members attended.

An economist is a man who can tell you what can happen under any given conditions, and his guess is liable to be just as good as anybody else's.

### Tidbits from the Jolly Little S...!

Those of you who frequent 2 Meters have probably noticed that there is a whole lot of beeping going on on the Club W6TRW repeater. Jim Cox, our Technical Chairman and guru of VHF recently put the W6TRW machine back in operation, and removed the W6NWP machine to add some upgrades to it and get it back to its proper location at Garrett. A little difficulty, coined the "word eater" by Chris Wachs, was encountered that was traced to the tone decoder. The repeater will mute if tones from a touch tone pad are received and the audio level into the decoder was too high and it was muting from voice frequencies. Reducing the level cured the problem. Jim says that the repeater is putting out only about half its normal power due to a overstressed driver transistor that took a beating when the repeater went down the last time. We are looking for a 2N4427 and will accept donations. The beeping that's going on is a courtesy beep that tells you when the repeater has been reset. The "alligator" now resets when the input carrier is dropped and the beep tells you that the reset has taken place. Courtesy still says that you should give a little bit of dead air before you jump on so that others trying to break get a chance to do so. If you have any ideas for improved operation of the repeater (forget an autopatch) please forward them to Jim Cox, John Keller or Chris Wachs.

It isn't enough that I put out this newsletter, but now I volunteer to organize the Family Day activity of the TRW/ARC on September 28th. Please see the TRW Family Day article elsewhere in the Crosstalk and please help out. I'd love to see us make a great showing!

On August 15th the Los Angeles Times had an article about Will Rogers on the 50th anniversary of his death. He was known for some pretty good one-liners, and I am reprinting the ones that appeared in the article as my little fillers. The amazing thing is that they are just as appropos now as they were 50 years ago, some even more so.

Here's a license plate that I saw before Chuck Lobb did, and it's a humdinger. The plate read "TNT WIFE" and the plate holder read "At least my husband thinks so!"

I hope you had a chance to stop at the Robot booth at the Hamcon. They had some pretty good slow scan pictures from the Shuttle's last flight. They pointed out that the transmit power from the shuttle was only one watt. It's nice when you can transmit and not have to worry about mountains getting in the way!

Sorry about the fact that there are no Field Day pictures in this issue of the Crosstalk, but the fact is I misplaced the pictures that Paul Wisiolek gave me. If I find them in time for next month you'll see them then.

The July Swapmeet was full of interesting Amateur Radio related equipment and enthusiastic buyers and traders. The traffic and supervision was efficiently handled by Jerry Dean, WA6GVO; Dale Jensen, K6ZTI and Stan Harris, KG6MV. Both Jerry and Dale have served as supervisors repeatedly in the past. Thanks again fellows for a job well done.

When the sellers are challenged at the entrance to the Swapmeet, we still have a few traders that misrepresent the goods that they are going to offer for trade. This practice will not be tolerated and may result in the seller being required to leave. With this in mind, the TRW ARC Swapmeet policy is again published below:

#### **TRW AMATEUR RADIO CLUB SWAPMEET POLICY**

In keeping with the spirit of Amateur Radio to promote the hobby by helping those interested to gain the knowledge and equipment required for Amateur Radio, the TRW Amateur Radio Club sponsors a swapmeet. It is the intent of this Amateur Radio equipment swapmeet to provide a monthly meeting place for radio amateurs and experimenters to trade and exchange used amateur radio related equipment. Such equipment includes receivers, transmitters, antennas, test equipment, and electronic components. Computer hardware and software is also becoming related to amateur radio.

As a TRW Amateur Radio Club sponsored activity no fees are charged for the trading privileges. Instead, the Club asks the traders to cooperate by adhering to the swapmeet rules that limit the types of items for trade to used amateur radio equipment. Small quantities of unused electronic components may be traded. In order to preserve the intent of this Club function, commercial vendors are not permitted. In general, the sale of new equipment is not permitted.

With the continued growth and popularity of the swapmeet, there has been a trend for traders to offer non-amateur radio related equipment in quantities equivalent to commercial vendors. Your cooperation to end such trends is requested.

Where there is a question as to whether the equipment offered is acceptable, the TRW Amateur Radio Club swapmeet supervisors will make a determination. Your cooperation with the swapmeet supervisors is requested. Lack of cooperation will result in trading privileges being suspended for the offender.

Every time we have an election, we get worse men and the country keeps right on going. Times have proven only one thing and that is you can't ruin this country ever, with politics.

### Lifetime General Radiotelephone Operator License

With just a few months left in this year, you are reminded that anyone holding a First Class, Second Class or General Radiotelephone Operator License issued or renewed between January 1, 1979 and June 14, 1984 is eligible to receive a lifetime license.

To receive your special lifetime license certificate, you must send your request to the same FCC field office that issued you your last license. Include your name as it appears on your license, your date of birth, and your license number. Write the words "Lifetime License" above the Field Office's address. If your present license has an endorsement, you must submit a copy of that license with your request. Please enclose an SASE for sending the special certificate to you, at least 4 1/8 x 9 1/2 with appropriate first class postage. If you want your special certificate delivered unfolded, please enclose a 9 1/2 x 12 inch envelope with the correct postage for the larger size envelope. Do not lose, damage or destroy your special certificate. Replacement certificates will not be available.

## NEW MEMBERS - - OLD MEMBERS

Welcome to the Club:

Ralph Sellers, W6TUQ, a ham for 15 years and holder of a Technician License, and is ready to get involved with the Swapmeet, Field Day, Emergency Communications and promises to use the W6TRW repeater on a regular basis. Welcome aboard Ralph, hope to see you at the next meeting.

Nobody wants to be called the common people, especially common people.

Live your life so if you lose you are still ahead.

## Join the ARRL -- Help the Club

This appeal is directed to those who are not members of the ARRL or those who were members but your membership expired prior to 1980. Bill Dews has applications to join that have a box for you to fill out with the Club 4-digit code that will result in the TRW/ARC getting \$5 back for each new membership. Here is a good way for you to double the effectiveness of you dues by getting for the Club the same amount from the ARRL. Again, you must be a new member, use the form with the Club 4-digit code and send your application in with a full remittance (\$25 per year) and send the application to ARRL Headquarters, Attention: Dept 33. The TRW/ARC code is 1 6 5 8. Bill can be reached at (53)54393 or by mail at M4/2059.

America invents everything, but the trouble is we get tired of it the minute the new is wore off.

There is nothing as stupid as an educated man if you get him off the thing he was educated in.

## SW Division Convention Report

John Keller, N6JLS

The Southwestern Division ARRL Convention was an outstanding success. There were expectations of 4000 people showing up and door prize tickets that were being turned in at the 4:00PM hour were numbered about 3950. There were 70 hourly prizes given away which included about 5 or 6 HT's each hour. One lucky winner of an HT had just received her ham license only three months before. Just to show that we were good guys, the members of the TRW/ARC, notorious for walking away with their share of prizes at conventions, walked away completely empty handed this time around. None of the 5 Grand Prizes, or the Early Bird or the Advanced Registration prizes went to any TRW/ARC member. We didn't even get one of the hourly door prizes! Icom had buttons that were serialized and there were three duplicate numbers that had to find each other to win handhelds. As of late Saturday only two of the six handhelds had been claimed. The Banquet was a delicious Prime Rib Dinner and was completely sold out, even the overflow room. Master of Ceremonies was Roy Neal and the speaker for the evening was Sen. Barry Goldwater. The appreciative gathering was treated to a recounting of Roy's first interview with the Senator and the run-in Roy had with the Senators horse. The TRW/ARC set up a hospitality room aboard the Queen Mary and many members took some time before the Banquet to relax and meet other members. Many thanks to Bill Dews for his superb performance as host.

So where do we go from here?? Next years Convention will be held in San Diego in September and it will be the National Convention as well as the SW Division. Looks like it will be another biggie! I'm already looking forward to it and hope you are too.

## Field Day Report

Dale Jensen, K6ZTI

The TRW/ARC did a fine job on Field Day this year with 2356 total QSOs and a total point count of 7422! Let's break down the totals and show how we got the points.

BAND	CW	SSB	FM	MULTIPLIER	POINTS
80 M	---	83	---	1	
40 M	637	---	---	2	1274
40 M	---	398	---	1	398
20 M	351	---	---	2	702
20 M	---	392	---	1	392
15 M	97	---	---	2	194
15 M	---	83	---	1	83
10 M	---	4	---	1	4
6 M	---	19	---	1	19
2 M	---	---	152	1	152
220MHz	---	---	40	1	40
430MHz	---	19	---	1	19
OSCAR	---	61	---	1	61
PACKET	20	---	---	2	40
TOTALS	1105	1059	192		3461
Multiplier for less than 200 Watts				2	6922
Bonus Points:					
Emergency Power					100
Publicity (operated in public park)					100
Message to SCM					100
First Oscar Contact					100
First Packet Contact					100
Grand Total					7422

My deepest thanks have to go posthumously to Gary Komatsu, K6HPD, whose pre-preparation and organization of previous Field Day operations made my job all the easier this year. The forms, operating aids, T-shirts, etc. made the weekend that much easier to pull off.

John Keller, N6JLS, was the perfect example of what not to do just before Field Day, having injured his knee in a softball game the Thursday night before the weekend. John spent the weekend stiff legged in a knee brace with doctor's orders to stay off the leg and keep it elevated. It didn't stop John from participating though!

Many thanks to Bill Dews for providing person. resources. The members filling out the questions on the membership application is where we get the names from for Field Day help. Thanks to Frank Cartier, Jim Wike and Jim Cox as well as TRW for providing the generators and thanks to Paul Herbert for keeping the big one going through the night.

Thanks also to Helen and Norm Stockwell for the outstanding dinner on Saturday night. It really filled an empty spot and was yummy in the tummy!

And an especially big thank you to all those who helped tear down and bring back to the shack all of the equipment we dragged out for the weekend, especially Jim Wike, Paul Wisiolek and Glenn Webb.

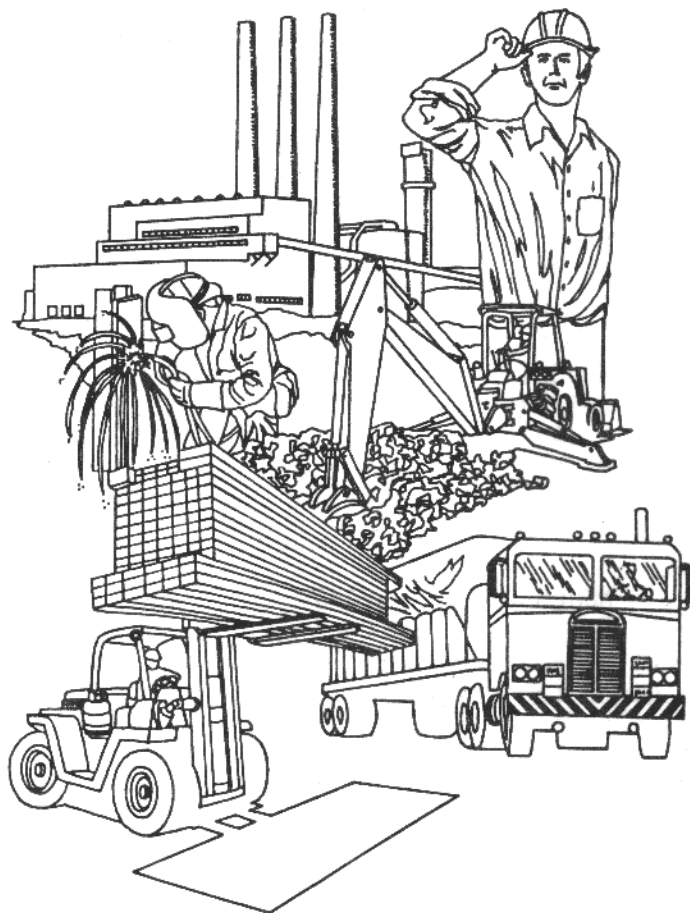
So who were the guys that had all the fun and operated over the weekend? On 20 M SSB there were Carl Kennedy, WB6TDE; Frank Cartier, WA6RAY; Bill Cox, K6YWQ, Herb Gleed, W6FQ and Mike Ramirez, W6YLZ. On 40, 15, and 10 M SSB (that is one outstanding vertical antenna!) were Ollie Saunders, N6OS; Paul Beckwith and Dave Cross, WB5VFR. On 40 M CW was the crew of Bob Hume, KG6B and Barry Allen, WA4TTG. 20 M CW was ably handled by the crew of Paul Wisiolek, K1TKL; Glenn Webb, W6FP and John Keller, N6JLS. 15 M CW was covered by Harry Klebs, WC6H with an assist from Paul Wisiolek. VHF was operated on by Walt Pearson, N6DZM and Mike Ramirez. The OSCAR and PACKET contacts were due to the special efforts of Chris Wachs, WA2KDL with assists from Darwin Salisbury, K6IGU and Mike Ramirez. Dave Stockwell, WA6APK, was too energetic to stay in one place very long and was seen helping out on 20 M CW, 40 M CW, and Oscar/Packet.

If there are any that I have missed, please accept apologies, everyone did a tremendous job and I appreciate the support that all of you gave me.

An interesting note: Our first Oscar contact was with the Hughes El Segundo Club, and it was their first contact too. Where were they located? Oh, about a mile up the hill from us!

See you next year!

# LABOR DAY



It's serious business this making people laugh.

Party politics is the most narrow-minded occupation in the World...All you would have to do to make some men Atheists is just to tell them the Lord belonged to the Opposition Party.

I love a dog. He does nothing for political reasons.

## Time is Running Out!

Chris Wachs, WA2KDL

Yes, it's only 4 months until the January VHF contest. Here is a great contest that you can get involved in right from the comfort of your home. What should the Club be doing now?? Well, if you cannot operate on 2 Meters SSB you have a problem. This should be of high priority to be able to do this by this coming January. If you have an HF transceiver you are half way there. We could set up a group purchase of transverters and 2 Meter beams for a discount. Do not delay any longer. Time is running out! If you are interested call me at (213)371-4705 evenings.

Liberty don't work as good in practice as it does in speeches.

All our senators and congressmen are away from Washington now. This is the season of the year when they do the least damage to their country.

## Picnic (The Fourth) Report

John Keller, N6JLS

Well, I didn't think it was possible but we finally ate almost everything Jim brought to the Picnic. All the ham was gone by the time late arriver Stan Johnson appeared and he had to settle for a cheese sandwich and potatoe salad. Those who arrived earlier were treated to ham as well as cheese and chips to go with the sandwich and potatoe salad. Besides Stan, members that appeared included Jim Cox, Charlie Clarke, Bill Dews, Joe Zboril, Joe Dietrich, Paul Lukas, Rich Robertson, Dale Jensen, Walt Pearson, George Lee, Herb Glead, Norm, Dave and Helen Stockwell, Pat Dobbins, Jim Wike, and Dave Hassel, W5DJJ, who showed up all the way from Las Cruces, New Mexico! Talk included the results of Field Day with the pictures of Dale Jensen making the rounds, the recent operation of the W6TRW repeater that was put back on line, the convention recently held at the Queen Mary, and equipment new and old. A good time was had by all and we look forward to the LAST picnic of the year to be held on Tuesday, September 17th, at noon in El Nido Park, on 182nd Street between Inglewood and Hawthorne.

It's not what you pay a man but what he costs you that counts.

I would rather be the guy that bought the Brooklyn Bridge than the guy that sold it.

It is kinder funny, but no matter how common our blood is, we hate to lose any of it.

## From the Library

George Lee, W6IOW

What's new in the August issues of:

QST: A Closer Look at Packet Radio (description of TNC2 from TAPR)  
A utility IC - The CA3046 (for front ends)  
Review of IC-471A 70cm Xcvr (all modes)

CQ: Antenna Special:  
A Trio of Homebrew Antenna Tuner Possibilities  
The Minipoise - A Small but Efficient LF Antenna  
The T2FD Antenna Revisited

HR: Calculation Input Z of a Tapered Vertical  
Designing a Toroided Tank Circuit  
Medium Power Amp in VHF/UHF World  
A Pulsed, Constant Current Ni-Cad Battery Charger

The following 2 magazines were donated by Neal Hudson, N6NW (with apologies for spelling your name wrong last month).

Amateur Radio, Mar. '85:  
Review of Microwave Modules (a British Mfr.)  
MMT144/28R, 2 Meter Multimode Transverter  
Review of Icom IC551 (6M)  
(Devotion to data is generally more in depth than those in American magazines)

Ham Radio Today, Apr. '85:  
A much lower level of technical magazine than the above one.

The short memories of the American voter is what keeps politicians in office.