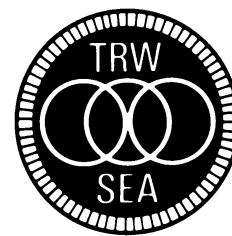




CROSSTALK



News Bulletin of the TRW Amateur Radio Club

Volume 97 Number 2

February 1997

Editor's Notes:

After the hustle and bustle of the holidays, I'm trying to get caught up. As some of you may already know, the 2 meter repeater is back on the air, and hopefully by the time you read this newsletter, the KLM HF Tribander will also be on the tower.

In this issue, check out a article, submitted by Dave Nelson on the HF project, also in this issue, see pictures from the last VHF/UHF Contest, and also words from the President.

See the latest "scanner" offering from Icom below.....

Better yet, wanna listen to police calls without a scanner? Check out <http://www.policescanner.com> - hear realtime police calls on your computer!!!!

Catch MORE Listening Excitement!

PC Programmable for Total Scanning Control!
Using a PC and available third party FCC Master File license database info (on CD-ROM or HD Disks), quickly customize your IC-R10 to scan only the active channels you want - anywhere in the country! ICOM's C-I-V computer interface is built right in! You can also quickly clone ideas from PC to IC-R10, or from one IC-R10 to another.

Advanced Operation in an Easy to Use Package!

- Beginning listeners can start out using the IC-R10's easy mode: select 1 of 10 band scan programs set by ICOM's factory. As your listening preferences grow, the scans can be changed to follow the listener's desired settings!

Actual Size!
2.3"(w) x 5.1"(h) x 1.2"(d)

Next Generation Features for the Serious Listener!

- 7 different scan types with priority watch include the all new "signal navigation" (SIG NAV) scan. While you listen to a paused frequency, the SIG NAV scan locks for the next busy frequency (within ±100 kHz)!
- Tunable bandpass filters provide excellent image reception and help reduce intermod.
- A built-in 20 db attenuator helps block unwanted noise.
- A "real-time" band scope makes it easy to find busy frequencies and to note band conditions. A handheld first!
- The alphanumeric dot matrix display allows up to 8 characters per channel name and up to 10 characters per bank name.
- Large 36mm² speaker for loud, crisp audio.

1000 memory channels with an EEPROM. Memories are arranged in 18 banks of 50 channels, with 100 channels for auto memory write and program skip scan.

Impressive Specifications!

- Wide band performance! 500 kHz - 1.3 GHz coverage*
- All Modes, including SSB for SWL's AM, FM, WFM, USB, LSB, CW

Uses Ni-Cd, Alkaline or other DC Power! The IC-R10 comes with a battery pack that uses either "AA" alkalines or the included "AA" Ni-Cd batteries. For frequent listeners, use the right-in-the-radio rechargeable Ni-Cd's (AC wall charger plug also included). Infrequent listeners may prefer using alkalines for their long power storage capacity. Or use an external DC power source, like a car cigarette lighter!

PC Ready!

The All New, Advanced Performance, Affordably Priced IC-R10 Next Generation Receiver

Call 206-450-6088 for a free brochure!

ICOM RECEIVERS
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MOTOROLA HAM RADIO

Radio AP50 & CP50

Specifications:

- Frequency Coverage (136-174 MHz)
- PL/DPL/DTMF code built-in
- Frequency Steps, 5, 10, 12.5, 25 KHz
- 20 channels with scanning & delete capabilities
- Auto or Programmable Repeater Offset
- Power level: Low (2W) or High (5W)
- 6 DTMF Memories • PTT Id built-in
- Compact (5.2" x 2.5" x 1.4") or Standard (5.9" x 2.5" x 1.4")
- Modifiable for MARS/CAPuse (permit required)
- Alkaline or Nicad Battery (Standard Model)
- Optional DTMF decoder for selective call - group call
- Keypad frequency program with LCD display
- Manufactured with Motorola backed proven quality

Brand Name Radio at Affordable Price
AP50 only **\$249!**
Group Discount Available
Also Commercial Radio (CP50 - UHF - 430-470 MHz) Available

ORDER: (714) 543-6800 or (714) 893-2944
ATRAN COMMUNICATION CORP.

This ad was in the February QST. Looks like a winner!

Is Motorola getting into the Ham business again?? rumor is that this is for export only at this time.....

TRWARC Monthly Calendar of Events

February 1997:

Tuesday, February 5	5:30 pm	Executive Board Meeting (All Club Members are invited)
Tuesday, February 11	5:30 pm	Club Meeting Leo's Mexican Restaurant
Friday, February 21	12:00 noon	Technical Chairman's Meeting Building S Hamshack
Tuesday, February 11 Tuesday, February 25	12:00 noon	Emergency Communications Team Meeting R3 Emergency Operations Center
Saturday, February 22	7:00 am	TRW/ARC Swap Meet Marine and Aviation (Northeast Corner)
Saturday, February 22	12:00 noon	T-Hunt Swap Meet Parking Lot - 144.72 MHz

Reoccurring Events:

Every Monday Night (Except the 1st & Holidays)	7:30 pm	Disaster Communication Systems (DCS) Net DCS Members: Check in on 2 Meter Repeater
Every Wednesday	12:00 noon	ECT Net on 2 meter Repeater
Every Thursday Night	6:30 pm	TRW Amateur Radio Club Net The Bob and ? Show - Check In on 2 Meter Repeater
Every Friday Morning	7:30 am	TRW Amateur Radio Club Breakfast Building S Cafeteria - Everyone is invited Talk-in on 2 Meters

Other Events

Computer Marketplace (Computer Shows) *Hours: 10:00 to 17:00*

POMONA \$8 admission

February 8 & 9 (Sat. & Sun.), **February 22 & 23**, **March 15 & 16**

Fairplex Exposition Complex Exit Highway 10 at Fairplex Drive.

Go north to McKinley Avenue, turn right. Turn left on White Avenue to Gate 14.

BUENA PARK \$5 admission

February 2 (Sun.), **March 2** (Sun)

Sequoia Conference Center Take the Beach Blvd. exit off the 91 Freeway.

Go one block north to 7530 Orangethorpe.

All Shows Open to the Public 10:00 a.m. to 5:00 p.m.

Call for more information (408) 778-5200 or 800-800-5600 Fax# (408) 779-1374

www.computermarketplace.com

Other Ham Swap meets:

Inland Empire ARC - 2nd Sat. ea. mo. @ A.B. Miller High School, Walnut & Olenander in Fontana - Talk-in 145.480 (-600 pl=77.0hz)

CMRA - 3rd Sat. ea. mo. @ DeVry Institute, 901 Corporate Center Dr. Pomona - Talk-in 146.175 (+600)

El Cajon ARC - 1st Sat. ea. mo. @ Santee Drive-in Theater, Woodside Ave. @ Hwy 67 in Santee

Presidents Corner

It's the start of our second term! Your board has generated and approved a budget for this year that will let us get accomplished the things that we think we need to get done, such as completing the installation of equipment in the Emergency Communications Van. There are also other things that we need to get accomplished and some things that just need some final touch up work, such as the HF tower on building S. There is one thing this year that we have to recover from, which is the loss of all the aluminum tower sections that were kept in the fenced area north of building 05. These tower sections were used for Field Day and this year we will need to work around that lost field day equipment.



John Shepherd and Ray Enriquez will co-chairperson the Field Day effort this year and are coming up with ways that we can get around the loss of the towers. If you want to participate in this years Field Day keep tuned in, John said that he would be holding their first planning meeting sometime in the near future.

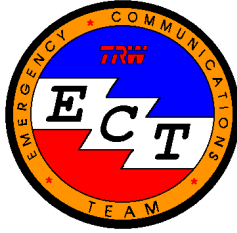
I am glad to announce for those of you that haven't noticed our old friend is back, the primary W6TRW repeater. It was worked over by John Cheatham and it works better than it has in the past. He cleaned up the wiring on the repeater, made schematics of how the system is wired, got back some of the original capability of the system, and basically gave it a real good tune-up. Again thank you John for doing such a great job on the repeater. For those of you that didn't make the February meeting John gave a good talk on the repeater and the present condition of same. Thanks again John for all your work!!

Last year with the help of a lot of club members and friends we were able to solve two big problems that faced us at the beginning of last year. The first problem was that the club didn't have a quality HF station similar to the station that had been in building 65. We had plans for a while but nothing got done. Then Dave Nelson stepped up to the plate and said that we would have a first class HF station in building S. It looks like we have more capability than before and from the comments I've heard, people like the system. We do have some clean up work to do like lightning protection for all the antennas on building S. I have heard rumors that we may have a directed effort for HF contests also, which could get more club members involved in HF activities. I look forward to that happening.

The second problem we've resolved, even though we are still working the issue, is to regain our emergency communications capability through the construction of our new club communications van. The van is not complete and if you talk to some, it will never be complete there will be something to add or change until we get a new van. But we do need to get it to a ever ready condition to support either TRW or local community events. This year we still need to do some serious work to get the van to a status that it is complete with reference to the present plans. It is usable for the multitude of things that we use it for, such as: support for the Swapmeet, a platform from which we can participate in ARRL contests, Community support for their events, and most important, to support our Company in the case of emergencies. There is some hard work to be done in the van but when it is complete, it will have a lot more capability than the previous van and will be more comfortable to work in. If you haven't seen the van it will be out supporting the next Swapmeet, it's worth coming out and taking a look at.

Also this year there is an effort ongoing to get the Oscar station back up and running to support satellite or shuttle contacts. Last year the club received a QSL card from STS-70 the mission that launched TRW's last TDRS satellite. With the steerable antennas and the gain from the fifteen element Oscar antenna, contacting the shuttle is a lot easier than using a hand held. Hopefully we will have the station up and running in the next month, I would like to try and contact the astronaut, Don Thomas, the one we talked to when we made our first shuttle contact.

After the present major projects are complete we will pulse the club members as to what is next for the club to provide in the way of a capability that we don't have now. So keep thinking of things that would be nice to have in the club and maybe we can get it done. 73, Bob Briggs KD6WYQ



ECT News

by Duane Park WA6EIK
M3/2261BO x34219

As the new ECT Coordinator, Welcome to a new column. This will prevail when time and space permits.

Van news: No much to report here, the work is progressing, the van was utilized at the last VHF/UHF Contest as seen in the pictures elsewhere in this newsletter, the new ergonomic chairs were welcome to the operators I'm sure.

Things have been pretty quiet here at Space Park, if I hear any news, I will try to let you know. I'm planning on continuing a similar format that Rich, N6CIZ has used in the past, so for most things should seem pretty transparent as this transition takes place. I welcome any comments or questions, by Quick Mail, please address any correspondence to my KOMSAT_M3 address, not the "STD" one, I will receive it much faster, or my mail to M3/2261BO.



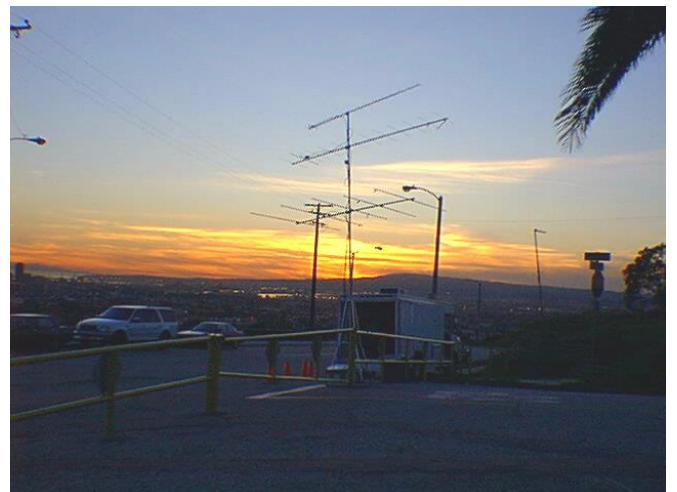
Computer Dreams helps out club and members

David Osborn of **Computer Dreams** has been very helpful to the club and its members during the past year.

Dave upgraded the club shack machine. Dave can get any computer part you need with a full manufacture warranty.

Dave specializes in Custom Computer Systems to your specs at mail order price levels. Dave is an IBM, Intel, Microsoft, and Compaq certified reseller. Dave also subscribes to the latest diagnostic tools and programs. Dave is a full service computer specialist. Dave has many satisfied club members. Dave lives and works in Redondo Beach. His hours are flexible and he does make house calls. You can Reach Dave at 310-372-0625 or Fax him at 310-376-8729, email is roa@usa.net. When you talk to Dave tell him you are from the TRW Radio Club.

Thanks to Dave Lee, WA6MPF, here are pictures from the last VHF/UHF Contest



HF BEAMS DECLARED OPERATIONAL

by Dave Nelson, AB6DU

On February 1, 1997, members of the club raised the last HF beam, a KLM KT-34XA, to its ultimate home on the Building S tower, over 80 feet above ground level. This addition provides 10, 15, and 20 meter capability to the tower stack. A 40 meter dipole and a Cushcraft AW3S WARC band tribander were already operational over the Tail Twister rotator. This project has preoccupied a large segment of the club over the past 8 months and reaching this milestone was a major event for those who participated in this difficult project. Kudos to all who have helped. You made a difference.

Five members actually completed the raising in a few hours, but over twenty-five members have contributed hundreds of hours to enable this final event. Elizabeth Kunkee, KS4IS, Steve Papa, KO6VF, Rod Scott, KE6PI, Mike Borden, N6XRH, and Bob Briggs, KD6WYQ, performed this climaxing scene in our enduring rooftop drama. We certainly thank them for placing this critical piece of equipment into the W6TRW HF arsenal and are anxiously anticipating activities in DXing, contesting, rag chewing, and operating awards such as Five Band Worked All Counties. Those with HF privileges will be enthralled by the performance of these antennas. Those without are encouraged to at least tune around and consider upgrading. Just listening on the bands gives an indication that this antenna installation is no minor improvement. Although only preliminary evaluations have been completed, indications are excellent. One short call on 20 SSB and the Argentine station came right back, with a 59+. Never mind the pileup. Forty meter SSB contacts have consistently received S9 + 20 throughout the midwest, from stations received here at S9. Seventeen meter contacts are similarly successful, with +20 reports easily obtained again. These were barefoot, but the Henry linear is operational on the traditional (non WARC) bands, delivering over 1300 watts output.

Altogether, the three HF beams, which cover 40 through 10 meters, the Henry 2K-3 linear, and the TS-940 transceiver provide a super HF platform for the club. Even QRP enthusiasts will be cracking pileups. But it doesn't stop there. The Cushcraft R7 all-band vertical is also operational for omni coverage or for a second rig. For high ambient RF noise levels, the JFD ANC-4 RF noise canceller is available to cancel ignition or power line type noise. This would probably be connected to the R7 for a sense antenna. A MFJ NIR-10 DSP active filter and audio noise suppresser is also available. And for CW buffs, the AEA Morse Machine complements your own skills. Whatever your HF interests, if the above doesn't cover it, you can complain to this writer, who will be glad to start adding more capability.

The tower and antennas assembly was conceived in May 1996, after a club meeting when someone mentioned the tower was just laying on the roof of the building, simply awaiting assembly and erection. (Why don't we get a couple people together and put it up?) And after a mere 8 months of work involving over 25 people, the red tape of building permits, construction drawings, interfacing with TRW building and facility people, professional engineer calculations and certification for the special guying, documenting the overall design, purchasing parts, crew scheduling, antenna assembling, tuning, and testing, painting, cabling, the gobacks for screwups, raising the tower, drilling the I-beams, boring the concrete, endless trips to the hardware store, machining special assemblies, designing the lightning protection and grounding, dressing the guys, rebuilding the rotator, raising the rotator and antennas until finally, we reached the point where an excellent array is operational.

We can thank many for their contributions. Unfortunately, space doesn't allow detailed reporting of their specific contributions. With apologies for any inadvertent omissions, I'd like to acknowledge the following people who provided hands on contributions in addition to those mentioned above: Mike Aust, WB6DJI, Frank Bartel KC6ABS, John Cheatham, KE6OJM, Bryan De Aro, KN6OW, Ray Enriquez, KD6IGI, Craig Gullickson, KC6CEX, Wayne Hogancamp, KI6GM, Bob Hume, KG6B, Stan Johnson, W6EKK, David Lee, WA6MPF, Mike Lee, KE6MJU, Oded Lerner, KE6SGR, Paul Lukas, N6DMV, Greg Martens, N6RRY, Bill Shanney, W6QR, John Shepherd, KO6MZ, Richard Sullivan, AC6RL, Chris Wachs, WA2KDL, Willard Washburn, KE6PNP, Bill Whiddon, NM6X, Dave Williams, KF6IB, and Craig Young, AC6NN. Many others contributed valuable suggestions which facilitated the construction.

There were many frustrating times in this project, but all obstacles were eventually overcome to reach this success. It was a learning experience. The second tower will be much easier.



Circa September 1996



The finished product

TRW AMATEUR RADIO CLUB

ELECTED OFFICERS

President	Bob Briggs	KD6WYQ	R8 / 2188	(310) 813-2622
Vice President	Pat Anderson	KB6YPI	R7A /1265	(310) 813-6874
Secretary	Nina Whiddon	KN6FL	O1 / 2070	(310) 813-9351
Treasurer	Jan Parker	KD6AKD	R4 / 2058	(310) 812-1081

APPOINTED STAFF

Activities Chairperson	Greg Martens	N6RRY	M1 / 1275	(310) 813-4049
Crosstalk Editor	Duane Park	WA6EIK	M3 / 2261BO	(310) 813-4219
Emergency Coordinator	Duane Park	WA6EIK	M3 / 2261BO	(310) 813-4219
Librarian/Asst. Postmaster	Steve Papa	KO6VF	M5 / 1263	(310) 812-5305
Membership Chairperson	Jerry Dean	WA6GVO	R2 / 1036	(310) 812-0770
Past President	Frank Cartier	W6FC	O1 / 1210	(310) 812-2292
QSL Manager	Bryan DeAro	KN6OW	120 / 1020B	(310) 812-4789
447 Repeater Autopatch	Pat Anderson	KB6YPI	R7A /1265	(310) 813-6874
SEA Representative	Elizabeth Twyford	KS4IS	D1 / 1024	(310) 813-0524
Swap Meet Manager	Rich Sauer	N6CIZ	R9 / 2849	(310) 813-5869
SYSOP (Telephone BBS)	Ron Hoffman	KE6OJD	M4 / 2031C	(310) 814-9126
Technical Chairperson	John Cheatham	KE6OJM	R9 / 2838	(310) 813-5903
S.P. Packet/Internet Sysop	Chris Wachs	WA2KDL	R7A / 2100	(310) 813-1506
Training Chairperson	Bryan DeAro	KN6OW	120 / 1020B	(310) 812-4789
Trustee of W6TRW License	Frank Cartier	W6FC	O1 /1210	(310) 812-2292

TRW/ARC Telephone Computer BBS (24 hrs, 300-14,400 Baud, 8-N-1)	(310) 768-3399
TRW/ARC Hotline (Club Answering Machine)	(310) 813-8569
W6TRW 2 Meter Repeater (Open Repeater)	145.32 (-600) PL 114.8Hz
W6TRW UHF Repeater (Open Repeater / Closed Autopatch)	447.00 (-5 MHz) PL 100 Hz
W6TRW-3 Packet Radio Internet Gateway and BBS (1200 Baud Port)	146.745 (-600)
W6TRW Internet Home Page	http://w6trw.sp.trw.com/w6trw/

TRW Amateur Radio Club
One Space Park
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