



CROSSTALK

News Bulletin of the TRW Amateur Radio Club

MEMBER ARRL CLUB NO 1658 MEMBER LAACARC

W6TRW REPEATER: 145.320/- .6 (PL 2A)

UHF: 442.000 IN/447.000 OUT

Aug
SEPT 88

CALENDER FOR AUGUST AND SEPTEMBER

FRIDAY	Every Friday	Club Breakfast in Bldg S Cafeteria anytime after 7 a.m. All Club members are welcome to attend.
Wednesday	Every Wed.	Emergency Communications Team Check-in. Noon on 145.320. Everyone is encouraged to check-in.
Saturday	August 27 8-11	a.m. Swap Meet at the northwest corner of Compton Marine and Aviation behind the Chevron station.
Tuesday	August 30	Noon. Club Meeting R10/2778. All members are invited to attend.
Thursday	September 8	5:30 pm Executive Board Meeting, Pizza Hut at the corner of El Segundo Blvd and Oceangate.
Tuesday	September 13	Picnic, 12 noon to 1 pm at El Nido Park. Bring your club badge or ID card and have lunch with the Club.
Saturday	September 24	8-11 am. Swap Meet at the northwest corner of Compton/Marine and Aviation.
Tuesday	September 27	Noon. Club Meeting. Location to be announced.

This years Club Dinner will be Saturday, November 12. More info will follow.

DEADLINE FOR SEPTEMBER CROSSTALK IS SEPT 16.

220 MHz Lost to Ham Radio

by Rich Sauer, N6CIZ and Karl Pagel, N6BUV

Two megahertz of radio spectrum has been taken away from Amateur Radio and given to commercial interests. On thursday, August 4, in Washington D.C., the FCC voted 3-0 to give the lower two megahertz of the 220 MHz band to the Land Mobile interests. They also gave the upper three megahertz of the band to Amateur Radio on a primary basis.

If we lose 220 to 222 Mhz, in Southern California we will lose:

47 remote bases including the Condor hub on Frazier Peak that links all 12 of the repeaters in the Condor System.

22 auxiliary one-way links including 15 links for two meter repeaters, 15 for 220 repeaters and 2 for 440 repeaters.

31 control one-way links including 16 control links for 2 meter repeaters, 14 control links for 220 repeaters and 1 control link for a 6 meter repeater. 4 packet digipeaters on 221.96 (W6FNO-1 on Johnstone Peak, W6FNO-2 on Palos Verdes, W6FNO-3 on Onyx Peak and W6FNO in Sylmar.

W6IYK-11 digipeater on 221.94 which is a backbone between L.A. and Riverside 220.90 to 221.10 that has been set aside for 56 kilobaud wide-band packet.

100 kHz of simplex between 221.90 and 222.00 MHz.

Beacons between 220.05 and 220.60 Mhz.

Moon bounce and weak signal that was authorized between 220.0 and 220.5

(CON from front page)

What can we do now? Under the FCC rules and regulations, we have a right to file a "Petition for Reconsideration." This must be done within 30 days from the date of public notice. This is how you do that:

1. First find a copy of the Report and Order and read it. contact N6CI4 for a copy if you need it.
- 2a. If you filed comments in the previous 87-14 proceeding, you need only to state in your filing that your interests are adversely affected by the action taken by the Commission.
- 2b. If you did not file comments in the previous 87-14 proceedings, you will need to state with particularity the manner in which your interests are adversely affected by the action taken, and should show good reason why it was not possible for you to participate in the earlier stages of the proceedings.
3. In filing your "Petition for Reconsideration", you should also state why you think the action taken should be changed, and state specifically that the FCC should make the entire 220-225 MHz band primary to Amateur Radio.
4. The form to use is shown elsewhere in this newsletter. It must be on standard 8 1/2 by 11 white paper, double spaced, not more than 25 pages in length. The left margin is 1 1/2 inches wide (for binding purposes), the right margin is 1/2 inch wide and top margin is 1 inch. Send your original and 5 copies with a cover letter.

TRW Amateur Radio Club members are reminded that they must write as individuals and NOT as representatives of the Club or the company.

Although the FCC's decision does not directly affect our Club, since few members are active on 220, the decision has major implications. The majority of comments received by the FCC before their ruling were pro Ham Radio and against any reallocation. Still our frequencies were reallocated to another service. This is a precedent-setting ruling. How long will it be before other interests go after our other bands?

It's up to each of us to do his or her part to maintain the Amateur Radio Service frequency spectrum. If we all do what we can, 220 to 222 MHz can still be saved.

TRW/ARC Executive Board Meeting August 8, 1988

Officers present were Rich Sauer, Don Renkowitz, and Dave Stockwell. Jeff Shields and Bill Dews were also present.

The meeting was called to order at 17:30. The first motion brought before the Board was for the TRW/ARC to join with the LAACARC in support of the ARRL S.W. Division Hamfest for 1989. There is a \$200 refundable membership to join. This motion passed by all members of the E.B. The next motion was for a Hospitality room for \$72 during the S.W. Division Hamfest at the Disneyland Hotel. Motion passed. A motion was made for the OSCAR committee to purchase necessary equipment not to exceed \$600. Motion passed.

Jeff Shields reported on how well the door prizes went with the budget increased to \$75. He also reported on how well the new antennas were working at the OSCAR station thanks to the help of Dave Basile, Steve O'Neal, Phil Bergeron, Greg Martens and Chris Wachs. He noted that in last months minutes it was reported that OSCAR 13 was to be launched at the end of the month. This is an error and the launch date was really June 15 with the transponders turned on for QSO on July 22. Don Renkowitz reported that the guest speaker for August will be Mr. Locassio on the Wallace Radio Ranch. Steve O'Neal reported on his effort to keep the shack cleaned up! Good job Steve!!! Steve also reported that the Swap Meet Crew will be working hard to remind people that 11:30 am is time to clean up and go home. Some problems were noted last Swap Meet. Bill Dews reported that there are now 262 members in the Club. He also noted that all Hams at TRW should invite

(EBM CON from last page)

Hams that are not members to come to the meetings and join up!! The more TRW Hams that join the better for the club at TRW. So invite your Ham friends and non-ham friends to our Club meetings. Bill is also looking into getting more copies of the Crosstalk printed up to hand out to non-members and to put in employee services. Rich reminded the Board that they have the responsibility of running the club and they should attend all EBM's. If we do not have a quorum, votes cannot be taken and everything comes to a grinding halt. He also wanted all Board Members to let David Kropp know if the address/phone numbers on the back are correct and to change them if not. Rich closed the meeting at 18:46 and thanked all who came.

PRESIDENT'S CORNER by Rich Sauer, N6CIZ

What's on your mind? That's the question for the month. The Club Executive Board has been tackling the problem of planning for the future and I'd like to know what YOU think. What would you like to see the Club do? What kind of equipment should we buy? What kind of activities should we undertake? This is your opportunity to be heard and recognized. Send me a brief note with your ideas, suggestions or comments.

The TRW/ARC Annual Banquet will be held in November at Reubens Restaurant in Rolling Hills Estates on the PV Hill. More info will be forthcoming in future issues of Crosstalk. Plan to set aside Saturday, November 12th for our Club bash.

The ARRL S.W. Division Convention will be taking place at the Disneyland Hotel the weekend of Sept. 2, 3 and 4. The TRW/ARC will have a "hospitality suite" for it's members and guests. Plan to attend the convention and stop by our room. Club members should meet on 145.32 SIMPLEX at the hotel to get together. Right now, we do not know our room number but ask on the radio or check in with the front desk at the hotel. We have the room booked for Friday and Saturday nights.

Speaking of conventions, as I mentioned last month, the LAACARC is already well into the planning stage for next year's ARRL convention which will be held close to LAX. Don Renkowitz, W6SQF, attended a meeting after last month's Swap Meet and pledged TRW's commitment to help out. It looks like our Swap Meet will be a "featured attraction" for the convention with shuttle buses running between the convention hotel and the meet. Anyone interested in helping out should contact Don.

The OSCAR station has been making regular contacts on AO-13. Everything seems to be working well thanks to the efforts of Jeff Shields, N6CZA and others. The problem with a balun on the antenna has been fixed but there is still a little more work to do. Volunteers are always welcome! Contact Jeff or Chris Wachs, WA2KDL, before using the OSCAR station for some personal instructions.

Technical Chairman Greg Martens, N6RRY, is working on a bulletin board system which will run on the IBM AT in the shack. Once this gets up and running we'll publish the telephone number where you can dial up the computer and get the latest scoop on Ham Radio news and software. Look for future info. Don't forget the LAST PICNIC of the year will be held at noon Tues, Sept. 13th. There just may be some surprises.... so be there! 73!!

TIDBITS by David Kropp, N6PLV

Okay, I used my mom's typewriter instead of the computer. You can read the print, but don't get columns. Such is life. Well, I'm out of space. 73 for this month.

COMMISSION ALLOCATES SPECTRUM IN THE 216-225 MHZ BAND THREE WAYS

(GEN. DOCKET 87-14)

The Commission today divided allocation of the 216-225 MHz band three ways. By its action, the Commission: 1) maintained the maritime mobile allocation in the 216-220 MHz band; 2) allocated the 220-222 MHz band to the land mobile service; and 3) allocated the 222-225 MHz band to the amateur service for exclusive use.

A variety of factors were considered in making these allocations, including the need to provide for narrowband land mobile operations, the impact on the amateur use of the 220-225 MHz band, and the potential interference to TV broadcasting, as well as the actions taken in the 1979 World Administrative Radio Conference (WARC). As a result of the 1979 WARC, the amateurs have received several new frequency allocations.

First, the Commission concluded that the public interest would be best served by providing dedicated spectrum for the development of narrowband spectrum efficient land mobile technologies, if such technologies are to have a reasonable opportunity for acceptance in the market place. As compared to conventional land mobile technology, narrowband technology may provide a three to four-fold increase in the number of channels that can be made available in a given amount of spectrum. The Commission noted that promoting narrowband technology for the land mobile service is consistent with the directive of the Communications Act to encourage the provision of new technologies and services to the public. In considering an allocation for narrowband land mobile service in the 220 MHz region, the Commission noted two constraints that precluded operation in the 216-220 MHz band.

The first constraint is that land mobile operation in the 216-220 MHz band would be impractical due to the need to provide adequate protection to TV channel 13 broadcast operation located in adjacent spectrum at 210-216MHz. The second is the Commission's decision not to restrain the development of the maritime mobile service in the 216-220 MHz band. Consequently, after careful consideration of a variety of alternatives, the Commission found that allocation of 220-222 MHz band was best suited for this purpose. The Commission noted that reallocation of this band to the land mobile service to be shared by government and non-government users is supported by National Telecommunication and Information Administration.

With respect to amateurs, the Commission believes that they will benefit from an exclusive allocation of the 222-225 MHz band. The Commission noted that several other frequency bands are available for amateur service. In particular, amateur bands at 28-29.7 MHz, 50-54 MHz, 144-148 MHz, 222-225 MHz, 420-450 MHz, 902-928 MHz and 1240-1300 MHz support amateur operations similar to the 220-222 MHz band.

Several hundred channels will remain available for amateurs to use for emergency communications, which should meet the local area communication requirements of any emergency or natural disaster. Taking these factors, along with others into consideration, the Commission found the reallocation of the 220-222 MHz band to be in the public interest.

The Commission reiterated its continued support for the amateur service. It recognizes that amateurs have a long history of public service and of providing assistance in emergencies, including national and international disasters. Further, amateurs are a vital resource of persons knowledgeable in the radio art and have had a long history of contributions to the advance of radio science. The three megahertz allocated to amateurs on an exclusive basis in this proceeding, together with the many other amateur bands, should continue to provide adequately for this service.

The Commission noted that the 220-225 MHz band is currently allocated internationally on a co-primary basis to the fixed, mobile, radiolocation and amateur services as resulting from actions of the WARC. The radiolocation service will start January 1, 1990, and no new station may be authorized for this service. In implementing these allocations domestically in 1984, the Commission conformed the domestic allocations to the international allocations. However, the Commission stated that the fixed and mobile services would not be implemented until a proceeding was initiated to determine precisely how the band would be shared among the various services and between Federal and public users. The Commission stated that the basic principle that would apply is the equality of right to operate. In the meantime, amateur use of the 220-225 MHz band, which had formerly been secondary in this band, was permitted to continue. Today's action resolves the sharing issue.

The Commission pointed out that this proceeding only addressed frequency allocations and not service rules and that a new proceeding would be initiated to develop procedural and technical rules for licensing private land mobile operations in the 220-222 MHz band.

However, since the 220-222 MHz band is to be shared between government and non-government users, the development of coordination procedures is needed. Consequently, neither government nor non-government users will be allowed access to the 220-225 MHz band until the Commission has adopted final service rules.

Amateurs are also advised to begin an orderly transition of on-going operations in the 220-222 MHz band to other amateur service frequency bands in order to avoid an abrupt termination of such activities.

Action by the Commission August 4, 1988, by Report and Order (R&O number to be specified).