# World MEWS

Vol. 2, No. 8

May-June 1973

50¢

## Ham's Life Saved Via Fresno Repeater

A Sanger man who made a habit of carrying his two-way radio to help others in emergencies still is alive today because of that habit.

Berge Bulbulian (WB6OSH), 47, was reported in satisfactory condition in Fresno Community Hospital after a culvert he and two others were attempting to bury fell on him.

Bulbulian said the three had tried several ways to get rid of the culvert, which was no longer useful on his ranch, so they were digging a hole to bury it. When the hole was about four feet deep, the culvert rolled into it and onto Bulbulian. He suffered a broken pelvis, broken hip, and ruptured bladder.

While the other two -- his father, Yghish Bulbulian, and a fellow worker, Alfredo Corpus -- were trying to dig him out, Bulbulian, an amateur radio operator, radioed for help. An ambulance arrived just as the other two freed him. Doctors say the radio and quick response of the ambulance "probably saved his life".

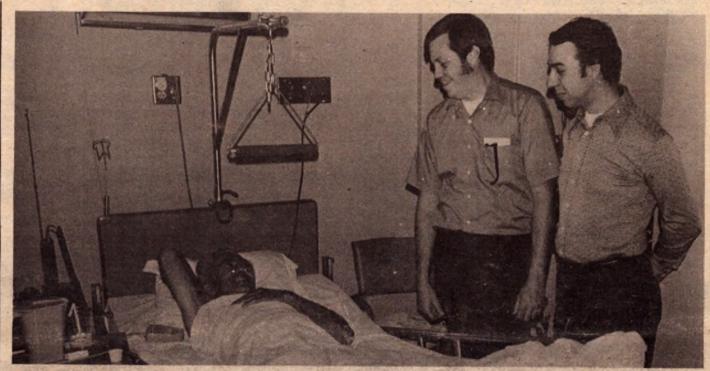
Bulbulian says he intends to carry the radio with him "no matter where I am".

(From "The Fresno Bee")

## Berge's story - as told to Worldradio

"I attempted to jump out of the hole and got caught part of the way out. It caught me up against one corner of the hole at about hip level on down. I don't have any injuries above the waist, except for bruises on one arm. I yelled to them "get me out of here!"

They started to dig frantically and immediately I remembered that I had an HT-200 with me that was loaned to me by Randy Mays, WB4DHA, who's on duty on the USS Ranger in the Tonkin Gulf.



Berge Bulbulian, WB6OSH, visited in the hospital by Stan Ostrom, WA6WXP, and Larry Webster, K6RPH. Note the two meter rig next to Berge's bed. (Photo: Armond Noble, WB6AUH)

He had no use for it out there so he loaned it to me and I called for it immediately and yelled, emergency, emergency, this is WB6OSH!' I suppose I was somewhat incoherent but I managed to get out the information as to who I was, where I was, that I needed help and that I was being crushed.

Several hams heard and responded. Bill Price, WA6PRU, and Verl Harmon, WB6RLX, responded on .34/.94 (W6PXP, the Fresno Amateur Radio Club repeater) and indicated that help was on the way.

I have since learned that a number of other hams also heard the call, did not respond but immediately called in for help. So as I understand it, quite a number of people were calling in for me. The ambulance was rolling. I learned later that a number of other types of equipment had also rolled but had got there after I was dug out.

The two fellows, Bill Price and

Verl Harmon, headed out towards me. They didn't know I had help there with me.

They also called my wife, and she was able to come to me which I didn't quite like at the time but they meant well. They didn't know where I was exactly, what my situation was and they felt that getting her there would be a quick way of getting help to me. If I had been alone that could very well have been the point that saved my life in that kind of situation.

With my worker digging and me doing the directing (from the hole), they managed to dig most of me out. I had to do some of the digging myself down in the hole with a small cement trowel. I asked them to bring a rope from my pickup, they tied it around my waist and I hung onto it. They pulled and I got out.

My first thought, of course, was to wiggle my feet to see if everything was all right. Everything wasn't all right but I was able to move my feet so I knew I didn't have spinal injuries and at that exact moment the ambulance arrived. It was just perfect timing. They were able to load me onto it and get me on the way immediately.

I was at the time suffering from internal bleeding, but of course I didn't know that. The doctor later told me that the fact they were able to get me to the hospital as rapidly as they did, so that the internal bleeding could be stopped, and I could be treated for shock, unquestionably saved my life as I was in a very bad state of shock at the time I arrived in the hospital

I was conscious through every bit of this. I told my wife that I wished I weren't but I was and that's pretty much the story of the rescue operation. One of the things I thought was really great about the way the hams performed was that they didn't all get on the air and try to contribute something. Everybody did what he had to do. They knew that these two fellows were handling the situation very capably and they stayed off. I thought there was admirable restraint on the part of the ham fraternity in just staying off.

If you can do something, do it. If you can't do it, don't. In spite of the fact that we have no emergency apparatus in this area, they performed beautifully.

And I'm certainly thankful that that repeater was on. Under the new repeater regulations, it could very well not have been."

Guatemala-USA Accord As of 26 May 1973, Guatemala and USA may exchange 3rd party traffic. (de Les Anderson, TG9SK, WB6AWD).

fils Contant St. [18433]



# Newsfront

# Around the World

## **Emergency Operations**

Licola (Vic.): 15 schoolboys and two teachers missing for two days on Mt. Tamboritha were rescued by helicopter.

Amateur radio operator Keith Scott, VK3SS, was the vital link between search headquarters and searchers. For 17 hours on the chilly summit of the mountain, Keith operated his well-equipped mobile station.

A helicopter overhead and experienced bushmen on the ground searched the dense mountain timber for the missing people lost while on a school hike in the ranges.

Mobile 144 MHz transceivers with the searchers kept in touch with Keith to relay their messages to police, while anxious parents and friends crowded around the radio van to listen to progress. They were delighted to hear that all had been found. They took for granted that the radio gear was part of the search headquarters equipment. They were unaware that the cost of that vital link was borne by Keith in true amateur fashion.

(From "Amateur Radio" - Australia)

## **Emergency Call**

by Clyde Mashburn, W4SDR

Upon activation of the Florida Midday Traffic Net at noon on Friday, March 30th, an emergency call for help was received from Marvin Banister, K4PGY-mobile north of Gainesville, Florida. With K4PGY was the father of a medevac patient who was being air-lifted from Albany, Georgia to the University of Florida Medical Center. The critically ill patient was accompanied by a doctor and two nurses. The father requested the FMTN NCS, Jim Wilson, W4GDK, to immediately arrange for a completely equipped ambulance to meet the plane no later than 12:30 on the runway of Gainesville airport. This was accomplished in about fifteen minutes by Bill Fugerer, W4DFP, Gainesville, through the FAA and the Medical Center.

Herb Roland, W4LSR, acted as relay between NCS and the mobile. Additional help was offered by Carleton Coleman, W4QBR, of Gainesville.

(From "Florida Skip")

This Fall there will be one or more new round-tables dealing with matters of significance to the inhabitants of our tiny planet. SSTV will be used when its capabilities help the communication process; but ideas will be the heart of what's going on, not hardware. I would like to hear from any Worldradio readers (with or without slow-scan gear) who are interested in helping to make such gettogethers happen.

Copthorne Macdonald, WOORX P. O. Box 483 Rochester, MN 55901



ACTION IN DOCKET CASE

By Chief Administrative Law Judge Arthur A. Gladstone on April 3:

SAN FRANCISCO, CALIF. (WILLIAM D. HELM) ORDER TO SHOW CAUSE WHY THE LICENSE FOR AMATEUR RADIO STATION WB6DMF/1 SHOULD NOT BE REVOKED AND SUSPENSION OF AMATEUR RADIO OPERATOR LICENSE. On request of the Chief, Safety and Special Radio Services Bureau, ordered that Helm and the Bureau Chief, respectively, shall, on or before April 17, exchange in writing copies of their respective proposed written exhibits and lists of proposed witnesses with appropriate indications of the general areas of the proposed testimony of each witness.

April 18, 1973

#### ACTION IN DOCKET CASE

By Administrative Law Judge Chester F. Naumowicz, Jr. on April 11:

KANSAS CITY, KANSAS (RONALD G. BOZICH) ORDER TO SHOW CAUSE WHY LICENSE FOR CITIZENS RADIO STATION KBV-8379 AND AMATEUR RADIO STATION WBØDCY SHOULD NOT BE REVOKED. Granted petition by the Safety and Special Radio Services Bureau and extended to April 23, 1973, time in which to file proposed findings of fact.

April 18, 1973

#### GENERAL ACTION

OMEGA SERVICE, INC., CHICAGO, ILL., DENIED REVIEW OF RULING REFUSING REQUEST TO INSPECT FCC OPERATOR LICENSE APPLICATION FILES

A request by Omega Services, Inc. (Omega), asking review of the January 29, 1973, ruling of the Executive Director denying its request to inspect FCC commercial and amateur license applications filed at the Commission's Chicago, Ill. field office, has been denied by the Commission.

Omega is a commercial vocational training school which teaches electronics. It said it intended to use the information to obtain names and addresses of persons who failed FCC commercial and amateur operator examinations so that it could offer help.

The Executive Director denied Omega's request on the basis that the records contained (Turn to page 47, please)



FCC issued on April 20 a Notice of Inquiry, Docket 19723, soliciting comments and suggestions from informed persons and organizations concerning the Radio Amateur Civil Emergency Service as to its effectiveness, its licensing system, abuses, additional or different privileges, consequences of any expansion to the remainder of amateur radio, and regulatory safeguards needed. The comments of interested parties should reach the Commission on or before July 1, 1973. At the same time, FCC denied a proposal, pending since 1967, which would have allowed RACES stations to use facsimile in the 160 and 80 meter bands. Full information on both matters will appear in the June issue of QST.

May 3, 1973

How is Oscar doing? Contrary to rumors, Amsat says Oscar 6 is not near its end of life. It is felt that Oscar will achieve the one year design lifetime, but complete co-operation of users becomes an increasingly vital factor. The operating schedule has been modified leaving the satellite on for Thursday, Saturday and Monday GMT each week, to provide more frequent battery recharge periods. Recharging cannot take place if amateurs use the repeater during the off days. If you can find the repeater on when it should be off, please do not transmit in the 145.9 to 146 MHz uplink band. Observance of the 100 watt effective radiated power limitation is another positive step to insure continued good performance. The translator output band is 29, 45 to 29, 55 MHz.

May 10, 1973

The ARRL Member's Guide to Amateur Satellites is now ready for distribution. This convenient 32-page collection of background articles from QST, the ARRL Handbook and Amsat Newsletter features information on equipment and techniques needed to use the satellite, orbit plotting, orbit prediction using Doppler measurements, satellite tracking and guidelines for construction of helix antennas. For your free unfolded copy, by first class mail, send an addressed envelope larger than six by nine inches with 16 cents United States postage to ARRL, 225 Main Street, Newington, Connecticut 06111.

May 24, 1973

The following are the calls of the high claimed Top Ten single operator scores in the 1973 ARRL International DX Competition. DX cw, KH6RS, KV4HW, YV5KL, KH6IJ, LU5HFI, TI2DX, KH6IAB, 9Y4VU, EA2IA, I6BQI. W/VE cw, KINOL, WIBPW, KILPL/3, WIYK, W2GXD, KIDIR, KIVTM, WAIRCP, WB4YOJ, W2DXL. DX phone, 6J9AA, 4M4AGP, KZ5JF, XGIJ, LU5HFI, VP2MY, KH6BZF, KH6IJ, 9Y4VU, CE3AQW. W/VE-phone, W7RM, W6RR, K6EBB, WIYK, KIJHX, KIVTM, W4ZCY, KITHQ, W3GRF, K6SVL. The full listing of high claimed scores will appear in the July issue of QST. The following are the calls of the high the July issue of QST.



# Amateur Radio is more than communication-It's a service

## Flood Warning

Some 30 members of the Chattanooga-Tri-State FM Association, working through the local Red Cross chapter, broadcasted 58 hours Friday through Sunday in providing services during the flood.

According to Mac McCarthy, one of the amateur radio club's 80 ham operators, stations were established at each of the area's seven Red Cross shelters.

He said mobile units operating in the Brainerd, East Brainerd and Highway 153 areas also radioed street-by-street reports to the Red Cross building on McCallie Avenue, where evacuation procedures were determined.

At Jasper, Tennessee, members Phil Lytle and Clyde Hendee assisted in establishing the city's first Red Cross shelter. They also set up a radio communications station there.

Mr. McCarthy said all work was voluntary.

The Chattanooga-Tri-State FM Association operated through a repeater station on Signal Mountain.

It is licensed by the Federal Communications Commission as WB4KLO.

(From Chattanooga "News-Free Press")

## Hams do Girl Scouts a Good Turn

by Ronald Jacob, WB4GYX

Saturday, March 24, 1973 was a night with a lot of action; the Swapfest supper was a big success, the Girl Scouts of Junior Troop 179 went tent camping, and a line of violent thunderstorms visited the Fort Walton Beach (Fla.) area. About 30 girls, 9-12 years old, and their leaders (including WB4GYX) planned to spend the night at Woodland Trails, a Girl Scout camp about a half a mile back in the woods next to Camp Pinchot. Fortunately, WB4GYX had his HR-2A along (no electricity or phone available) because the weather deteriorated steadily all day.

About 9:00 p. m. a severe thunderstorm could be seen over Ft. Walton Beach, so a call was made on 146.94 MHz to find out how bad it was. Steven Butler, WB4PFV, reported 50 mph wind gusts, and heavy rain. Several others including John Zwaska, W4WKQ; Harald Seeley, WB4ZKK; and Alan Hinshelwood, W4BVE called in to offer assistance. Dott Smith, WA4SBS, advised that he had contacted the Eglin weather forecaster and the area was under tornado watch with up to four inches of rain expected to accompany violent thunderstorms.

It was decided to move the girls out, so Harald Seeley, WB4ZKK, was asked to phone the parents who were to provide transportation. An additional parent had to be called by Alan Hinshelwood, W4BVE, and the camp was completely evacuated before the worst storms hit the area.

(From "Florida Skip")

## March of Dimes

by Charles Cotterell, WØSIN

The Rocky Mountain Radio League, assisted by the Denver Area AREC (Amateur Radio Emergency Corps), played an important part in the communications set up for the Denver area March of Dimes Walk-a-thon on March 1.

The Rocky Mountain Radio League (RMRL) maintains a two-meter repeater on Squaw Mountain for the use of its members and to serve the public in emergencies and other public activities.

Dick Schmidt, KØFLQ, Aurora, is the section (state) emergency coordinator, and there are two local emergency coordinators who work with local officials and organizations who are in need of extra communications.

These are Rich High, WØHEP, (whose wife also is licensed as WØHEM and who manned their fixed station at home to be able to use a telephone for relaying messages to parents of children who had problems and to certain officials of local governments), the EC for Denver, and Joe Fair, WAØPXF, the EC for Arapahoe and Jefferson Counties.

They have grave responsibilities and along with about 41 other amateur radio operators did an excellent job in helping the REACT people keep everything under control.

There were only six base stations, those who were at a home, all the others were either auto mobile or motorcycle mobile. The six motorcycles were able to maneuver in traffic much better than the mobiles but weren't able to carry anyone with them. Yet it all worked very well.

The four separate "walks" were coordinated from the one repeater, WØWYX, atop Squaw Mountain. Dennis Boruchin, KØBTO, was the net control in the Adams County area, while Whit Brown, WBØCJX and WBØGOV, handled the George Washington School headquarters. Place Junior High School had Stuart Edmonds, WØGV and David Baysinger, WBØBAE, and Mel Knoll, WØVNP, was the RMRL official originally contacted for help.

Children were on the streets by 8 a.m. and the base station in WØHEP's trailer was secured at 6:30 p.m. that evening; it was a long and fruitful day.

(From the "Denver Post")

The Jan. 9, 1973 FCC computer printout showed Amateur Radio service losing average of 10 hams a day from Nov. 1, 1972 through Jan. 1, 1973. Novice up 69 (23, 482 to 23, 551), Advanced up 299 (58, 709 to 59, 005) and Extra up 85 (12, 061 to 12, 146). Technician down 268 (51, 509 to 51, 241), Conditional down 275 (29, 754 to 29, 479) and General down 536 (87, 204 to 86, 668). Grand total of all licensees dropped from 262, 719 to 262, 093; a loss of 626 hams.

### IDENTIFICATION

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#### Hams Send Out First Call

Otto Caldwell, Jr, and Ray Dunkin were the first Ham Radio operators on the scene in Hubbard (Texas) Saturday morning after the tornado, besides Phil Woodward, who lives there. They got there about 7 a.m. and set up mobile equipment.

Their first call went out at 7:30 to Waco to Neul Chatman for him to relay a message for Kermit Granger, a Hubbard Volunteer-Fireman, to the Hillsboro Gas Company to come and cut off the gas to stop the gas leaks.

The ham operators used two meter communications equipment. All phones and electricity in the area were out.

Calls went out to Navarro County for medical supplies for the hospital.

Ed Edrington of Waco went to Hubbard later in the day to help, along with a West operator, George Smajstria.

Others on the Waco end helping were Tom Crockett, Jim Brown, Fred Harbour, Bill Clarke, Stan Crain, Jug Wood and Gene Chunn.

(From the Waco, Texas "Citizen")

# Say Visibility Obstructed By Ham Antenna

A new battle is being waged between ham radio operators in the city (Van Nuys) and hillside residents who object to the radio antennas obstructing their view of the Valley floor.

And as normally happens when the rights of ham operators are threatened, the "brotherhood" of the amateur radio network has rallied in defense.

The City Council's building and safety committee yesterday considered complaints from several San Fernando Valley residents who object essentially to two radio antennas and have requested an amendment of existing antenna ordinances.

Delayed Action

The matter was referred to the city attorney for a report back in 30 days after he considers possible amendments to city requirements to include precautions to mitigate the effect of antennas and other towers in the area.

The committee, headed by Councilwoman Pat Russell was told existing building requirements for safety become effective when antennas stretch more than 45 feet from the ground or are valued at more than \$100.

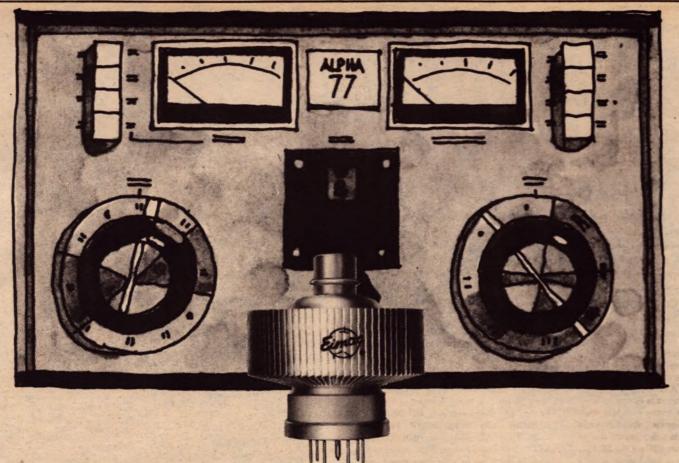
Planning Department representatives to the committee zoning ordinances control location and height of the antennas to some extent, although there are exceptions.

Used for Sports

One of the antennas in question is reportedly a \$7000 tower which is used by its owner to receive locally blacked-out athletic events on television.

Arguments from about a dozen ham operator spokesmen centered around their usefulness in emergency or disaster situations.

(From "Valley News", Van Nuys, CA)



# The no-compromise Alpha 77 is powered by the no-compromise EIMAC 8877.

No corners were cut in designing the rugged Alpha 77 amplifier. Rated for continuous commercial service, it loafs along at the maximum legal amateur power limit.

And, no corners were cut in designing EIMAC's air-cooled 8877 ceramic/metal, high-mu triode, the Alpha 77 power tube. The 8877 is conservatively rated at 1500 watts plate dissipation up to 250 MHz and requires less than 65 watts PEP drive signal for the legal power input limit. This impressive power gain is achieved with 3rd order intermodulation distortion products —38 decibels below one tone of a two equaltone drive signal.

This compact, rugged, high-mu power triode has a maximum plate voltage rating of 4000 and a maximum plate current rating of one ampere in commercial service. While the 8877 is primarily designed for superla-

tive linear amplifier service demanding low intermodulation distortion, its high efficiency also permits excellent operation as a class C power amplifier, oscillator, or as a plate modulated amplifier. The zero bias characteristic is useful for these services, as plate dissipation is held to a safe level if drive power fails, up to a plate potential of 3 kV.

The Alpha 77 is the ultimate power amplifier for the 70's. That's proven by the choice of the 8877, another example of EIMAC's ability to provide tomorrow's tubes today. For additional information on this tube or other products, contact EIMAC Division of Varian, 301 Industrial Way, San Carlos, California 94070. Phone (415) 592-1221. Or contact any of the more than 30 Varian/EIMAC Electron Tube and Device Group Sales Offices throughout the world.



## How to stay on the air AN EMERGENCY STRIKES.

## with a fully solid-state transceiver from SWAN.

That's right! Even if your area is struck with a massive electric power failure you can have full amateur band coverage, with up to 200 watts P.E.P. available, to relay emergency information or to call for help. A 12 volt battery, just like the one in your car, is all you need to operate a Swan solid-state transceiver.

Here's all you do to set up a home emergency station. Simply purchase a 12 volt automobile battery. Connect a Swan solid-state transceiver to the battery and your antenna. That's it! The station is ready to go on the air at any time — able to operate for several days — if necessary. Prepare now, to communicate in any emergency situation!

HINT: - Add a battery charger to a battery-powered solid-state home installation and you can regularly operate more efficiently. It'll cost less than most A.C. power supplies. Even Swan's big SS-200 transceiver takes very little power drain from a bettery - less than 500 ma on receive and averages about 6 amps when transmitting on single sideband (as low as 0.8 amps average, to transmit SSB on the SS-15).

Another thought — a solid-state mobile installation can mean a savings of up to \$140.00 when compared to the special D.C. power supplies that must be purchased for mobile use of conventional tube-type transceivers.

Now is the time to join the new age of amateur radio electronics by selecting a new fully solid-state Swan transceiver. Every model "SS" series features: NO TRANSMITTER TUNING, INFINITE VSWR PROTECTION, CONTROLLED NOISE BLANKING, BUILT-IN VOX, and more. Just 10% down will put an all-solid-state rig in your ham shack, when you use your Swan Revolving Credit Service account. Why wait? Order yours now!!



Join the New Age of Amateur Radio Electronics! Equip your ham installation with one of these fine New Fully Solid-State Transceivers . . . each model operates directly from any 12 volt DC supply:

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SWAN 610X (Crystal Controlled		-
Oscillator)	. \$	53.95
SWAN SS-16B (Super Selective Filter)	0.00	
SWAN SS-208 (External VFO)	. \$1	59.00

SWAN SS-1200 (1200 Watt P.E.P., tube-type, Linear amplifier . . . , \$299.00

SWAN SS-200 (200 Watts P.E.P.) . . \$779.00 SWAN SS-100 (100 Watts P.E.P.) . . \$699.00 SWAN SS-15 (15 Watts P.E.P.) . . . If you must operate from a 115 volt AC source, order one of these power supply units:

SWAN PS-20 (For SS-200/SS-100/ \$139.00 SWAN PS-10 (For SS-100/SS-15). . \$ 89.00

#### NEW, ECONOMICAL, FULLY **SOLID-STATE MONOBANDERS!!**

Featuring many of the circuitry designs of the multiband units described above, these 15 Watt P.E.P. input transceivers will give years of reliable service. Operate directly from 12 volts DC with no tune-up time required. SSB and CW modes, transmit ALC, smooth AGC, S-Meter, and no transmitter tuning to mess with. Includes infinite VSWR protection feature.

SWAN MB-40 (7.0 to 7.3 MHz). . . \$249.95 SWAN MB-80 (3.5 to 4.0 MHz). . . \$249.95

#### MONOBANDER ACCESSORIES INCLUDE:

Your choice of solid-state amplifiers to boost your range. Usable on any single band from 3 to 30 MHz with the appropriate plug-in filter. Price includes one filter. Please specify band

SWAN MB-100 (100 Watt P.E.P.) . . \$139.95 SWAN MB-200 (200 Watt P.E.P.) . . \$209.95

#### ACCESSORIES:

SWAN WM-1500 In-line Wattmeter	
5, 50, 500 & 1500 Watt scales	. \$49.95
SWAN 600S - Speaker	\$21.95
SWAN 600SP - Deluxe speaker	50/1-16
with phone patch	. \$64.50
SWAN 600R - CW Filter	\$29.50
SWAN 600R - AM Filter	\$39.95
SWAN 14-117 - DC Power	. 400.00
Supply	\$139.95
SWAN 510X - VFO	\$53.95
	\$159.95
CWAN 240	
SWAN 210 - VFO	
SWAN 160 - VFO	. \$119.00
<b>SWAN VX-2</b> – <b>VOX</b>	. \$35.95
SWAN FP-1 — Phone Patch	. \$48.95
SWAN NS-1 - Noise Blanker	\$39.95
SWAN 444 - Desk Mike	
SWAN 404 - Hand Mike	\$21.95



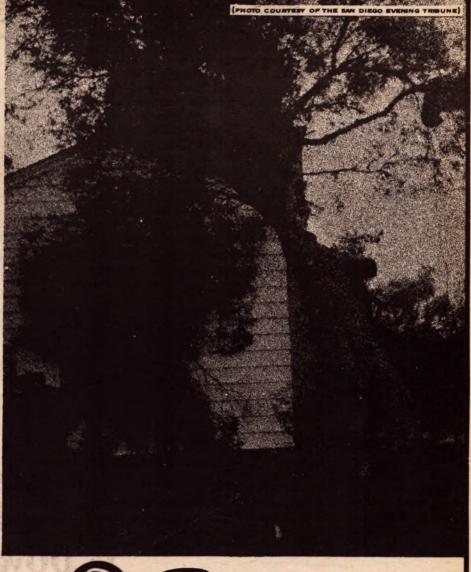
## SWAN FM1210-A - 144 channel

combinations are provided through independent switching of 12 transmit and 12 receive frequencies with eight crystals installed. Dynamic microphone included. Covers 144 to . . . \$319.00 SWAN FM1210-A - Pedestal type

12 volt DC source. . . . . . \$69.95

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SWAN 500-CX - 500 Watts P.E.P., SSB/CW/AM Transceiver. Covers all amateur bands 80 thru 10 Meters \$529.95 With 6S-16B Super Selective SWAN 117-XC - 117 volt AC \$109.95 SWAN 230-XC - 117 to 230 volt . \$115.95 AC Power Supply . . .



SWAN 270B — 260 watts P.E.P. SSB Transceiver. Built-in speaker/AC power supply. 3.5 to 29.7 mHz. . \$469.95 



SWAN 600T - 600 watts P.E.P. 10 to 80 Meter Transmitter . . . \$589.95 SWAN 600R — Companion Receiver for 600T. . . . . . . . \$439.95 Custom with SS-16B . . . . . . . . . . \$599.95



SWAN 1200X - 5 Band Linear Amplifier. 1,200 watts P.E.P. Built-in power supply. . . . . . . . \$259.95 SWAN VHF-150 — 2 Meter Linear Amplifier. 180 watts P.E.P. . . . . \$299.95 

Mail to: SWA	AN ELECTRONICS, 305 Airport Road, Oceanside, CA 92054	A STATE OF
Gentlemen:	I read your advertisement. Please send me:  ☐ Data on your New solid-state units. I am interested in your ☐ SS-200, ☐ SS-100, ☐ SS-15, ☐ MB-40, ☐ MB-80, ☐ Credit Application, ☐ Other	
Name:	CALL:	-
Address:		
City:	State: Zip:	1

# HAMS HELP BLAST VICTIMS

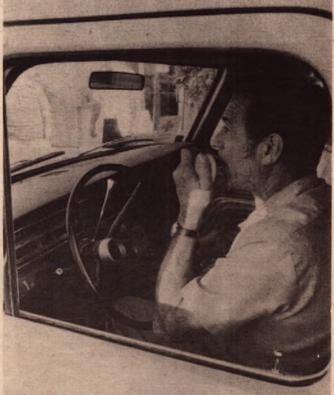
by Al Maston, W6JYQ



A distraught family reunited through amateur radio



Dan Nunn, WA6IAB, Red Cross coordinator at the Roseville Armory



Al Maston, W6JYQ, on 40 meters at the Armory

Photos: Armond Noble, WB6AUH



George Patterson, W6BAR, on 2 meter FM from the Armory



George Bausert, WA6ADS, on 75 meters from the Armory

A five-hour series of devastating explosions ripped through a bombladen freight train at Antelope, California next to Roseville at a Southern Pacific Railroad make-up yard at approximately 8 a.m. Saturday morning, April 28, 1973 and continued until 9 p.m. that evening.

The train contained 21 Department of Defense cars carrying 330 Mark 81 bombs weighing 250 pounds each and two non-military propane cars which also exploded.

Approximately 30,000 persons were evacuated temporarily to

homes of friends and relatives in Sacramento and to the local high school gymnasiums and the National Guard Armory in Roseville.

Local and state-wide area amateur radio operators, members and non-members of RACES were called into service (or volunteered) to the RACES network and the local Red Cross headquarters in Sacramento to handle health and welfare traffic.

Dan Nunn, WA6IAB, was the Red Cross coordinator at the Roseville Armory approximately two miles from the devastation area. Also at the armory were:
George Patterson, WA6BAR, who
was handling traffic on the 2-meter
FM, Mt. Vaca Repeater; Pat Jones,
WA6EHM, was on the 2-meter AM
Net to the Red Cross headquarters
in downtown Sacramento; George
Baustert, WA6ADS, was on the
75-meter, 3965 kHz emergency
frequency; and Al Maston, W6JYQ,
was on the 40-meter, 7265 kHz
emergency net. Also represented
was our local Army and Air Force
MARS stations handling traffic and
ground to air communications between the military and state helicopters and reconnaissance aircraft.

In all there were approximately eight evacuation centers throughout the Roseville and Citrus Heights area, besides the National Guard Armory south of Roseville. They were: San Juan, Mira Loma, Del Campo, Rio Linda, El Camino and Bella Vista High Schools, and at Rusch Park which was the main base station for the Sacramento County sheriffs, the Red Cross, Highway Patrol and Department of Defense.

Communications for health and welfare were maintained by local



Pat Jones, WA6EHM, on 2 meter AM from the Armory



Ross Stevens, W6FRE, and Helen Stevens, WA6KHD, at Rusch Park



Jim Bollinger, W6ETD, and Steve Chastain, WA7SJV/6, at Red Cross headquarters in Sacramento



Bill Jenkins, WB6FTU, operating through the Mt. Vaca repeater from Red Cross headquarters.



At Red Cross headquarters, (left) Kay Galbreath, WB6POQ; (back to camera, seated) Ken Welsh, WB6FKV; (center) Jay O'Brien, W6GDO; (right) Keith Crandall, K6QIF



Doris Conkling, WA6UAF, and Dave Conkling, WA6IQK, operating from home

and state-wide hams at most evacuation centers. Harry Sands, WB6GKR, of Sacramento, assisted by Clyde Hoyt, WB6FEU, of Concord, California, at San Juan High School, handled traffic on 7265 kHz between other evacuation centers, as did Gary Wann, K6YZJ, Sacramento, assisted by Gary Hale, WN6PKO, Sacramento, on 2 meters.

Tim Ryan, K6RHM, Sacramento, was at the El Camino High School on 75 meters during the course of the day, then relieved Al Maston, W6JYQ, on 40 meters at the Armory at 11 p. m. that same evening.

Bill Stanis, WA6PIV, of Sylmar was in Sacramento with his XYL and handled traffic on 75 meters at the San Juan High School. Earl (Bud) de Mill, WB6FZY, was both mobile on 75 meters and 2 meters FM and also acted as a base station after leaving the area.

Others who assisted in the health and welfare traffic during this crisis were as follows:

75 Meters: Base Stations
Lou Potter, K6VT, Fair Oaks
Marcia Rast, K6DLL, Fair Oaks
Steve Chastain, WA7SJV/6, Sacto.

Andy Montgomery, W6NS, Sacto.

40 Meters: Base Stations
Dick Baron, WA6FTD, Citrus Hgts.
Guy Lizotte, WA6RIF, Red Cross
Hdq.
Dick Jeffrey, WA6TDP, Citrus Hgts.
Jerry Kugler, WA6BKS, N. High-

Jerry Kugler, WA6BKS, N. Highlands Fern Fuller, WB6FNG, Carmichael

2 Meters: Base Stations
Kay Galbreath, WB6POQ, W. Sacto.
Paul Goodin, WA6CXB, Sacto.

There were many other hams who assisted: Don Catlet, K5YMU; Austin Smith, WB6IYO; Phil San-

ders, WB6ZPO and many others whose calls we have not received but we thank them kindly for their fine assistance.

And of course, Ed Black, WB6-DZP, acted as coordinator of RACES at Red Cross headquarters at 13th and I Streets, Sacramento.

Special mention goes to Ray J. Motley, WB6TRO, of Alpine, CA (near San Diego) who performed an outstanding job on 40 meters in keeping a clear frequency on 7265 kHz during the emergency for health and welfare traffic.



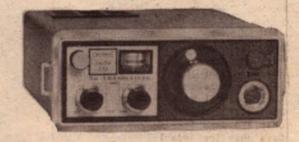
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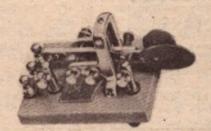
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	7405	. 35		.65
á	74H05	.50		.90
	74H08	.50		.65
	7410	.35		.90
ŝ	74L10	.50		.90
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The 24th Annual International DX Convention, held the 7th and 8th of April, was its usual rousing success. Alternately sponsored by the Northern California and Southern California DX Clubs, this year it was the NCDXC turn with Bob Thompson, K6SSJ, carrying the ball (and the burdens) as Chairman.

Festivities started Friday night with DXers from all over the United States and the world having dinner together.

The convention started on Saturday with the "Contest Forum" which was chaired by Charles "Rusty" Epps, W6OAT; Fred Capossela, W2IWC (CQ Magazine Contest Committee); and Philip Goetz, W6DQX (ARRL Contest Advisory Committee).

Phil told how the ARRL Contest Advisory Committee operated with its eleven members. He urged that hams get their views across by writing to any or all of the members and to the ARRL headquarters. It was members' suggestions, he pointed out, that resulted in changes in the Sweepstakes rules such as the shortened exchange and the end of the power multiplier.

Possible changes in the DX contests being considered are shortening it to one weekend, or having it both weekends but having separate winners for each weekend, limiting the hours, making the entrants operate in a single band, limiting the contest to certain parts of the band, changing the starting time, etc. But he stressed that it is the hams themselves who will decide what happens.

Fred Capossela, who is best known for operating K2GL during contests brought greetings from CQ Magazine Contest Editor, Frank Anzalone, W1WY. Fred talked about contest entry cover sheets being sent by certified mail and disappearing into thin air. Another topic was "disqualifications". He said that those who show on their entries more than three percent duplicate contacts are disqualified and he believes that such is reasonable. Regarding those who are disqualified for "an overly active imagination", Fred said that lawsuits have been threatened by those who were disqualified on those grounds. But after being invited to view the documentation the matter has always been dropped. (Editor's Note: Those running contests have been treated to such follies as logs showing W6 stations working India on 10 meters at 3:00 a.m.; a letter to the DX station brings back the reply that the operator died two years ago, etc.)

Fred went on to say that some operators were growing weary of the two weekend contests and one solution would be to have a contest in February for 40, 80 and 160 meters and to have a contest in March for 10, 15 and 20 meters. Separate winners could be announced for each weekend and everyone could get more sleep.

During the Q and A session it was brought out that when the ARRL receives logs they are first checked by Ellen White, W1YL, and then examined by Fred Niswander, WA1PID, and multipliers are given the scrutiny. Fifty percent of all the high scorers are checked for dupes. If things look a little awry in someone's log, letters go to stations asking for a list of stations worked in a particular time span. The station in question is not identified as such but the answer will be revealed in the list coming from the queried station.

There was some grumbling about checking for dupes and Jim Neiger told about making 5700 contacts in 1969 from ZD8Z. He said he was on the air for 93 hours and later it took him 100 hours to extract 400 dupes and essentially said if he can do it on an effort like that, others can also.

While there was some talk against the two-week contests, others were in favor of such saying that this enabled the casual operator some time in the contest. Rex Maner, W5QQQ, asked that the possibility be considered of leaving dupes in. He felt that they were contacts and should count. Pat Bacon, WA7NIN, thought it might add a bit more incentive, in areas where the same station wins year after year, to have second and third place awards if a million points or so are scored by the runners-up.

Craig Wilson, W6OMZ, brought up the possibility of each station being allowed only sixteen hours competition during the contest, with the individual choosing the sixteen hours. He said the older fellows need their sleep for, as you get on in years, "you run out of gas", which received a round of laughter.

Some of the discussion centered on the battle between the "big guns" and the "little guys" but Author Charette, WA6CXK, said he was a "little guy" and he liked contests because they were fun, and he has fun. Jim Neiger, who has operated from many overseas locations, told that a one weekend contest might draw more interest from the DX stations. He said that the two week contests discourages DX stations many of whom work a six-day week.

The next seminar was by Lew McCoy, W1ICP, who has been with the ARRL for 25 years and is the editor of the antenna section in the Handbook. Lew snapped a few heads when he called the tri-band trap 3-element yagi "a stupid antenna to put up". He said some of them have "less gain than a rotatable dipole". Using the black-

board Lew illustrated the difference between the trapped antenna and the monobander.

Having experimented with every antenna possible, Lew told of his conclusion; "for DX, I'm strictly a quad man". He said the quad will let you get the band opening earlier and for you it will close later. Other topics he covered had to do with the good performance of a vertical if one uses forty radials two-tenths of a wavelength long to eliminate the ground losses. He stated that on a field strength meter one could see the drop in radiated energy as the radials are removed. He also mentioned a full wavelength loop as having 1.8 db gain.

A handy tip he gave the audience was: with antenna and ground connected, mike and key leads attached, grid dip the system by wrapping the coax feedline around the dipper's coil. He said if the resonant frequency falls in a ham band, it should be changed, so as to prevent feedline radiation.

The "Top Band" program was presented by Herb Schoenbonn, KV4FZ. He opened by saying "160 has a thrill to offer, and the argument about needing a lot of space for an antenna is nonsense". Herb told that an inverted V at 50-60 feet will give you a good signal for about 500 miles. That particular antenna, though, will not be good for DX as you need a low angle of radiation.

Herb stated that "6s" have worked Europe on the band and that 160 meter DX contests are prized. He mentioned that the JAs can be found between 1909 and 1912 kHz and during a contest you can get 20-30 multipliers on 160 which could be quite a difference in your score. In the WPX contest 160 meter contacts get a double multiplier and the IARU contest gives six points for a 160 meter contact out of your own country. He said the CQ Magazine Contest has created a lot of interest in 160.

There are beacons around the world that can warn one when 160 may be open and Herb mentioned DHJ on 1831. 5 kHz in Germany. That station with 200 watts into a folded unipole is often heard 3 5 9 in the midwest. Herb said the best time to look for DX was just prior to an auroral disturbance and conditions are getting better as the sunspots go down.

Telling of his 92 countries total on 160 meters Herb said the nice thing about 160 meter DX is that it is not dog-eat-dog like you'll find on other bands. He mentioned Bob Eshleman, W4QCW, while talking about the great camaraderie existing on 160 meters. Also mentioned was Stew Perry, W1BB, with the comment, "Stew brought DX to 160".

Herb mentioned that 160 is now more common on DXpeditions and told of going to Navassa with 160. While there Dale Strieter, W4DQS, "one of the greatest CW ops around became quite enthusiastic about 160 and worked 30 stations in one hour.

As to operating, Herb told that the FL-88 filter for \$2.95 is a great help. In a tightly-packed, meaty talk, the Beverage antenna received the spotlight. Its virtues regarding improved signal to noise ratio and the construction of it were detailed. The asset of having one antenna for transmit (vertical) and another (horizontal) was mentioned. A balloon-supported vertical, tethered with fish line, as well as kite-supported antennas were a topic. And humor entered as Herb told of hanging the children's toy "Slinky" from your tower and feeding it from the bottom. After the contest you can cut it down and watch it walk away.

He again mentioned the gentlemanly atmosphere prevailing on the band and how the operators try to help each other. Giving tips, such as the peak times being sunset and sunrise (for about 15 minutes) proved his point. Emphasized was the need for keeping ground losses down and that a ground screen is important. He also told that one can load up his existing tower. In concluding he mentioned that last summer he worked WAC in 24 hours and that 160 is a "great band".

Following the lectures came one of the better bashes in amateur radio get-togethers. The two-hour "Personality Improvement" cocktail party. Spread over three rooms each bar featured a different drink. Bartenders were past presidents of the club. No long lines, no waiting, swift dispensing by such as Wes Loudon, WB6UJO, contributed to conversation. The group went to dinner in a good mood.

The audience warm-up was conducted by Lew McCoy, W1ICP. He unleashed his brand of humor which had the audience engulfed in laughter. Visitors, guests and club officials were introduced and then the program began which was a film of the Spratly Island DXpedition (see WORLDRADIO, April 1973, page 14). Narrating the film were two of the participants, Don Riebhoff, K7CBZ (of the U.S. State Department, Saigon), and Scott Gantt, WB4VBY (Major, U.S. Army-Special Forces). Scott was accompanied at the convention by his XYL, WB4ZOQ.

The boat taking them to Spratly (1S1A) left the port of Saigon and travelled to Vung Tau before heading to Spratly which made it one of the only DXpeditions to have M-16s and the like as part of the gear along with transceivers, beams and inverted Vs.

Hams all over the world were praised for helping make the DX-pedition possible, with Robert Beaudet, WIYRC, being singled out for special mention.

The film showed what a difficult time the crew had in getting to Spratly. Two attempts were aborted when high seas (reaching 30 feet) forced the boat back to Viet-Nam. Only a gutsy crew of hams would stick with an effort after having a boat full of water, generators breaking down, carburetors failing, being adrift for seven hours, etc. 10



Don Wallace, W6AM, receives special award from John Troster, W6ISQ. (Complete story in next month's issue)



Phil Wright, VS6DR, came in from Hong Kong.



Jim Neiger, W6BHY, and XYL, accept award from CQ Magazine



Herb Schoenbohm, KV4FZ, gives details on 160 antennas



Lew McCoy, WIICP, on HF antennas



Part of the dinner crowd hearing the Spratly story



Frank Cuevas, W6AOA, and special DX award

It was Murphy's Law in spades.

On the third attempt (when lesser men would have given up) they made it to the island. Eight feet above water, 400 by 250 yards and covered with birds describes Spratly.

The film was thoroughly enjoyed by all. Don's and Scott's narration was filled with humor, some of it being the humor that accompanies anguish.

They had brought their logs with them and the DXers who were on hand that worked 1S1A received special autographed QSL cards. Special mention should go to Fern, XYL of Rubin Hughes, WA6AHF, who was up until 3 a.m. filling out the 1A1A cards.

After the film the clubs presented awards to their members, CQ Magazine presented awards to high scorers and Katashi Nose, KH6LJ, was presented a cover plaque from QST. The prize drawing saw the Kenwood TS-900 transceiver being won by Joe Magen, HC2OM, OM of globe-trotting

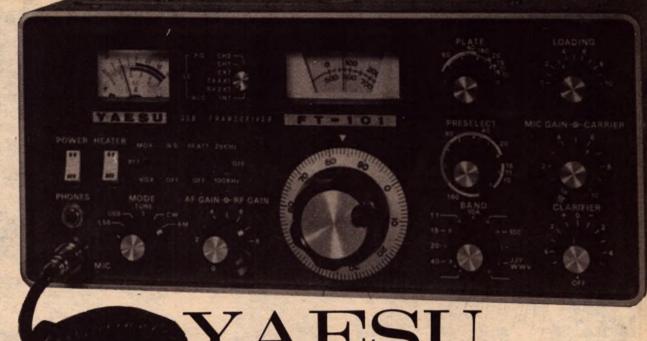
Darleen, HC2YL (WA6FSC).

The next morning the group gathered for breakfast and a series of entertainments. Then a special award was made to Frank Cuevas, W6AOA, in recognition of his many contributions to DXing. Although Frank's birthday isn't until June, it was decided to have the party a little early. Out came a gigantic birthday cake. Frank was touched. He was even more touched when the cake popped open and out came a sweet young thing sans any visual QRM. It was better than SSTV.

Hugh Cassidy, WA6AUD, Editor of the West Coast DX Bulletin, was heard to say "son of a gun".

While this article was being written the receiver was on the low end of 20. A booming signal came down from Dick Moen, W7VRO, after he worked a G and a UA we gave him a shout and chatted for a few minutes. Told him we were writing the article about the DX convention. He said, "I sure will be there again next year". Which pretty much sums up the feelings of those who attended.



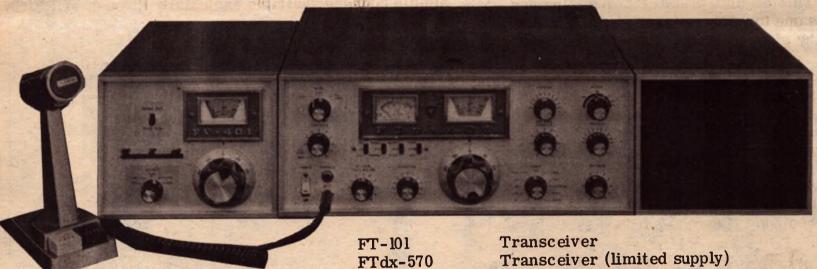




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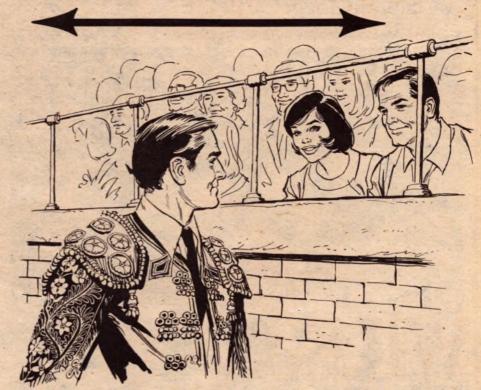
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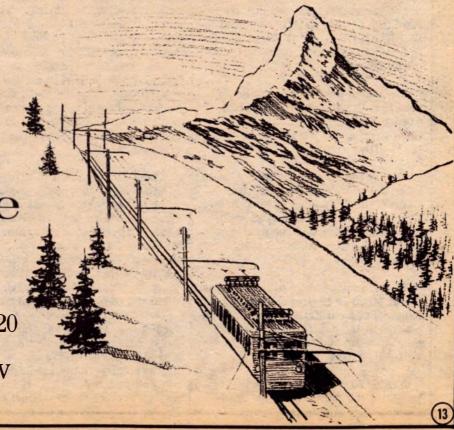
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# Things are looking up at Rancho Sordo Mudo

by Stan Kellogg, W6KPR



Ed Everett, XE2YX, inspects the windmill donated by a group of hams in Black Canyon, Arizona. He hopes to have it operating in the near future to replace the gasoline-driven pump now used.

Many wonderful events have occurred at the Rancho Sordo Mudo since December 1971 when an article appeared in WORLDRADIO about this fine school for deaf mute children of Mexico.

Rancho Sordo Mudo is located in the beautiful Guadalupe Valley about twenty-five miles northeast of Ensenada, Baja California, and is run by Ed Everett, XE2YX, the director, and his wife, Margaret.

For those readers who did not read the article in the December 1971 WORLDRADIO, it might be in order to give a brief background of the school.

The ranch property (completely paid for) is composed of five hundred acres, some of it in fertile level ground and part in fairly steep hilly terrain.

Ed Everett is an ordained minister in the Independent Baptist Church but the school is supported by various denominations as well as by some service organizations such as the Kiwanis and Lions Clubs and also by private citizens.

The ultimate object of the Rancho Sordo Mudo is to prepare these handicapped children to take their places in the outside world when they grow up and to be able to be self-supporting.

Aside from the regular subjects taught at the school are lip reading and sign language. Ed and

Margaret are quite adept at both skills. At the present time there are sixteen students in the school which will accommodate a total of sixty.

Up until Thanksgiving Day of 1972, the Rancho Sordo Mudo had been operating without commercial power for a period of about three and a half years. It had been powered by small gasoline engine run generators, one of which was donated by Harry de Vries, W6PIX, of Porterville, California. The use of these small generators was highly unsatisfactory, to say the least, as the bill for gasoline alone came to about \$200 per month, and also the lack of immediate availability of spare parts during breakdowns and the inconvenience of doing without power for protracted periods added to the frus-

Thus, for a period of three and a half years, the ranch was operating either without electricity at first, and then on a hit-or-miss basis with portable generators. So, it was with great joy and true thanksgiving that commercial power finally came to the Rancho Sordo Mudo on Thanksgiving Day of 1972 when the power lines were tied in to the school and the power was turned on. Of course, this was a great convenience to the school and also a vast saving in the cost of electricity as the commercial power costs them a small fraction of that previously furnished by the small gasoline generators.

This all started when a ham in San Diego, Leroy Bellwood, W6PJW, who works in a television station there showed the article in WORLD-RADIO to a colleague of his, Ralph Evans, W6VMN. Ralph had also been involved with Ed, XE2YX in running some emergency traffic. Leroy, W6PJW, invited Ed and Margaret up to meet him and in the course of their conversation, Ralph asked them if there wasn't some project that the San Diego Kiwanis Chib could sponsor. He was informed that audio training equipment would be a very useful adjunct in instructing the children.

As a result, Ed Everett and his XYL were invited to a Kiwanis luncheon two months later and presented with the audio training equipment for the school. During the meeting, Ed and Margaret were introduced to Walter Zitler, the president of a southern California power company and Margaret mentioned to him that it was too bad he had no connections with the Mexican Electric Company as the school had been in operation for three and a half years without commercial power and it would cost them \$3,500.00 to have power run into the ranch, and, of course, that was completely out of the question. Due to the prompt and effective efforts of Mr. Zitler, power poles were installed on the school property within a week with the small cost of only \$38.50 to the school.

The two benefits mentioned

above were direct results of the WORLDRADIO article in the December 1971 issue. Due to amateur radio contacts, the Rancho Sordo Mudo has reaped several other benefits to the school as well as making many new friends for the Everett family.

Also, Ed has been involved on more than one occasion in running emergency traffic. Jaime Pimentel, who works at the school, owes much to ham radio. He was stricken with a serious attack of appendicitis and had been without medical attention for two or three days. Finally, Ed Everett took him into Ensenada where a local doctor informed them that Jaime would have to be operated on immediately or there would be no hope for him.

On hearing this, Ed started out for the border to get Jaime to an emergency hospital in the United States. Margaret Everett manned the home station, XE2YX, and made contact with Wes Novotny, W6YSP, of La Mesa, CA. and Earl Wiederhold, K6SMT, of Bonita, CA. These two gentlemen arranged for clearance to cross the border and also for the emergency operation on Jaime, who was operated on immediately. There is no doubt that ham radio was instrumental in saving his life.

Some months after Jaime Pimentel's bout with appendicitis, his pregnant wife suffered a heart attack and a call went out for as-



A view of Rancho Sordo Mudo looking southward. The new school building is at the left and the dormitory on the right. The shop building is in the center bottom, with the Everett's residence above. Perhaps, XE2YX's antennas can be seen over the house. At the left foreground is the garden plot which was virtually washed away by the recent rains.



New classroom building built by the church group from Bass Lake. The room farthest away is a clinic containing an examining table and dentist's chair. One of the recently installed power poles is in the background.



Jaime Pimentel, the worker on Rancho Sordo Mudo, pauses in his work to chat with Wes, W6YSP, right, and Ed, XE2YX. Jaime is the one who was stricken with appendicitis and was rushed to the border by Ed. Unfortunately, the black and white film doesn't show the profusion of the wildflowers that grew in the Guadalupe Valley.

sistance from XE2YX. A mission station in San Quintin, XE2DP/P, responded and help arrived within the hour by airplane to give her medical aid. Today, she is in good health and even named her baby daughter, Margaret, after Ed's XYL.

One evening, while in conversation on the air with some other hams, Ed mentioned that the ranch was in need of a windmill. George Berryhill, K7VIS, of Black Canyon, Arizona, joined in the group and told Ed that he thought he could obtain one for the school.

George and another amateur,
Joe Barnes, WA7GVL, also of
Black Canyon, gathered some
other hams together and went
about dismantling a windmill.
Then they informed Ed that it was
his for the taking. Aside from
the gift of the windmill, George
and Joe instigated a community
project whereby they raised enough
money to buy a truck-load of food
for the school, and Joe's XYL,
Maude (also a ham), personally
made a dozen colorful quilts for
the girls' dormitory.

The Rancho Sordo Mudo has recently been blessed with the addition of a new classroom building. Previous to the erection of this building, classes were held in a small room located next to the shop. This highly necessary building is the direct result of much work and effort on the part of a small non-denominational church

in Bass Lake, California. On e of its members is Grant Story, W6NTK.

One night as Ed was chatting on the air, Grant broke in and in the process of the QSO, he informed Ed that their church liked to help needy Indians or Mexicans. The next evening, Grant got the pastor of their church on the air with Ed, and the upshot of the conversation was that Grant and the pastor decided to travel down to Guadalupe to look things over and see what could be done. On their arrival at the ranch, Ed stated that the greatest need at the time was for a school building and all the equipment that classrooms require, such as furniture, blackboards, stationery supplies, etc.

Upon returning to Bass Lake, Grant and the pastor reported the needs of the school to the members of the congregation, who immediately commenced raising money in various ways.

As a result of these fund raising projects, the church members sent enough money down to Rancho Sordo Mudo to have local labor put up the concrete blocks for the building, and at Easter time of 1972, a group from the church at Bass Lake journeyed to the school and completed the school building. This group was also instrumental in obtaining furnishings and school supplies for the classrooms. This Easter, 1973, this same group planned to go there again to build

a residence for the teachers which the Everetts hope to have in the near future. To cap off what they have already done for the school, this little church group from Bass Lake has located a much-needed tractor for the ranch as well as a load of lumber.

One evening as Ed was CQ'ing he made contact with Dan Pike, K6GTX/M. Dan became interested in what Ed was doing at the school and a few days later flew to Guadalupe in his plane for a visit. Dan was quite impressed with the work the Everetts were doing, and to help out, he donated some funds for the school building and also furnished uniforms for the girls. In addition, he does the printing of the news-sheets which are sent out from the school, and he volunteered to pick up children in different parts of Mexico and deliver them to the Rancho Sordo

Another occasion when amateur radio played its part in an emergency was the time a meat company in the United States donated some "hot dogs" to several schools in Baja, the Rancho Sordo Mudo being one of them. Due to the odor of the meat, the Everetts suspected that it was tainted and threw it in the dump. Their Great Dane found and ate the meat and died within the hour.

Immediately Ed contacted the company which had donated the "hot dogs" and got a list of the

other schools which had received the meat. He got in contact with Wes Novotny, W6YSP, who contacted the California Highway Patrol. A patrolman was dispatched to a mission in Tecate, CA, U.S. A. The mission sent someone across the border to warn the school in Tecate, Mexico of the meat. Some of the recipients of the bad meat were located some distance away from Guadalupe, but eventually everyone was warned in time. Through the efforts of ham radio, another catastrophe had been averted.

Another friend and benefactor of Rancho Sordo Mudo is Bill Hammer, WB6NAF, of Los Angeles who made a monetary donation to the school and whom Ed later met in person in Los Angeles.

Bill made a trip to Palm Desert, California, to visit some friends and try to raise funds for the school. The result of his trip were funds to purchase power tools for the school shop. These tools are almost a necessity as all repairs and most construction has to be done by personnel on the ranch.

Some other friends of Rancho Sordo Mudo are Dorothy Holms, WB6OSP, of Costa Mesa, CA. who has been instrumental in procuring several truck-loads of food and clothing; Bert Davis, W5YCB, of Jackson, Mississippi, who makes a monthly donation; Fred Killitz, Jr., WB6EGJ, Reseda, CA., who donated large quantities of paint to the school; and Earl Bowen, WA6OFK, of Encenitas, CA., who with the help of some Oceanside hams, collected canned food.

Anyone wishing to contact Ed Everett can write to Rancho Sordo Mudo, Apto. 1468, Ensenada, B.C.. Mexico, or on the "Taco Net" on 3855 kHz at 1900 PST or 2100 PDST.

The Everetts are very grateful to amateur radio for both the worldly benefits it has brought to Rancho Sordo Mudo as well as the many friends they have made through this medium. Needless to say, Ed is more than delighted with the manner in which individuals and organizations have responded to the needs of this growing school and he credits ham radio with the vastly improved conditions under which they now work and live as compared to the days before they had either the radio or commercial power.

I am certain that the readers of this article would wish to join WORLDRADIO in wishing the gang at Rancho Sordo Mudo "Muy buena suerte siempre".

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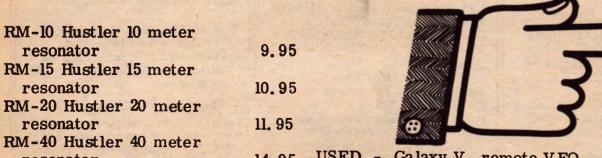
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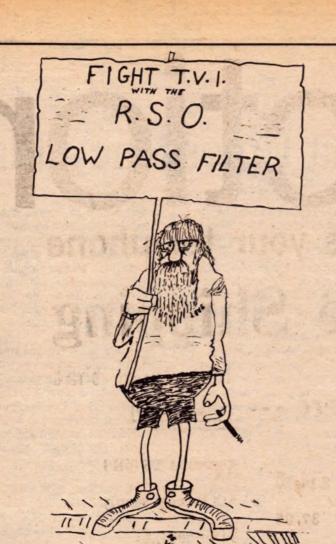
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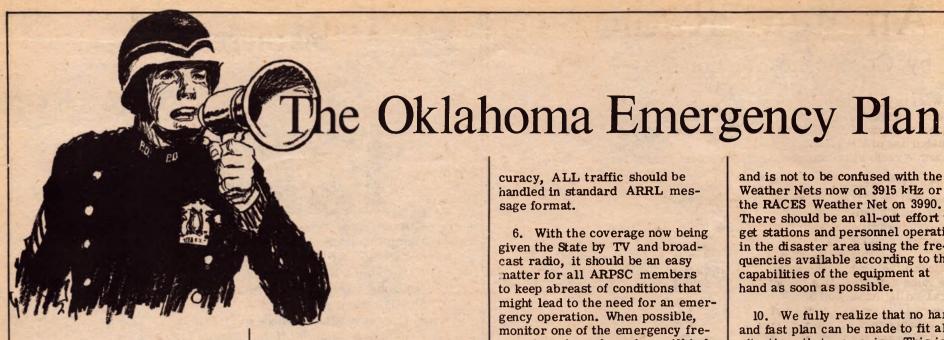
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- The primary frequency for emergency operation on a statewide basis will be 3915 kHz. This frequency will be used to organize operations and handle traffic in a minor disaster.
- 2. In a major disaster, 3915 kHz will be used to direct all operations and handle Red Cross, C.D., and other Priority I traffic. 3682.5 and 3925 kHz will be used for incoming welfare traffic. 3980 kHz will be used for patches and calls where possible. RACES (3990.5) and Mars frequencies (where available) will be used for outgoing welfare traffic.
- 3. The KEY CITY plan as outlined in the ARRL Operating Manual should be used as much as possible. ALL possible use should be made of the VHF facilities available for intercom and liason between the various nets where possible. IF initial contact with the disaster area is made by VHF, that frequency will be used for priority traffic until additional stations and equipment can be made available in the area to supplement the VHF operation.
- 4. The various FM repeaters now on the air throughout the state are particularly adaptable to intercom work and to liason with Red Cross and municipal and state emergency operating centers. Many of these E.O.C.'s are equipped with both VHF and HF stations and should be manned as soon as
- Stations operating from the disaster area should not act as Net Control. Once contact is established with a station outside the area, that station should take control and start the alerting procedure to notify the proper officials, Government, Red Cross, C.D., and ARRL. In order to give assistance as needed, it is preferred that, as soon as possible and where practical, a strong station in the nearest Key City take over as NCS and direct operation of all stations on the frequency being used. He can direct traffic into or out of the area as needed. With outgoing traffic being handled first according to priority, if and when there is a lull in emergency and P1 traffic, then P2 traffic can be handled on control frequency. To ensure ac-

curacy, ALL traffic should be handled in standard ARRL mes-

- 6. With the coverage now being given the State by TV and broadcast radio, it should be an easy natter for all ARPSC members to keep abreast of conditions that might lead to the need for an emergency operation. When possible, monitor one of the emergency frequencies. A good ragchew will help keep the frequency clear until such a time that it may be needed for emergency operation or until the alert has passed. In the event of an actual emergency, the nearest EC should take charge and immediately notify the SEC by priority radiogram, stating the type and extent of the disaster. It may be necessary to place a collect call to relay this information; however, the message should be filed for the record. The SEC will come to 3915 kHz to coordinate operations if needed. \*
- 7. In a major disaster, the SEC or Key City EC should designate stations to work each of the frequencies listed plus 7290 and 14, 300 kHz. The 20 and 40 meter frequencies should be used for out-of-state welfare inquiries and replies.
- 8. This being the basic plan, there will be many changes that will have to be made in order to fit the area and the situation that may exist. A GOOD LISTENER MAKES A GOOD NET MEMBER.
- 9. This plan is to be put in operation when there is a disaster

and is not to be confused with the Weather Nets now on 3915 kHz or the RACES Weather Net on 3990.5. There should be an all-out effort to get stations and personnel operating in the disaster area using the frequencies available according to the capabilities of the equipment at hand as soon as possible.

- 10. We fully realize that no hard and fast plan can be made to fit all situations that may arise. This is meant merely as a guideline to insure that should an emergency arise that there would be some semblance of organized operation to take care of the communication requirements.
- \* The SEC or SCM will, if the situation warrants, call the nearest district FCC office for frequency clearance.

Approved by: Cecil C. Cash, W5PML SCM Oklahoma

Submitted and Directed by: Leonard R. Hollar, WA5FSN SEC Oklahoma 405-375-4411 or 405-375-4111

(From "Collector and Emitter")

If this newspaper came to you in the mail and you are not yet a paid subscriber — it was a free sample copy sent to you to introduce you to WORLDRADIO. If you find the contents of interest you are cordially invited to subscribe.

see page 27

Seattle -- Two solid years of daily service will be celebrated on Sunday, 15 July 1973, in the second annual picnic of NAMS -- the Northwest Amateur Monitoring Service. NAMS has operated every day from 9 a.m. to 5:45 p.m. on 3970 kHz. It is unique in that it has no officers, no membership list, no dues, no roll call, issues no certificates and sends in reports to nobody.

"NAMS is all Indians and no chiefs," remarked its founder, William "Curly" Milner, W7MDM, of near Vancouver, Washington. "We just aim to facilitate ham-radio communications in the Pacific Northwest.'

NAMS had its first picnic on 15 July 1972. This year it will be joined by two other 3970 kHz nets -- the Noontime Net (11:30 a.m. to 12:15 p. m.) and WARTS (Washington Amateur Radio Traffic System) which operates at 6 p. m. NAMS suspends operation for the Noontime Net and closes down in the evening just before WARTS opens.

The two nets will begin their picnic on 14 July 1973 and run concurrently with the NAMS picnic on the 15th.

The combined picnic will be held at the Lewis and Clark State Park near Centralia, Washington. It is reached by turning east off Interstate Highway 5 onto Old Highway 99. Signs show the way to the park 1.7 miles from Mary's Corner. NAMS held its picnic at this spot last summer.

Although NAMS has no officers, it does not lack for enthusiastic supporters. The drive for the picnic this year began in February when Ed Galerneau, W7DFL, of Tacoma, Washington began soliciting help. He was promptly joined by others -- Henry Bittmann, WA7MFF; Virl Varney, WA7OTM; Harry Sorensen, W7IH; John Hendrixson, Sr., WA7PUC; Virginia Flagg, WA7LVN; Thomas Gohm, WA7FKM; Clarence Mc Credie, W7GJB; David Barber, K7LHB and WA7UUQ, among the very first -- with still more as word of the effort spread.

The NAMS picnickers will have a potluck luncheon (bring plenty of one or two dishes and share them with others) at 1:30 p.m. Sunday. A large coffee pot will be in operation most of the time for the benefit of all, and donations from several NAMS participants will provide pop for the kids. A public-address system, an organ and possibly other sources of entertainment have been promised.

At Lewis and Clark State Park there are 14 tent spaces and 9 camper-trailer spaces on the park road, with 20 camper-trailer spaces in the overflow area. Two large community

kitchens are available, with tables and benches and a fireplace in each. At least two modern flush-type toilet-washrooms are on the grounds.

For those wishing full hook-up facilities for trailers there is the KOA (Kampgrounds of America) campground on State Highway 12 (The White Pass Highway), approximately 13 miles east of the park. Plenty of clean toilets, hot showers, pull-through spaces and a small store, with propane gas and ice available.

Tent, camper and trailer spaces at the park do not have water, electric or sewer hook-ups. Presently the fee is \$1.75 but that probably will be raised to \$2.50 per night for camping. (There is no charge at all by NAMS -- remember, it is a do-it-yourself outfit).

For further details you can contact the Park Ranger (Edwin Ayer) at Route 1, Box 520, Winlock, Washington 98596; his telephone number is Area Code 206/864-2640. You might also inquire on NAMS for W7DFL, WA7MFF or WA7UUQ in particular.

Distances from Lewis and Clark State Park are approximately as follows: Seattle, 100 miles; Yakima, 139; Portland, 76; and Spo-kane 320. The park itself is in a beautiful tree-bordered setting. For fisherman-hams there will be the Cowlitz River and Lakes (Turn to page 39, please)

## Amateur Radio: Toy or Tool?

## by Copthorne Macdonald, WOORX

What is the justification for allowing a group of individuals known as Radio Amateurs the exclusive use of large chunks of valuable radio spectrum space?

The FCC in the Basis and Purpose section of the amateur rules mentions six things. They are: the communication service that amateurs provide for the public (especially emergency communications); their advancement of the radio art; advancing of technical skills; expansion of the reservoir of trained personnel; the enhancement of international good will; and the advancing of communication skills.

Of the six, the most neglected by hams is the advancement of skills for communicating.

It's too bad, but we hams do very little deep communicating. Stereotyped exchanges of signal reports, weather reports, and QTH's are a kind of arms length protection from getting near each other and into what each of us really cares about. Senseless taboos against communicating exist and permeate almost the entirety of ham radio. Not only are there taboos against discussing politics and religion, but there also seems to be a blanket taboo against having any sort of personally meaningful discussion. Getting into a heavy intellectual rap, or anything charged with emotion while on the air seems to be frowned upon.

It's time to discard the taboos and start using our amateur hardware as a tool for serious interpersonal communication. The only opposition is going to come from people who are afraid of personal contact, or controversy, or perhaps life itself. They make unsubstantiated assertions that serious talk does not belong, somehow, in ham radio. Serious subjects are not in "good taste". They would have us play with our rigs and shut up.

Perhaps the critics of free speech on the ham bands are afraid of some sort of governmental retaliation or repression. If the First Amendment has been effectively eliminated, I for one would like to know about it without delay! In the meantime I think I'll continue to say what I feel, on the air or off.

The restrictions that these people would place on us do not appear in the FCC rules. The FCC restricts hams from commercial communications, broadcasting, transmitting music, obscene language, and sending secret codes. But the name of the ham radio game is, "radiocommunication... solely with a personal aim". That aim is whatever we want it to be so long as it does not transgress these few restrictions. If the aim we choose is that of improving our

skills at really communicating, the amateur rules actively support and encourage us.

There has never been a greater need for people to share their thoughts and ideas with each other. Our world is in deep trouble.

The Club of Rome report, Limits to Growth, has pointed out that the joy ride for the U.S. and the other rich nations may not last another hundred years. The most probable collapse mode, they figure, is mass starvation of the large population due to failure of agriculture. Agriculture has failed because of lack of the products of industry fertilizers, gasoline, and tractors. Industry has failed because the easy-to-get raw materials are gone, and there just isn't enough capital to get sufficient quantities of the hard-to-get stuff.

Throughout the country, people are reexamining their goals, and values, and life choices. Communication can play a vital role in this reexamination process. I'm not speaking here of depersonalized mass communication, but of probing, questioning, individual-to-individual communication.

FCC Commissioner Nicholas
Johnson, a man about my own age,
has said it so well that I must pass
along this quote from his book,
Test Pattern for Living:

"No age is easy; but being in one's thirties at this time is especially difficult. You are caught between cultures. The temptation is to take sides, to move either forward or backward in time. The challenge is to stand firm, to try to discover as precisely as you can your honest-as-possible self, to pick the best from all possible worlds, and try to encourage constructive communication between two generations that seem to be missing most of what the other is saying. That is what many my age realize to be their responsibility and their opportunity; it is what I am trying to do."

It is what I am trying to do also, and I can think of no better tools than ham radio and slow-scan TV to help in the process.

Broadcast TV is a one-way medium with Big Money deciding what you'll see and what you won't. Slow-scan TV is do-it-yourself audio-visual dialogue with each individual deciding that part of his life he wants to share. Slow-scan makes it easy and natural to step into another person's life; if he wants to let us in, and share his feelings with us. If we restrict ourselves to the stilted, formula kind of communication that now fills the H. F. bands, we have no tools, just very expensive toys.

Let's put this in perspective.

I figure that the typical ham on the air with slow-scan has spent a couple of thousand dollars on ham gear. The typical Latin American would have to work at physical labor, 10 hours a day, 6 days a week, for over 6 years to make \$2000. Don't misunderstand me, if a society has an excess of wealth, I think it's quite appropriate to spend some of that wealth on tools for communication.

The crime, to me, is in spending the money, and then letting the tools rust. Like spending \$600 for slow-scan gear and then sending only cheesecake photos, and test patterns, and "cute" comments.

"OK, I want to use my toys as tools. Where do I start?"

There are many directions. The first involves making our casual QSO's something other than casual. We can start by getting our images together. By gathering those pictures together that tell something about ourselves. Pictures that get into some of the things outside of ham radio that we're interested in. Pictures that help us tell how we feel about some of the important questions we're all facing.

To quote Nicholas Johnson again:

"It seems to me we ought to share with each other such incomplete and imperfect insights as we've evolved. We ought not be shy about the personal facts of our lives just because we're unsure of ourselves. We ought to help each other. We damn sure aren't getting any help from Big Business, Big Broadcasting, or Big Government".

What a tool ham radio could be for finding others and sharing those insights!

Most of the other directions involve a considerable expansion of the round-table concept. First, an expansion in the variety of participants. There are innumerable non-hams who would be glad to share their special knowledge with a group of hams in an on-the-air round-table. The rules allow you to permit "any third party to participate in amateur radio communication..." over your station. Imagine round-tables involving some of your most interesting non-ham friends. Round-tables that include slow-scan tapes that you have made of them doing their thing, or some of their slides transferred to slow-

Second, is a great geographic and cultural expansion. Let's look at some of the possibilities. How about honest and open dialogue between people in different cultures - - - perhaps with "I'm OK/you're OK" ground-rules?

In this country alone there are a number of cultures and subcultures. The middle class culture. The youth culture, or counterculture. The urban Black culture. The Puerto Rican culture. The Southern culture. The Mexican-American and American Indian cultures. True, most hams come from the middle class straight American culture, but through "third party" round-tables a Montana rancher might have his first rap with a New York Black man.

Crossing international boundaries opens another layer of possibilities. How does your outlook differ from the outlook of a Canadian or a New Zealander? How well does Sweden's welfare state really work? How does an Israeli view internal U.S. problems? We need inputs from outside the U.S.

Some doors to dialogue will be closed, of course. While traveling in the South Pacific I met a ham who told me that things were so controlled in his country that he could not even discuss the population of the country on the air. In those countries which permit freedom of expression, however, what is our excuse for not discussing the subjects that vitally concern the future of our planet matters of war, and of peace, of natural resources, and human needs?

The third dimension of round table expansion is subject matter. Our concept of what education is all about is changing drastically. We're beginning to see the limitations and damaging side effects of traditional schooling. People are realizing that it is the end result (competence) that counts, not the process by which an individual acquires that competence.

Ivan Illich in his book,

Deschooling Society, says that,

"A good educational system should have three purposes: it should provide all who want to learn with access to available resources at any time in their lives; empower all who want to share what they know to find those who want to learn it from them, and finally, furnish all who want to present an issue to the public with the opportunity to make their challenge known."

Think how well ham radio and slow-scan TV mesh with this concept of education. Geographic barriers are gone. A farmer in Oregon could hold his free organic gardening classes every day at noon on 14235 MHz, and interested individuals and groups all over the country could participate. The Saturday afternoon slow-scan net is an example of this right now. How many Saturdays has Ralph Taggart held the interest of the group by informally teaching about some phase of slow-scan?

In bringing those who know together with those who want to know, SSTV has incredible possibilities. Even in the matter of bringing issues before the public, ham radio might be useful. Unlike a broadcast talk show where the M. C. picks the topic, in an amateur round-table each ham is as free as the next to pick the subject or change it. There is no reason (Turn to page 23, please)

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IC-20



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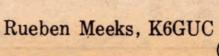
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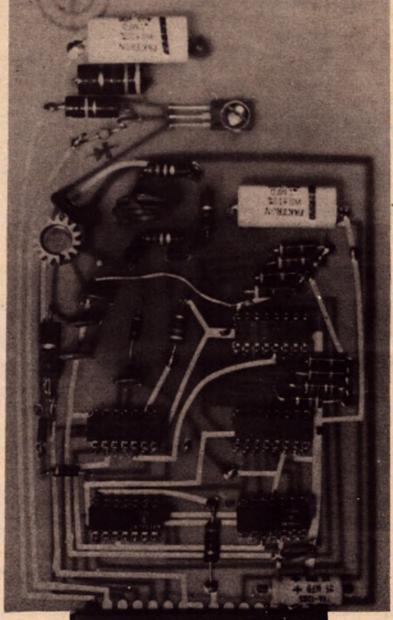


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## RACES

April 20, 1973

ACTION IN DOCKET CASE

POSSIBLE EXPANSION OF RADIO AMATEUR CIVIL EMERGENCY SERVICE (RACES) WILL BE STUDIED IN FCC INQUIRY; NEW YORK CIVIL DEFENSE COMMISSION REQUEST FOR ADDITIONAL RACES OPERATION DENIED.

An inquiry into the feasibility of expanded operation of the Radio Amateur Civil Emergency Service (RACES), which provides for amateur radio operation during civil emergencies, has been ordered by the Commission.

A request by the New York State Civil Defense Commission (NYCD), to expand emission privileges for amateur stations in the RACES program was denied.

RACES is a radiocommunication service conducted by licensed amateur radio stations for civil defense purposes only. The amateurs operate on specifically designated segments of the regularly allocated amateur frequency bands, under the direction of authorized local, regional or Federal civil defense officials, according to an approved civil defense communications plan. Amateur licensees and certain grades of commercial radio operator licensees are eligible to operate RACES stations, providing they are enrolled as radio operators in the civil defense organization.

RACES stations share the allocated frequencies with other amateur stations. Since the privileges of amateur radio operator classes (Section 97. 7) do not generally apply to the operation of RACES stations, and non-amateurs may operate RACES stations, the Commission stated, safeguards are necessary to insure that non-essential RACES radiocommunication is not conducted at the expense of regular amateur radiocommunications.

The Commission explained that it was ordering the inquiry because it had received no positive response to a rulemaking proposal, adopted March 22, 1967 (Docket 17315), in response to a NYCD petition, and it lacked "any other substantive information" on the need to expand RACES.

Four additional petitions for expansion of RACES were filed later with the FCC.

The Commission invited comments on specific questions as to whether RACES is an effective means of providing needed communications during local, regional or national emergencies; if the present licensing system for RACES stations is appropriate; if RACES stations should be assigned distinctive call signs that could be used only for RACES activities. It also asked for dis-

cussion on rule abuses by RACES stations to determine whether they are "commonplace", and what possible solutions exist to end them; if additional frequencies, emissions, or operators should be authorized for RACES stations; the most needed additional privileges; the consequences to both RACES and the Amateur Radio Service generally, if RACES privileges are expanded; the consequences if the privileges are not expanded; and additional safeguards, if any, which might be required to insure that nonessential RACES radiocommunication is not conducted to the detriment of non-RACES amateur radiocommunication.

Comments are requested on or before July 1, 1973.

The New York State Civil Defense Commission petition, denied by the FCC, asked for expansion of RACES to permit the use of facsimile, F4 emission, in the 1800-2000 kHz and 3500-4000 kHz amateur frequency bands. The plan called for a RACES radio link to serve as a back-up capability to the primary wireline link in a system for facilitating the collection, interpolation and dissemination of radiological fallout data from monitoring stations throughout the state.

The Commission noted that no one filed comments supporting the New York request. The American Radio Relay League (ARRL) and the New York State Phone Traffic and Emergency Net opposed it. The New York Telephone Company disputed the New York State Civil Defense Commission's contention that New York State's "post-attack wireline survival capability is an unknown", and a radio back-up link was necessary.

The FCC said it had denied the New York State Civil Defense Commission position to further expansion of RACES, among other reasons.

The four petitions for expansion of RACES still before the Commission include a request by San Diego County, Calif:, to operate RACES stations by radio remote control through a control link using non-amateur frequencies; a request by the California Disaster Office for extensive rule changes, including expansion and revision of frequency allocation for RACES; a request by the Area "D" Civil Defense and Disaster Board, Pomona, Calif., for au-thorization of 40 F2 emission for radioteleprinter operation in the frequency bands 145, 17-145, 71 MHz, 146, 79-147, 33 MHz and 220-225 MHz; and a request by a licensee to permit Technician Class licensees to operate in the 50. 35-53. 75 MHz, 145. 17-145. 71 MHz and 220-225 MHz frequency bands in RACES, and to authorize the frequencies 146-147 MHz for RACES with emissions of 0. lAl, 1.1Fl, 6A2, 6A4 and 40F3.

Action by the Commission April 18, 1973, by Notice of Inquiry and Report and Order. Commissioners Burch (Chairman), Johnson, Reid, Wiley and Hooks.

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

In the Matter of

Amendment of Part 97 Subpart F, regulations for the Radio Amateur Civil Emergency Service (RACES).

REPORT AND ORDER Adopted: April 18, 1973 Released: April 20, 1973

By the Commission: Commissioners Robert E. Lee and H. Rex Lee absent.

- 1. On March 22, 1967, the Commission adopted a Notice of Proposed Rule Making in Docket 17315. The Notice proposed amendments to Subpart F, Radio Amateur Civil Emergency Service (RACES), of the Rules and Regulations for the Amateur Radio Service, Part 97. RM-964 was filed by the New York Civil De-fense Commission, and requests that Sections 97. 193(a)(1) and 97. 195(a) be amended to provide for the use of facsimile, F4 emission, in the 1800-2000 kHz and 3500-4000 kHz amateur frequency bands. Although the time for filing comments was subsequently extended from April 28, 1967 to May 26, 1967 by Order adopted on April 27, 1967, only three comments were timely filed. Two comments oppose the proposal and the other one takes exception to the petitioner's basis for the petition. No comments were filed in support of the proposal.
- 2. The Notice was in response to RM-964, in which the petitioner stated a desire for a RACES radio link as a back-up capability to the primary wireline link in a system used to facilitate the collection, interpolation and dissemination of radiological fallout data gathered at approximately 3,000 monitoring stations throughout New York State. The data is transmitted by facsimile over the wireline circuits. Petitioner justified the need for the radio back-up link with the following statement:
  - "Since this portion of our civil defense communications system is essential to the survival of the State's eighteen (18) million populace, and since the postattack wireline survival capability is an unknown, unpredictable link in this vital system, it is evident that a radio back-up link is necessary to ensure full post-attack radiological defense communications reliability."
- 3. Due to the radio coverage desired, petitioner requested amendments which would authorize facsimile emissions in the 1800-2000 kHz and 3500-4000 kHz amateur radio bands. Accordingly, our Notice proposed to amend Sections 97. 193(a)(1) and 97. 195(a) to provide for the use of 3A4 emission in the 1800-1825 kHz, 1975-2000 kHz, and 3990-4000 kHz frequency bands and incorporate other related amendments. These frequencies are available on a non-exclusive basis for RACES stations which are operated under

the direct supervision of civil defense officials.

- 4. Comments filed by the New York Telephone Company state no objection to the proposed rule making, but they request that the record be set straight with respect to paragraph 4 of the Notice which stated:
  - "Since the post attack wireline survival capability in New York State is an unknown, petitioner asserts it is evident that a radio back-up link is necessary to insure full post attack radiological defense communication reliability."

The New York Telephone Company believes this statement misleading and contrary to fact. They feel that the "...useful redundancy in the Common Carrier network in New York State gives this network a high degree of survivability."

- 5. Comments filed on behalf of the New York State Phone Traffic and Emergency Net stated opposition to the proposal to authorize A4 and F4 emissions in the 160 meter and 75 meter bands. Respondent claims such operation would cause non-essential interference to the New York State group and other amateur traffic handling networks.
- 6. Comments filed by the American Radio Relay League (ARRL) stated they are unable to support the proposed amendments. ARRL requests adequate safeguards be applied so that RACES will not become a routine non-amateur communications activity. They express concern, "...over trends in RACES administration and operations which stray beyond the bounds of both the intent and the rules. These trends concern the use of non-amateur operators in some areas almost to the exclusion of licensed amateurs, often without the necessary authorization of the appropriate civil defense official, and use of RACES facilities for communications not authorized or contemplated by the rules.
- 7. The radio frequency bands proposed for facsimile emissions by RACES stations are also used extensively by non-RACES amateur radio stations. The 3990-4000 kHz segment is heavily used for radiotelephony. This is in the portion of the 75 meter band which was expanded on November 22, 1972, to help alleviate the severe overcrowded conditions. The other two segments are in the 160 meter band, which is shared on a secondary basis with the LORAN-A radionavigation system. The state in which an amateur radio station is located determines the availability of these frequencies and the power limitations. As a consequence, the full potential of the 160 meter band to the Amateur Radio Service cannot be realized. Only a few stations can operate simultaneously in this frequency band.
- 8. Therefore in view of 1) the (Turn to page 23, please)

(Continued from page 22)
lack of support for the proposal,
2) the expressed opposition to the proposal, 3) the statement of the New York Telephone Company regarding the survivability capabilities of the wireline system, and
4) the existing overcrowding and shortage of operating frequencies in the 160 meter and 75 meter bands, we are unable to find that adoption of the proposed amendments would be in the public interest convenience or necessity.

- 9. Accordingly, IT IS ORDERED, that the petition for rule making, RM-964, filed by the New York Civil Defense Commission, IS DENIED.
- 10. IT IS FURTHER ORDERED, that this proceeding IS TERMINATED.

By: Ben F. Waple, Secretary FCC

In the Matter of

Inquiry into the provisions of Subpart F, Radio Amateur Civil Emergency Service (RACES), in Part 97.

NOTICE OF INQUIRY Adopted: April 18, 1973 Released: April 20, 1973

By the Commission: Commissioners Robert E. Lee and H. Rex Lee absent.

- l. In our Report and Order adopted today on Docket 17315, we denied a petition to expand the emission privileges for stations operating in the RACES program because of the expressed opposition to further expansion of privileges for RACES stations, among other reasons. Four other petitions for rule making have been filed requesting additional amendments to the provisions in Part 97, Subpart F, Radio Amateur Civil Emergency Service (RACES).
- 2. RM-968 was filed by the County of San Diego, and requests amendments permitting RACES stations to be operated by radio remote control through a control link utilizing non-amateur frequencies. Petitioner desires to use the microwave facilities of the Government Emergency Operators Centers for this purpose.
- 3. RM-1116 was filed by the California Disaster Office. The petition requests extensive rule changes to Subpart F, including expansion and revision of frequency allocation for RACES.
- 4. RM-1478 was filed by the Area "D" Civil Defense and Disaster Board, Pomona, California, and requests Section 97. 193(a)(3) be amended to authorize 40 F2 emission for radioteleprinter operation in the frequency bands 145. 17-145. 71 MHz, 146. 79-147. 33 MHz, and 220-225 MHz.
- 5. RM-2032 was filed by Murray Green, and requests amendments to rules to permit Technician Class licensees to operate in the 50.35-53.75 MHz, 145.17-145.71 MHz, and 220-225 MHz frequency bands in RACES. Petitioner also requests

the frequencies 146-147 MHz be authorized for RACES with emissions 0.1Al, 1.1Fl, 6A2, 6F2, 6A4, and 40F3.

- 6. As stated in Subpart F, RACES provides for amateur radio operation for civil defense purposes only, during periods of local, regional, or national civil emergencies. It is a radiocommunication service carried on by licensed amateur radio stations while operating on specifically designated segments of the regularly allocated amateur frequency bands, under the direction of authorized local, regional or federal civil defense officials pursuant to an approved civil defense communications plan. Persons holding amateur radio operator licenses, and persons holding certain grades of commercial radio operator licenses are eligible to operate RACES stations provided they are enrolled in the Civil Defense organization as a radio operator.
- 7. Stations operating in RACES share the allocated frequencies with other amateur radio stations conducting non-RACES amateur radiocommunication. Inasmuch as the privileges of amateur radio operator classes (Section 97. 7), do not apply to the operation of RACES stations, except for some limitations for holders of the Novice Class and Technician Class, and since non-amateur operators may operate RACES stations, appropriate safeguards are necessary to insure that non-essential RACES radiocommunication is not conducted at the expense of regular amateur radiocommunications.
- 8. RM-968 is concerned with the control of RACES stations by radio remote control in one particular Emergency Operations Center, San Diego, California. Due to radio interference restrictions at that particular site, the frequencies 220-225 MHz available to RACES stations for remote control cannot be used. Petitioner proposed amendments to the Rules to permit Local Government (Operational Fixed) microwave equipment to be used for the control link.
- 9. RM-1478 states that the authorization of 40 F2 emission in the frequency bands 145. 17-145. 71 MHz, 146. 79-147. 33 MHz, and 220-225 MHz for audio frequency-shift keying in radioteleprinting will "... materially benefit the RACES service by allowing the use of the superior characteristics of this mode, e.g., sensitivity, noise, interference and power ratios."
- 10. Petitions RM-1116 and RM-2032 request expanded and revised frequency allocations for RACES stations. RM-1116 does not offer any rationale for the extensive frequency and emission authorizations requested. Additionally, petitioner proposes rules changes relating to the organizational and operational phases of the RACES program. RM-2032 claims the potential value of Technician Class licensees to support the RACES program is lost by the prohibition against such licensees obtaining RACES station authorization for operation as members of RACES. Petitioner states that:

- "... a large portion, if not the majority of today's FM repeater users, hold Technician Class licenses", and "... the utilization of FM VHF repeaters, together with mobile and portable communications equipment and dedicated Amateur Radio operators, provides an enormous reserve of emergency communications in support of local civil defense operations."
- 11. These petitions, like the petition denied in Docket 17315, would expand the privileges for stations and operators in the RACES program. Since the same frequencies and emissions are common both to RACES activities and to other amateur radio activities, the allocation of additional privileges to RACES could have an impact upon non-RACES activities. In light of the lack of any positive response to the proposed amendments in Docket 17315, and because of the lack of any other substantive information on the general need in the RACES program for the proposed amendments, this Notice of Inquiry is intended to elicit comments and suggestions from informed persons and organizations familiar with RACES and the Amateur Radio Service.
- 12. In order to assist the Commission in making determinations in these areas, informed parties are requested to submit comments and suggestions relevant to the following:
  - I. Is RACES an effective means of providing needed communication services during periods of local, regional, or national emergencies?
- II Is the present licensing system for RACES stations appropriate? Should stations authorized to be operated in RACES be assigned distinctive call signs which could only be used for RACES activities?
- III What abuses, if any, of the Rules by RACES stations are commonplace? What are possible solutions to ending these abuses?
- IV Should additional or different privileges, e.g., frequencies, emissions, operators, be authorized for RACES stations? What are the most needed additional privileges? What are the consequences, to both RACES and the Amateur Radio Service in general, if RACES privileges are expanded? What are the consequences if RACES privileges are not expanded?
- V What additional safeguards, if any, are required to insure that non-essential RACES radiocommunication is not conducted to the detriment of non-RACES amateur radiocommunication?
- 13. This action is taken pursuant to Sections 4(i), 303, and 403 of the Communications Act of 1934, as amended. Comments must be filed on or before July 1,

1973. All relevant and timely comments will be considered.

14. In accordance with provisions of Section 1. 419 of the Rules, an original and fourteen (14) copies of all comments, suggestions, pleadings, briefs, or other documents shall be furnished the Commission. Responses will be available for public inspection during regular business hours in the Commission's Broadcast and Docket Reference Room at its headquarters in Washington, D.C.

Amateur Radio:

## Toy or Tool?

(Continued from page 19)
why national "town meetings"
couldn't be held on-the-air on
particular topics. The group would
not have to be limited to hams
only. A group of tens or even
hundreds of people might participate, carrying on a discussion of
issues around the country; or
around the world, where third
party regulations permit.

And let's not forget that ham radio, by its very nature, is a First Amendment insurance policy. I cannot imagine a regime repressive enough to completely silence amateur radio. The Nazis tried to silence the Dutch and Norwegian hams in World War II, and failed. Today there must be a million ham rigs spread around the earth. Too many for communication between geographically separated people ever to be completely cut off, no matter what political or other disaster should strike.

Where do we go from here? Really communicating is not going to appeal to a lot of hams. Some hams are happy with the status quo. They don't want to probe into themselves or into anything upsetting or unpleasant. Some hams are scared.

There are psychologists who feel that many hams hide behind their black boxes and are afraid of real communication. This won't be for them. Some hams are hung up on hardware. They are into electronic communication techniques, not communicating. They're into the process of communication, not the content.

Fortunately, there is room enough in ham radio for a great diversity of interests. If all this talk about communicating turns you off, fine --- continue to do your thing, whatever it is. I think and hope though, that we will find a growing group that are not going to remain satisfied to use their \$2000 worth of equipment only to exchange signal and weather reports.

Those of us who are concerned with meaningful communication -- let's get in touch, and keep in touch.

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March 13, 1973

Mr. Wilbur E. Bachman, W6BIP 880 Dartmouth Street San Francisco, California 94134

Dear Mr. Bachman:

Now that the work of the Mayor's Committee on Nicaraguan Relief has been completed, I want to thank you, on behalf of all citizens of San Francisco, for your outstanding contribution to this worthy cause. Because of your dedicated help, our citywide efforts in behalf of the victims of the devastating earthquake at Managua were eminently successful. The many problems connected with organizing an emergency effort on such a broad scale were patiently and efficiently dealt with by the Committee in such a manner as to make possible the speedy receipt by the victims of the quake of supplies and monies collected. For this the victims in Nicaragua and concerned San Franciscans owe you and your fellow members a debt of gratitude.

With my thanks again for your public spirited service, together with my kindest regards and all best wishes.

Sincerely,

/s/ Joseph L. Alioto Mayor



a monthly column

Our congratulations to Jack Petree, WB4OVX, who is Mr. #l. He has received that coveted award for being the first to complete WAS-SSTV. Jack worked for thirteen months and ten days. He also has worked/confirmed 54 countries. Guess he wants DXCC-SSTV #l. A glance at his sharp QSL shows a first class station, well thought out and meticulously executed.

Another QSL you should try to exchange with is Frank Killinger, W7CRH, Klamath Falls, Oregon. I worked him on 75 meters, and received a custom QSL in the miniature size of his SSTV monitor. This unique QSL took time to make and shows it. He obviously

## WN2KPU meets challenge

by Ray Meyers, W6MLZ

Issued too late to be included in the current 51st Anniversary copy of the 1973 Radio Amateur Callbook magazine is the call WN2KPU owned and operated by a long-time patient in the Shriner Hospital, Springfield, New York. Owner of this station is Timmy Bulson.

A number of members of the Shriner's amateur net worked with Timmy shortly after he got on the air, thanks to Nobles of Ziyara Shrine Temple of Utica, N. Y. These Shriners visited the boy along with Joe Michaud, K2UBE, one of Timmy's most ardent admirers, and one who helped him prepare for this examination for his amateur license, issued by the Federal Communications Commission.

Station WN2KPU is now on the air, thanks to members of Ziyara Temple who were amazed at the young man's ability to manipulate a telegraph key, which he does with what he jokingly calls his "left foot".

Timmy was born in Ilion, N.Y., 14 years ago without arms and only parts of his legs. A greater part of his life has been spent in the Philadelphia and Springfield Shriners' hospitals, where he has been outfitted with an electric cart which he controls by means of chinpressure applied to a panel attached to his vehicle. This makes him quite independent of outside aid in many of his efforts.

Those who know the youngster call him a real "ball of fire". His school grades, equal to the highest in his class, confirms this title. The boy must lie on the floor to perform his school work, all with only the use of his left foot. He will never walk.

Being a novice, Timmy is not able to operate his station on the medium high frequency bands open to those holding conditional, general, advanced or extra grade licenses.

enjoys his hobby, and makes his "QSL, a final courtesy of a QSO".

At the recent DX Convention in Fresno, a few of us were discussing how to point your beam in a strong wind. We had first hand technical help; Clyde Blylevin, sales manager of Tri-Ex Towers, gave us the benefit of his years of experience. In spite of the fact that this learned person gave us his information, there were two or three listeners in the group who disputed this information. They had no basis for their theory, but selected the opposite school of thought. For a long time, this bothered me. Why should an educated man doubt a premise that was based on fact and theory? To be negative for the sake of truth is one thing, but to be negative just to be negative quickly puts us back into the stone age and closes our minds to progressive thinking. By theory, it is recommended to point the yagi into the wind, rather than have the boom take the brunt of the wind force.

A disturbing report from Washington tells us that the Pentagon has issued an order barring the further purchase of radios or telephones NOT capable of "scrambling" voice communications. Is this a further step in putting our government out of touch with its people? The report goes on to say that it is "our worst security problem". In the Vietnam war insecure voice communications were an everyday problem.

If you think about it for a moment, our government's inability to properly police our frequencies is a scary situation. In a recent talk with an FCC Chief Engineer, I was told that the FCC monitor stations have yet to install slow scan monitors. The privilege of running traffic from Navy ships at sea was

Joe Michaud, K2UBE, a member of the Knights of Columbus, up-state New York, the man who stirred up so much interest in the Ziyara Shrine Temple, called Timmy on the phone December 28, shortly after he received his license. By use of the "phone patch", he then let Timmy chat with members of the Nobility Net which operates daily using single sideband voice techniques.

Joe Harrant, W9FLA, who serves as net control, made a complete recording of Timmy's chat with net members and then played it back to the youngster so that he could hear how he sounded on the air.

It may be that my readers, especially those of the amateur fraternity will wish to drop Timmy Bulson, WN2KPH, a QSL card, or a note of congratulations for his tenacity in joining the ranks of our group. Mail addressed to 37 Massachusetts Avenue, Ihon, NY 13357, should reach the youngster.

Should any of my amateur readers hear him operating on the 40 meter band, and happen to make a contact with him, there is no need to ask the question "QLF" which many of our fraternity consider a non-international signal meaning, "Are you sending with your left foot?" Obviously the answer would have to be affirmative.

Timmy Bulson, like many handicapped people, has learned a new way to communicate with others. With his ability to learn new things you may be sure he will soon be out of the novice class and one of the gang able to use the medium high frequency bands. Of course, voice operation, with a voice controlled relay, will make things a lot easier for WN2KPU.

(From the "Spark-Gap Times" and the "Los Angeles Herald-Examiner")

stopped because the enemy was learning troop movements. Accidentally telling your wife when you would leave or arrive would upset the Naval Department. I guess they are aware of how much of a mess their own communications are in. Now that things are much quieter, wouldn't it be great to run an SSTV patch to a lonely wife at home. She could actually "see" her husband, and a lonely serviceman could "see" his family.

I extracted the following from the "West Coast DX Bulletin", edited by the Marin County DX group. A questionnaire was handed out at the Fresno DX Convention for all the big "DX guns" to ponder. One of the questions asked was, "Should our present bands be segmented for SSTV?" Forty-three said "yes" and seventy said "no". As far as I'm concerned, they are already segmented. Is it good for SSTV or not? Should all classes have the SSTV privilege? How do you feel about it? Drop me a card and let me know how you feel in this regard. I will include the replies in next month's column.

Thought of the day: Will Raymond Burr's now private island qualify for new country status? Mr. Ironside, it seems, will soon "wheel" away to his lonely Simoan retreat. Since he will be the sole owner, why can't we persuade him to apply for a new country status and then provide a DXpedition, with SSTV, of course.

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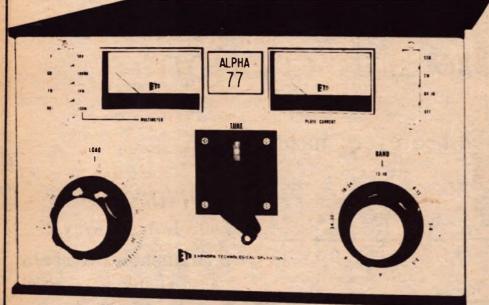
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So we may better serve you, the space below is for your comments and suggestions. Tell us of your interests and what news and features you would like to see. It would be helpful to know how long you have been a ham and what amateur organizations you are a member of. Tell us of your activities and if you have any news or information, you are invited to share it. Tell us how we may help you enjoy Amateur Radio.

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manager or is active in club affairs. He could be the editor of your club bulletin or the guy who is always there for Field Day or the SET. He's the man (or she's the woman) who handles traffic from the hospital ships or for the GI's overseas.

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## The Nobility Net

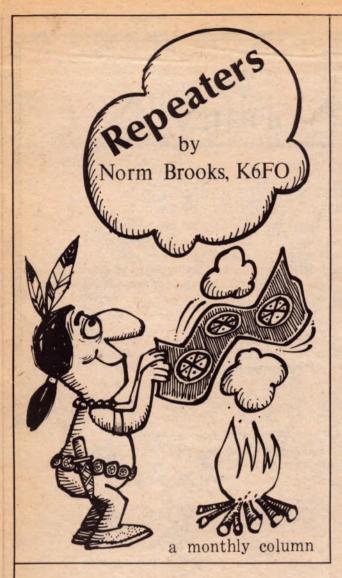
The Nobility Net of North America is a non-profit gathering of Shriners and members of the Masonic Order who have dedicated their services in behalf of the world's most rewarding philanthropy...the costfree care and rehabilitation of crippled and seriously burned children in our 22 Shriner's Hospitals, throughout Canada, Hawaii, Mexico and the U.S.A.

Among our many aims - to make available to parents of crippled children, who are unable to afford the high cost of medical aid, knowledge of how to secure these surgical services free of charge; aid in providing transportation for patients; setting up of blood banks and creating good relationships between Shrinedom and the public who are not aware of this great philanthropy.

There is no initiation fee nor are there any dues. All that a Noble or Mason need do is check into the Nobility Net which meets each Saturday at 1700 GMT, on 14. 310.

(adv.) (de International Coordinator, W3FQT)





Nothing has quite shaken up the VHF and UHF radio fraternity in the last decade as Docket 18803. This is the famous "Repeater Docket". In the past, the operation of a repeater was little different from that of any other ham radio station; but effective October 17, 1972, repeater operation became a lot different.

We won't go into all the changes that took place, as they have been already adequately covered. Some of them were just good amateur practice that we should have been following all along. Generally speaking, however, repeater operation became a lot more restrictive, and the licensing of a repeater appeared to become a nightmare!

By June 30, 1973, applications must be made to relicense all present repeaters. But the licensing procedure is actually more involved than licensing a commercial repeater. The big problem is that the Report and Order for Docket 18803 is complicated, needing a lot of interpretation, and there are very few people around to offer any clear interpretations. Even the FCC staff has been unclear in interpretations. For example, answers are now being given that are different from those given by A. Prose Walker, W4BW, Chief of the Amateur Division of the FCC when he attended the Greater Bay Area Hamfest last October. I'm only telling you all this se you can understand why repeater groups are frustrated to the point of anger.

Enter the knight on a white charger, with the ARRL logo on his shield! His name is Sir Lewis G. McCoy, WIICP, whose current assignment with ARRL is to act as liaison between the FCC Amateur Division and the various repeater committees and clubs. At other times Lew is the Novice Editor of QST, and Associate Editor of the Radio Amateur's Handbook. Lew got off to a fast start and took it upon himself to become the most knowledgeable ham in the US on repeater licensing. I think he succeeded.

In March 1973, after many visits to the FCC office in Washington DC, Lew put together an 8 page document to help with repeater licensing.

This was mailed to all hams whose call signs appeared in the ARRL Repeater Directory. This document itself was a big step forward, but he didn't stop there. He then took the show on the road, visiting various repeater clubs, answering questions and personally reviewing license applications before they were sent to the FCC.

On April 3, 1973, under the sponsorship of the California Amateur Relay Council, Lew met with some 45 interested hams at the Sacramento Metropolitan Airport. Repeater operators from all over Northern California were there. His formal presentation, plus questions and answers lasted two and a half hours, many of the participants taking it all down on tape. Most of the discussion was technical in nature, and I won't attempt to repeat it here. But I did come away with a lot of impressions, and I'd like to share them with you.

- l. The ARRL is to be commended for this affirmative action in repeater licensing, and Lew McCoy is to be thanked for taking on the difficult travel schedule. Only the night before he had met with the group in Phoenix, Arizona; here he was tonight, and later in the week he appeared at a hamfest in Fresno. Further, the CARC, which is a council of repeater clubs and remote base station operators, is to be complimented for scheduling the meeting, getting out the word, and picking up the tab for renting the meeting room.
- 2. FCC has said that relicensing applications must be received by April 30 if FCC action before the June 30 deadline is expected. This means that if you didn't file for your repeater in April, you will be off the air in July.
- 3. The Amateur Division of FCC has but a small staff. They are literally swamped with the great flood of paper called for in the repeater applications. Although a few repeater calls have been issued to date, it will be many months before they all are issued. Some hams have purposely sent in "easy" uncomplicated repeater applications to be the first to get a repeater license in their call area, but they are still waiting.
- 4. Repeater owners are upset about having to get FCC approval to make changes in their repeater stations, if it is something listed in the license application. They argue that this rule will do nothing but stifle amateur ingenuity and discourage experimentation.
- 5. Most, if not all, of the applicants for repeater licenses are over-filing. Lew told of one repeater group whose application was several inches thick. "It even included letters of commendation for public service rendered by the repeater club members." The FCC staff for licensing is not technical. They don't want detail beyond that specifically called for in the new regulations.
- 6. Most applications so far have something missing and they are sent back with a checksheet. Lew said he is working with the Commission to make the checksheet more meaningful.
- 7. Photo copies are OK, even of the maps. One wag said "the only thing the FCC will not accept a Xerox copy of is the check!"



Left, Lew McCoy, W1ICP; Right, Ross Stevens, W6FRE, Chairman of California Amateur Relay Council.









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## EDITORIAL

Armond Noble, WB6AUH

Editor, Worldradio

Licensed amateur radio operators from throughout the United States seem to be unanimous in their opinion regarding certain recent Federal Communication Commission rulings.

This was in graphic evidence a few weeks ago when your editor attended the DX convention in Fresno, California. Seated around one table were hams from the East Coast, the Midwest, the South and the West. To a man they were in deep opposition to recent rulings regarding repeaters. Specifically they objected to the provision that the repeater be turned off if there is no one "in control".

One amateur told that his group had asked the FCC if the repeater could be left on from midnight to eight a.m. if all transmissions were tape-recorded. The reply from Washington was "no".

The group wanted the repeater in operation during the late hours because those are the hours when roads are less travelled. In case of an emergency the fastest action would come from the use of radio.

It appears the FCC ruling is the result of repeaters being jammed or interfered with, and the FCC wants the "in control" amateur to turn the equipment off if such occurs.

The mature amateurs gathered around the table at the convention were more concerned that the repeater be available in case of an emergency. One voiced the opinion "If that repeater saves one human life in a hundred years because it was on when needed, we can tolerate the jamming". Everyone agreed.

Ironically, during that very conversation, a ham who lives in Fresno, recognizing people he knew at the table, walked over and proceeded to tell about a Fresno ham's life that had been saved the day before, via the local repeater. (See front page story this issue).

Those at the table said, "We were just talking about the possibility of such an occurrence".

The rescued amateur, Berge Bulbulian, WB6OSH, strongly holds the opinion that the repeaters should be left on. The well-known Berge Bulbulian has a long history of being interested in amateur radio as a way of helping other people. Fortunately for him, he had his radio along. The reason he had it was to be able to assist another human being, if need be.

What if the repeater had been off?

The doctors say his life was saved due to the fast work of the radio operators in getting an ambulance to the scene. He was rushed to the hospital and the internal bleeding was stopped.

What if the repeater had been off?

At the present time there is, unfortunately, a great deal of anti-FCC feeling among the amateurs. And this feeling is not coming from some wild, radical, anti-establishment fringe. Quite the contrary. It is coming from the establishment itself. It is coming from leading

amateurs. The voices of anger are coming from those in leadership positions. They are either elected leaders, or those who have made such contributions that they are looked up to for leadership.

In the amateur ranks are some of the most brilliant people. They are rational human beings, men of reason. Sitting in during a conversation of these people, as they discuss the repeater rulings, you will hear references to "Jeffersonian Democracy", "The Federalist Papers", and other foundations and thoughts of the rights of man.

These people feel that the amateur's right of self-determination has been summarily abolished, annulled by an authoritative act.

Recently the ARRL Board of Directors released a strongly worded resolution. In it they mentioned "apparent trend toward restrictive regulations". The Board also called for League officers to confer with appropriate government agencies for the purpose of "assuring the continued availability of traditional latitudes and freedoms and the full public service capabilities essential for the welfare of the amateur radio service".

(If the repeaters are off the full public service capability is diminished).

Some amateurs misconstrued the Board's statement to be "anti-FCC". Another way to look at it is, their statement was "pro-amateur radio".

The Board is not "anti-FCC". All they want is the same forms applied to amateur radio as is the basis for life in this republic. That is, free and open debate and the chance for arbitration, not fiat.

Some of the ARRL Directors heard adversely from their constituents. Such is certainly the prerogative of the members, one can only fault the basis for their criticism. Some said that amateurs "should not make waves". Such an attitude is indeed tragic. The only progress man has ever made has been caused by people who "made waves".

Certainly puzzling was the attitude of one retired military officer. He felt we should not 'fight city hall'. A regrettable attitude. He had, theoretically at least, spent his career defending the very right to "fight city hall".

Some amateurs are fearful that the FCC might 'take the offensive and produce a host of regulative actions'. This would be a "counter-emf" to the amateurs "making waves". If they attempted to do so, out of spite, they would be guilty of the grossest dereliction of duty. The role of government officials is to do what the public wants, no more and no less.

Possibly amateurs should pull their noses out of their engineering books long enough to dwell on history. Those who wrote the Magna Carta and the Bill of Rights "made waves". Their actions were to REDUCE the amount of intervention in the public's affairs by government.

With the recent developments in Washington, government and those who choose to be a part of it are finding themselves the objects of mistrust and their motives are being doubted.

One ARRL Director, in defending the action of the ARRL Board said "We of the League have only excercised our right in a democracy to express and/or petition our representatives and agencies of our government so that they can govern us in the way we wish to be governed. This is democracy in action". Amazingly, there are those who disagree with such and believe that everything "should have gone through channels".

If you want anything to bog down and dissipate itself into nothing the sure way is to "send it through channels". The only way to get anything meaningful done is through swift, forceful action, not through being mealy-mouthed or pussyfooting around.

Strangely, there are some amateurs who think that Amateur Radio should be ruled by a few. They are referred to by what we believe is the more reasonable camp as "not trusting the troops". These throwbacks to oligarchy should be reminded that the days of lord and vassal are over.

Amateur Radio will flourish, and serve, if it is governed and guided by the aggregate wisdom in which it abounds.

It is the American system that government governs only with the consent of the governed. In a democratic country the people, under the idea of self-government, make the laws through their elected representatives.

Those in government positions are not rulers, but merely representatives -- our representatives. They are there to do the bidding of the people.

But the actual issue is, why does the Federal Communications Commission wish to pass regulations that the amateur community does not want?

If anything, the amateur radio community had better be heard loud and clear in Washington that they believe in the concept that the government governs only with the consent of the governed. Public servants are just that, public servants. They are there to attend to the housekeeping of government and must reflect the wishes of the people.

We believe that government officials should be respected, but they must earn their respect. And the way to earn it is to do a good job of doing exactly what the people want and doing it as efficiently and inexpensively as possible.

It was Abraham Lincoln who said "best government is the least government".

(Next month, in this space, we shall discuss another serious problem facing Amateur Radio. In the spirit of fairness, equal space will be afforded to views in opposition to our editorials.)



Ken, C29ED, operating from the Republic of Nauru, will return home shortly (VK3TL) and after a holiday will be stationed in the People's Republic of China. He has hopes of getting a license. If such should occur he had best purchase a wheelbarrow to pick up QSL cards at the post office.

The popular Gene Nurka, VK9GN, will be returning to the US soon. Other missionaries in his group will keep the VK9 prefix on the air for those wishing a QSO with "the land that time forgot".

More activity from Yemen, 4Wl, with SVØWUU being assigned there. Don't rant and rave at the Malta hams for lack of QSLing. Seems their incoming QSL bureau was emulating the US Post Office and sacks of them were just sitting around. When in Rome, visit and operate HV3SJ.

Pakistan stations are a bit more active; activity reported on 15 and 20 SSB. CW 40-80 buffs will find an extended ear coming from UF6FE in Georgia...2300Z Friday at 7075 to 7080 kHz and 3640 kHz on Saturday at 2400Z...he is interested in working the US. Israel contacts are possible at 21.346 kHz at 1300Z and 14.303 kHz at 2200Z...don't let a 4X25 prefix puzzle you; it is authorized in celebration of the country's 25th anniversary.

Larry, VP5LD, active from Grand Turks, is set up for 10, 15 and 20. Dr. Sanfor Hutson,

K5QHS, is going to Africa this summer over a period of a couple of months and hopes to operate from TT8-TY-XT-TZ-TN8-CR3-CR5-TL8-5T5 and more. In addition to high bands the doc plans 40 and 80 meter activity.

Jackie, 3B6CF, on Agalea, checks into SEANET at 14320 kHz at 1200 Z. Scarce Libya now sports G5UJA/5A. Ten meter hounds may check the band around 1300 Z for Larry Minnis, WB6VGI/VQ9 on Chagoa. On the other end of the bandswitch, 3610 kHz around 2230 Z may turn up an OY station on the Faroe Islands.

Those needing SUI may peek at 1500Z around 14, 225-14, 235 kHz. SUIMA chats around then with pal F6BNQ. Don't snort and wheeze when hearing odd duck calls, that HAIØØKJX heard on 20 CW was a commemorative station marking the one-hundredth anniversary of an event close to the hearts of those in Budapest.

Well, what else would you expect? Karl Gamper, VE8RA, who operates the weather station at Yellowknife up there in the frozen Yukon, went on vacation---where did he pick? ---the Caribbean! While there he gave out contacts with the island prefixes.

Well-known Andre, 5Z4KL, is leaving Kenya in June after a nine-year stay. His youngsters are ready for high school and he is heading back to his native Scotland. During his six years on the air there he achieved 313 countries.

Rasheed, YKIAA, in Syria, now retired, is DXing. Set your clock for 1430 Z and look around 14200 kHz.

Some of the above items from the excellent West Coast DX Bulletin edited by Hugh Cassidy, WA6AUD. Courageous Hugh, tweaked the noses of some DXers when he printed the following in his 24 April issue - "The HP-Panama Emergency Net was activated on April 7th with the earthquake in Costa Rica. Their initial activation ran into some static, some amateurs saying that no emergency existed as they had checked their local newspapers and there was nothing on a Costa Rica earthquake". (Our comment) It seems the ham is going backwards. At one time he was on the forefront of dispensing information, now he won't believe it when it falls into his

lap. Considering that the time lag between an event occuring and it appearing in the local press can make a Box 88 QSL return look swift. It appears the hams are forgetting what an instantaneous information source these black boxes are. Whatever our Latin friends thought about their Gringo neighbors to the north after some fathead told them that there was no earthquake down there, is certainly justified. Hi Ho, the Ugly American rides again.

Some not-so-ugly (actually rather good-looking) Americans are going on a DXpedition. Gene Seymour, W6GQU, and Mike Kerr, K6GUY, will have their stethoscopes as well as 'phones in their ears. Along with Peter Bissonnette, KH6HIF; David Earnest, KS6DY; and 5WIAU, they will be on Tongareve starting on 30 June and working for one week. W6GQU will take portable X-ray equipment as well as supplies to administer skin tests. They will be making medical studies on tuberculosis.

Last year they operated on Fanning Island, VR3AA, and treated the people in a series of clinics. They will have a ZK call and it will count as Manihiki. There is hope that it will count as a "new one". On some maps it is shown as Penrhyn Atoll. The rigs will be Yaesu FT-10ls split-freq, delta loops, yagis.

Some of the "after-hours" discussion at the Fresno DX Convention centered around the hams who run "over-power". Not the ones who run a couple of hundred watts over, but those who run a couple of thousand (or more) over the legal limit. These are the guys who want to bring eleven players to the baseball game when the other team only has nine. They are the "bad sports" of amateur radio. There is no less term for them than "cheaters" for they are depriving, actually stealing, the contacts from their fellow hams who prefer to do things in an honest manner. What is the solution? There's only one solution for the "bad actors". Don't talk to them on the air. Don't talk to them at the conventions or club meetings. Don't do business with them. Remember, if he is the kind of guy who will cheat in a hobby, he'll probably "slip it to you" every chance he gets. Let's bring sportsmanship and skill back to DXing.

watts and an antenna 128 feet long, 28 feet high and 19 radials. Dave, G4AKY, with 10 watts and a 300-ft. long wire has worked Stewart Perry, W1BB and others... Larry Stoskopf, WØPSF, very busy with hospital internship, so is not very QRL 160; However, he takes a 3-day vacation for each CQ 160 and ARRL 160 test to keep "finger in the pie" until he has more time... Fred, G3YUV, with a 220-ft. inverted "L" 75-ft. high, in one night worked W1, 2, 3, 4, 8, 9 and KV4FZ... Bob, G3TZQ, made his first Atlantic crossing with ten watts... Stu, GM3WDF, has worked 43 Ws, QSLd 100% and has received only 7 replies. What's the matter fellows?... Adolf, OE5KE, is on 160 with the Drake Twins and a long wire antenna, doing much DXing, recently worked George Luick, WØBFL; Cok, OKIAOH, got his WAC working VK6HD... John, VK4LQ, heard Fred Gillett, W6HX and Dale Hoppe, K6UA on a 22-year-old Eddystone receiver... Charles O'Brien, W2EQS, worked a "new one", LU5HFI, for country number 86. Then he moved from New Jersey to Indiana. He has to start all over again.

The Beverage antenna. Charles Rauch, WA8IJI, has three, one each on Japan, Europe and VK-ZL Each is 1000 feet long, 30 feet high at the near end and 5 feet at the far end. They are supported by trees and poles, using 1/4 mile spools of electric fence wire, light and strong. He says, "... work amazingly well. For example, tonight on the vertical (Turn to page 38, please)



Things are looking pretty good! As expected, with the lower sunspot numbers this season, 160 DX is better. Top band operators are calling it "phenomenal", "super", "fabulous", or "best ever".

A "first-ever" was Charles Rauch, WA8-IJI, and JA7AO making the first W8/JA7 QSO. This was the farthest east JA ever heard or worked. Another "first" was OKIATP and W7DOL/6.

With 5 watts QRP, Brice Anderson, W9-PNE worked forty states plus ZFIG and other DX. As of November 1972, the ARRL now issues a brand new special 1.8 MHz WorkedAll-Continents Certificate. More DXpeditions are taking 160 meter gear with them.

Probably the most important item towards continuance of good 160 DXing, is preservation of the "DX window". The idea has worked out fairly well thus far, and as a result DX signals can usually be heard and worked 1825 - 1830 kHz. However, we do have serious problems. First, because of the great influx of newcomers to 160 who haven't learned about DX and the "window" and secondly because of three or four fellows who insist on operating there regardless. Otherwise cooperation has been most excellent. There is some consideration of requesting "partition" for CW/Phone segments. Send me your ideas on the subject.

Lagi Radnay, WlPL, was all wet.... Hearing Steward Perry, WlBB, working Europe, while he couldn't hear a signal was frustrating for Les. It was pouring rain outside but he nevertheless went out in it and put down his radials that had been rolled up for the summer. He got soaking wet but figured it was worth it. When he listened in on his vertical with the radials down, he immediately "went to town" working DL9KR and OKIATP. He says it was worth the drenching to prove the value of radials.

Ralph, WIGHT, continues to be the leading station in "knocking off" many DX QSOs.
Recent firsts include 4WIAE and JY9FOC....
Eric, G3GC, crossed the Atlantic with 10



Bob Kinghorn, G4APX, reports that he's listening for US Novices on the new 28.1 to 28.2 MHz Novice band. He says he really enjoys it when he is able to give a first "G" contact to a Novice.

This new column in WORLDRADIO will cover a variety of topics with inputs from several sources. Novices are invited to tell of their experiences and share what they have learned with newer licensees and the "old timer" is invited to lend a hand with some sage observations which would be of use to Novices.

The main areas we will cover are: first, how to get the most enjoyment from your Novice career and second, how to get a higher grade license.

Probably the greatest sin committed by novices, and one which results in fewer contacts is the overly long CQ. You could be sitting in Vermont, just itching to give fellow Novices their 50th state for WAS and they will never know, for after the 19th or 20th CQ in a row everyone will have turned the dial. Three CQs followed by your call twice, repeated two or three times is all you will ever need.

If you hear a General in the Novice band calling CQ, answer him. If he is going a tad fast, ask him to QRS (send more slowly). The reason he is there is he wants to work novices, so don't be squeamish about asking QRS. On the other hand, one will never get anywhere continuing to copy at a speed at which he is comfortable. Progress will only be made when one is copying a speed at which he has to strain to make it.

One help to the Novice (and Generals going to Extra) is the W6QIE (Don Johnson) CW transmissions every night, except Monday, on 3.590 MHz. He starts at 8 p.m. and goes until 9:30 p.m.; speeds start at 5 words per minute and go to 30 wpm. We intend to list other such transmissions in other parts of the country in future issues.

Another form of code practice is the commercially-produced CW course. The "Epsilon" course is especially good for learning the code. We can vouch for that one. For code practice, after it is learned, the "Pickering" course is quite nice. And there is the old standby for brushing up, the "Instructograph". The number of hams who have got their licenses after using that machine is beyond count. When copying CW use earphones as much as possible. When you go to "the marble halls" of the FCC you will take your test with 'phones so you should be accustomed to wearing them. It seems in today's fast-paced society, time is always a problem. Discipline is necessary to learn the 15 wpm needed before you take the test (be a little ahead, not right on the ragged edge). Set up a schedule. Fifteen minutes every day will do more than a half-hour every other day. Some find that right after the evening meal is a good time. One should sit and relax then anyway. Too many people fight the code. With fingers almost squeezing the ink out of the pen, copying code is a battle. Try another system. Leave the pen down and lean back, relaxed, and copy in your head.

Another trick that some have found usefulif you have a small battery-powered tape
recorder, you can make good use of your
commuting time back and forth to work.
With some code recorded on a cassette
one can pick up a half hour or so a day
extra code-copying time.

Which equipment to get is always a problem. Right now there is a good choice of used gear on the market. Before running off to buy something it might be wise to seek some counsel from an older ham. He will probably tell you that the Johnson Ranger represents a good investment in a transmitter. Johnson built their stuff to last forever. They are rather like the

DC-3 (or C-47) of ham radio. The Heath gear is also good. We even saw an AT-1 for \$15 the other day. For the young novice, on a limited budget, a few lawns mowed around the neighborhood and you are on the air.

Let's say you originally spent about \$100 for a transmitter and about the same for a receiver. Two years later you are ready for some better gear. Someone offers you \$75 for the transmitter and the same for the receiver. Don't look at it as losing \$50. Instead, view it as if you were able to rent a ham station for two dollars a month. Pretty cheap when you consider the fun you had. With cash in your hot hand you will do better at a dealer than with trade-ins.

You'll get a lot more enjoyment out of ham radio when you are involved with other people. Join the local ham club. You'll find that fellow hams are the most helpful people on this planet. But they have to know you are around. You'll make a lot of friends at your local club.

Go on Field Day. This is the best activity of the year. Hams who haven't been on Field Day have really missed something. You get some good fellowship and some good training at the same time. Operate during the Novice Roundup, Sweepstakes and other contests. Unfortunately, you will hear a few hams snort and wheeze when the subject of contests comes up. Pay no attention to them. What the contest will do for you is sharpen your operating skills. A couple of contests under your belt and you will be a far more professional operator.

During an emergency traffic situation you can listen to the frequency and just about tell who is a contester. They are sharp, brisk, to the point. The other operator is windy, asks for several repeats, can't find his pen to write the message down, etc. Contests will truly sharpen one up. They are good training.

In next month's column we will discuss the single most important part of an amateur radio station. It will tell how to do it well, and inexpensively.

# Country Cousins

by Raj Cauthers, K7NZO

QST Country Cousins, this is ..... Cousin...... at..... your ..... night Net Control for Western Country Cousins. This net meets nightly on or near 3970 kHz at 9 p.m. Pacific Time. Our purpose is service to anyone in any category. Our aim and motto is: "Help to all Mankind". When in need call a Country Cousin. This is a directed net, etc.

The Western Country Cousins have sent radio gear to the missions in Alaska, transistor radios to children hospitalized with long-term illnesses; supplied through a ham who does this for a hobby, audio tuners for sightless hams; sent eyeglasses they collected to a leper colony; helped orphanages; and collected needs and taken up any need that came to our attention and proved valid. Those in need do not have to be amateurs.

The most amazing and outstand-

ing event was when a ham, Tex Young, W7LYV, checked in from St. George, Utah. He mentioned that he had been trying to find his brothers and sisters for nearly 40 years. This was heard by a ham in Crescent City, who had a friend who had been trying to find his brothers and sister for the same period of time.

The two brothers, separated during childhood, were brought back together via phone patch that night.

Even more spectacular was that during that night, through the Country Cousins Net, all three brothers and a sister were located.

Tex cried. It was hard for him to talk. The whole net was so filled with emotion that voices sounded quite throaty. Since that night the brothers and sister have visited with each other and become reacquainted. Messages from family members can now be heard being passed back and forth on the Country Cousins Net.

The Country Cousins Net was originated in Florida. In 1963, when there seemed to be too many members of the parent organization for the net to function well, the western group was formed. The

western group now has 600 members. Now there is also a midwestern Country Cousin Net.

The Western Country Cousins have had four annual picnics held in state parks. There are several members with campers and trailers who head in on Friday evening, get acquainted Saturday and go to the picnic on Sunday. These events have drawn 200 participants.

Stations check in from Mexico to Alaska. Many of the Alaska check-ins are so far out in the bush that there is no other means of communication and the net has been able to help them in various ways.

### Worldradio

This publication has many and varied purposes. One usage is that when a non-ham asks, "What do hams do?", you can give them a copy. In this paper they will read about the exciting world of Amateur Radio.

The stress in our articles is on the human relationship. We believe in the people-to-people idea.

We enjoy reporting the adventures of motivated people. We hope such stories serve to activate others.

Any licensed YL who is sightless, or has vision impairment so that she cannot read regular printed copy, may obtain the "Young Ladies Radio League" publication, "YL HARMONICS" on seven-inch open reel tape.

Anyone knowing sightless YL operators who would be interested (they do not have to be YLRL members) should contact: in Eastern US - Dorothy Baumgardner, WA8-IJW, 20470 Lorain Road, Fairview Park, Ohio 44126; in Western US, Alaska and Hawaii - Raj Cauthers, K7NZO, Star Route 1, Box 250, Tahuya, WA 98588.

The tapes not only consist of the magazine, "YL HARMONICS" but also the "YL News and Views" from QST, and parts of "CQ YL" (the history of YLs from the known beginning) by Louisa Sando, W5RZJ. "YL HARMONICS" gives news of the doings of gals in all districts as also DX members; contests, nets, awards and everything YLs are interested in.

There must be many sightless YLs who would enjoy this service, but who know nothing about it. It is up to our sighted hams to help find these gals and let them know of the service.

## Lifetime

Listed below are those who have given WORLDRADIO the supreme vote of confidence.

Their lifetime subscriptions have made it easier for us to put out this publication. It assures them of receiving WORLDRADIO forevermore.

They also have the satisfaction of being part of "something that counts".

We publicly express our gratitude to:

Dave Flinn, W2CFP

Phil Pector, W9LDX

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Warren Bermann, WØTDR

Roy Tucker, W6UZB Kathryn Tucker, WN6SXG

Greg Knapp, WA6MIN

Erland Belrup, SM7COS

Lee Shaklee, W6BH

Charles Simmons, W6PDH

Jadakazu Sekine, JA5CK

Bill Eitel, W6UF

Charles Wilson, KlGVA

Ed Comeau, WLJWA

Mike Gauthier, K6ICS

## Product Reviews

FANTASTIC!! There is a great new product for the internationally minded ham.

\*\*\*\*\*\*\*\*

It is called "K3CHP's DX QSL GUIDE" but the title doesn't do it justice. It sounds like it might be a collection of QSL bureaus or managers, but that it is not.

Instead it is a list of twelve sentences, such as "Thank you very much for the QSO", in 54 different languages. The idea is that you may drop a little personal note, in the other ham's language, with your QSL card.

BRAVO!! For this way we can show the fellow in another country that we are taking a little interest in him, his language and culture. It shows that we are making a bit more extra effort to meet him part way. And we need a lot of that.

You can even copy off 'I hope to meet you soon again" in Japanese. There are 54 different languages that you can write in.

# Onward and Upward

Over the past six months your paper has experienced tremendous

While this has been most gratifying it has presented some problems and we ask your help.

This is the problem - - Upto now we have attended to the labeling and zip sorting of the papers in a garage behind the offices. We get some of the local hams to come and help. But it has outgrown our manual system.

Even with our good friends ye editor spent five days and nights in the garage last issue. We, by hand, put on over 6,000 labels and sorted them into zip code order. Then we have to label each bundle, then label the sacks. The next step is to rent a truck and then cart them off to the post office.

Five days a month adds up to

Dutch, Danish; 54 in all.

The book costs \$3.95 and can be ordered from K3CHP at 6913

The above-mentioned book may go a long way in helping erase the 'Ugly American" image that exists.

After building up a little confidence with K3CHP's book, the sophisticated amateur may wish languages. Ideal for that (and the only one of its kind) is the "Foreign Language QSO" course de-

Carl's course gives you a manual and a tape or cassette. The course starts with simple phrases and moves to common phrases used in Amateur Radio. Complete QSOs in the foreign language with their English equivalents are printed side by side. The course includes discussing the weather and pleasantries. One can describe his station and talk about travel. One can enter into a technical discussion and there is a section on how to handle phone patches. With this course one can handle an emergency situation.

With the printed manual there is also the audio tape. The words are pronounced by hams who are natives of the various countries.

German and Japanese (choose the courses aimed at the foreign ham who wishes to learn English. The cost of the courses range from

However, we treat it like it is not there and discipline ourselves not to dip into it, for we might always need it more some other

But getting into the computer is a necessity. The mailing firm says they can do the entire job in one day. That would get you your copy four days earlier and free us for more productive tasks.

Twelve more lifetime subscriptions (at \$50 each) would turn the

Some readers have started time payments on their lifetime subscriptions. We would accept a down payment of \$25 and the rest over a year. If 24 readers would take such a step, they would be the ones to benefit in the long run.

What has been amazing is the number of readers who have renewed their subscriptions for three year periods. If just fifty readers would sit down and go the threeyear route right now for \$13 we would be eternally grateful.

Mark your envelopes "out of the garage" .... thanks.

\$10.95 to \$13.95, depending on language and tape size. The manual is included in the price. However, for a start one could order the manual separately for \$2, 50.

Foreign Language QSOs can be reached at Box 53, Acton, Mass.

Kit Kitterer, the west coast representative for Hy-Gain, donated an 18AVT/WB vertical antenna to the Worldradio Staff Amateur Radio Club Station, WB6QHL. Kit told us if we found something good about the antenna, to report it and also if we found some things we didn't like, to also mention it.

First the good news. The antenna can be assembled on the floor of the living room while watching your favorite television show. The newest novice could follow the instructions.

Even though the antenna is 25 feet tall it was pulled up to the roof by one man. A five foot pole was strapped to the chimney and one man was able to attach the antenna to the pole.

Coming into the shack, the first station worked (moments after the antenna went up) was PY4AP (14 MHz-A3A-0130 Z-15 April), a 5 x 8 report was received using a Swan Cygnet bare-

That evening tests were run which showed the vertical to be about one S-unit stronger on both receive and transmit than a reference baluned (co-ax) well tuned inverted V which is ten feet higher than the base of the vertical. Some reports gave 8 db stronger. (Turn to page 35, please)

we prefer not to allocate the funds.

the label.

To insure our continuance we budget a percentage of each month's income into a reserve fund. Its purpose is to weather us over whatever rough spots that may occur along the way.

60 days a year - or two full months.

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voted to other matters to do with

the paper would vastly improve it.

Plus it would get the paper out on

to a firm that specializes in such

activities. They will pick up the paper at our printer, do the complete job, and take it to the post

This means that instead of

standing in the garage for five days

They want about \$120 each month

to do the work. Fair enough, and we can afford it. The rub is that

to have them do it we must enter

our subscriber roll into the com-

puter so that the addresses come

out in a form that can be handled

To get into the computer costs about \$600. We could do that but

by automatic machines which apply

we can immediately turn to creat-

We want to turn the mailing over

time more often.

ing the next issue.

office.

Someday you may be able to use the "You are my first Albanian radio contact" in Albanian. Or you may wish to say 'I would be very grateful for your QSL card" in Armenian.

We would like to mention that we did not receive a "review" copy of the book, but instead purchased our own.

After looking through the book we wrote to its author, Joseph Mikuckis, K3CHP, and asked him to write an article about the reasoning behind writing the book and the amount of research that went into it. We felt that many of our readers, (college professors and others interested in languages) would find such of great interest.

Joe wrote back that he was reluctant to do so fearing that it would look like "a cheap-shot publicity for the book". Frankly, we don't think many would look at it that way for it is apparent that such a book is a labor of love as one certainly could make more money applying the same effort to a more commercial product. (Sounds like a certain Amateur Radio newspaper we are familiar

Obviously this product is not going to appeal to the average amateur but rather to the highly motivated. Such things appeal to a minority (unfortunately). We get the QSL cards sent to us, from the foreign hams, in English. It seems only common courtesy that we reciprocate.

A few of the other languages are: Swedish, Spanish, Russian, Norwegian, Italian, Hungarian, Hebrew, Greek, German, French,

Furman Parkway, Riverdale, MD 20840. Non-USA stations may send 25 IRCs.

to attempt to speak in the different signed by Carl Sletten, W1YLV.

The courses teach Spanish, one you want). There are also

### Product Reviews

(Continued from page 35)

Fred, VK9 FH, said we were as strong as any station he was hearing out of the west coast. And some JAs were also worked. On 75 meters the reference antenna was a 135 foot long wire fed through a tuner. While talking to Lou, W7UU, we changed antennas and he reported the vertical was stronger.

The bad news. There's not getting around it folks, a vertical is noisier than a dipole. Going back and forth from the dipoles to the vertical (while listening to the same station) will reveal more noise on the vertical. This is more noticeable on the stations that are way down in the mush than on the average signal.

Summation: Being an antenna freak, we have tried Yagis, Quads, long wires, inverted Vs, etc. This was the first effort with a vertical. For sure, a rhombic it isn't but it appears the badmouthing they get is unwarranted. Recently we heard an antenna lecture by an engineer who said the vertical, if well grounded, good radial system and a screen, will radiate twice as much energy as the dipole. Another advantage of the vertical is that it doesn't snake its way all over the back yard to get on 75 meters. The longest radial is 37 feet and having but one antenna to operate all bands from 80 through 10 meters is convenient. The antenna costs \$69,95. One would be hard pressed to put up five dipoles and run coax from all of them for a like amount of money.

Many DXpeditions have taken the Hy-Gain verticals with them to use from the exotic spots. With only barefoot exciters they have been heard all over the world. You may be pleasantly surprised, as we were.

Another product sent to us for review was the Autek "Q-Box". The manufacturer claims "dramatic improvement for transceivers on CW". He understates his case.

Technically, the continuously variable bandwidth of the unit goes down to 30 Hz. In use it means that you can wipe out interfering stations. The best place to test out such a unit is the 40 meter novice band on a Sunday afternoon.

We found that with three signals coming through one could drop one out completely and reduce the signal of another to the point that it was not a nuisance and sit and copy the one remaining.

It was loaned to a friend to check out on his Collins transceiver and he reported on 20 CW he could completely null out an interfering station. Another value is that the "Q-Box" reduces the noise and trash on the band considerably.

While the manufacturer speaks

only of using it for CW, it was found to also be effective on SSB. While listening to one station who was being interfered with by a "tune-up" it was possible to take the offending carrier out of the picture.

SSB sounds a little strange when filtered through this kind of selectivity but one can get used to it and make out every word. It can make the difference between copying and giving up in disgust.

Being able to copy when you would not ordinarily be able to is well worth the \$17.95 asked for the unit. Shipping is a buck extra. California stations five percent tax (we are probably the ones who can most benefit from it). The unit comes with a 10-day moneyback guarantee and a one-year warranty. The unit comes with the cord and the plug which goes into your phone jack. Everything about it is high grade and quality; the photos don't do it justice. Autek is located at Box 1494A, Canoga Park, CA 91304. The outfit is run by Bill Onesky, W6DYD. Transceiver owners should give a long bow in his

Speaking of transceivers.... Rigs such as the Swan Cygnet and the SBE-33 and 34 (purchased used) represent an economical way to get on the air; however, they lack CW sidetone. None of the manufactured "RF actuated" or "off-the-air" CW monitors are very satisfactory. One answer is the AMECO Model OCM code practice oscillator and CW monitor. If your rig uses grid block keying this unit is a handy outboard accessory. The tone is clean and is variable over quite a range. Such is useful for relieving operator fatigue.

Hooking up the key to the oscillator to the rig is simplicity itself. The oscillator has an earphone jack which makes it possible to parallel the output of the rig and the sidetone to a pair of earphones (the only way to go on CW).

Thus for a few dollars, by adding the Autek "Q-Box" and an Ameco oscillator, one can transform a SSB transceiver into a competitive CW rig. With the decline in the ease of working SSB DX on the higher frequencies, CW on 40 and 80 late at night is going to become the way to go.

Looking at ways to get maximum station usability for a few dollars there is one particular \$30 outlay that could be the best expenditure one ever made.

That is the "Omega-T" antenna noise bridge. In case anyone is dubious about the enthusiasm that is to follow, we should like to point out that Omega is not an advertiser; we don't know anyone from the firm, nor have we ever heard from anyone with their firm.

We honestly believe this is one of the greatest gifts to the ham that is truly concerned about a properly operating antenna system.

Many hams have asked "what does this instrument tell you that an SWR bridge doesn't? The answer is "plenty". Unless an antenna and feedline are quite close to optimum already, an SWR bridge can give you some really erroneous readings. The reading it gives you can really mean that it can be anything higher than this and it will be no lower. One can really be way out of the ballpark.

On the other hand, the noise bridge tells you everything you want to know right down to the gnat's eyebrow. Many hams are unfamiliar with its operation or value. Here's how it works:

Place the bridge between the antenna and the rig. (Take caution NOT to apply transmitter power through the bridge.) Set the receiver where one thinks the antenna is resonant and the impedance dial on the bridge to the approximate impedance one believes the system to be at.

Move the receiver dial up and down until the noise level drops; move the impedance knob back and forth until noise drops again. Back to the receiver dial, back to the impedance knob. Keep going until the lowest noise level exists. That's it. Be prepared for a surprise or two. For this unit will tell you the exact resonant frequency of the antenna and the exact impedance.

It should be invaluable for those building their own traps and antennas from scratch. It works on every type of antenna. Put it between your rig and your antenna tuner and you can check where the controls on the tuner match what frequency.

The top antenna people say the first most important factor of an antenna is that it be resonant at the frequency. The most energy will be transmitted at this condition. Receiving noise will drop also.

The noise bridge can also be used for cutting co-ax to half and quarter wavelength pieces. (The velocity factor figures are but a guide to get you near; they can vary).

Admittedly this is not a unit one would be using every day. A group of hams living near each other might wish to chip in and buy one to be shared when needed. Or a club might purchase one for loan to members.

After using this unit you will find that the SWR bridge makes a nice tune-up meter and leaving it in the reverse position will tell you if your antenna has fallen down but the only way to truly check the antenna operation is with the noise bridge. Using a borrowed one here we believe that it is most valuable. Frankly, it's terrific.

The Model TE-7-01 that covers from 1 to 100 MHz is priced at \$29.95. VHFers may find the Model TE-7-02 which goes up to 300 MHz useful at \$39.95. OmegaT is located at 300 Terrace Village

Road, Richardson, TX 75080.

Another "product" on the amateur scene that isn't "purchased" in the quantities that it should be, and is well worth every buck is the "hamfest".

It is really unfortunate that the average hamfest or convention will draw less than ten percent of the hams who live within easy driving distance.

The part we enjoy the most is meeting hams in a good atmosphere. It is really enjoyable to see the faces connected to the voices. You really meet a great bunch of guys and gals. These are not the "hermits" but rather those who like to meet people. They are the outgoing, pleasant people, the active hams who are the backbone of the hobby.

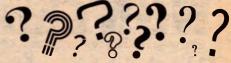
One thing that one will find is that the companies in the amateur radio manufacturing business are not cold, impersonal businesses but are owned, managed and staffed by some fine people. They are in the ham business because they enjoy it. They are not in it for the buck alone. For many of them the only reason they are in the ham market is because they want to be. Their main business may be in the commercial communications field and they feel if they can but breakeven in the ham business it is OK.

The seminars put on by top technical people are most interesting and informative. Lew McCoy, W1ICP, of the ARRL staff, gave an antenna dissertation at the DX convention that snapped a few heads. At the recent Fresno Hamfest some pretty high-priced engineers from industry were sharing their knowledge.

But the most important aspect of the hamfest, we believe, is the camaraderie. They are attended by people who want to be friendly. And you can hardly find a more enjoyable weekend than in the company of such people.

Support your local hamfest.

Wilson Electronics of Pittman, Nevada, donated a three-element 20-meter beam to WORLDRADIO. Due to the press of getting this issue out we haven't had the time to even open the crate. It is sitting in the garage. We hope by next issue to look it over and give you a report.



How 'bout that missing QSL?

UPI reports that a lady in Spokane, Washington sent payment for a bill to a local firm via mail. It never arrived. The letter was returned to her 4 months later via air mail from Madagascar. It was accompanied by a note from a Mrs. R. Jordahl who said it was delivered to her by second class boatmail... Kind of makes you wonder.

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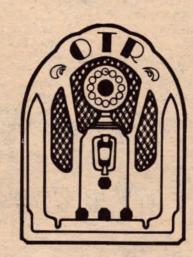
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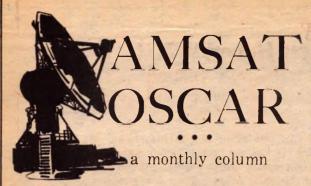
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#### by Richard Osman, WBOHUQ

Apparently, all is well on Oscar 6 as of late March. The only really serious malfunction experienced as of this writing, to my knowledge, was the failure of the 435.1 MHz telemetry transmitter, possibly due to a bad RF transistor. This necessitates taking telemetry off the 29, 45 beacon.

Since the satellite output is fairly well up to snuff, Amsat has added two days to the operating schedule. The new schedule is as follows:

ON: 0000 Z Thursday - 2400 Z Monday OFF: 0000 Z Tuesday - 2400 Z Wednesday TAKE NOTE: Days are in GMT

Should you find the satellite on during off periods, PLEASE DO NOT USE IT. This probably means that Amsat is taking telemetry. Should you use it, you will most likely inter-fere with the retrieval of the required information. You may also further discharge already depleted reserves of power. So please use Oscar 6 only at pre-arranged times.

Amsat also asks that you keep the ERP down below 100 watts, otherwise you will cause agc action to come into play, and may also draw more power than really necessary.

Oscar is now coming under some very heavy use, close to 50 countries are represented (see list) although the 50 states are not all represented. The states needed are:

LOUISIANA NEBRASKA WYOMING NEVADA KENTUCKY VERMONT NEW MEXICO SOUTH DAKOTA WEST VIRGINIA

If no one gets on in Wyoming, I'll try to get on from there. I'll have to hear from interested stations on this; write c/o WORLDRADIO. As far as the others go, let's get moving.

Although most QSO's are on SSB and CW. some have been made on RTTY (VK's, 3YDB. GHK) and SSTV (W9NTP). Distances covered are from 0 to 4500 miles.

The unofficial leader of the QSO race seems to be Dave Robinson, K7BBO, with better than 2200 Oscar QSOs with 35 states and 10 countries. Randy, VE2BYG, is close behind with 1500 contacts, 40 of them confirmed states and 25 countries. This includes 350 transatlantic QSOs.

The Soviet Union is also on the bandwagon. The first USSR-North American contact has been between VE2BYG and UA1DZ on December 11, '72. Since this time many QSOs have been exchanged with Russia.

In Australia, VK3YDB reported successful 2-way RTTY contacts over a distance of 2000 miles. This was accomplished with NBFM and narrow shift AFSK Shift (±42.5 Hz).

#### ORBITAL PARAMETERS

Oscar's orbital parameters have stabilized at the following:

Perioa: 114.9945 Inclination to Equator: 101.73 Equatorial Crossings: 28.7485 degrees progressively to the west for each new orbit in a south to north direction.
Uplink Passband: 145.90 - 146.00 MHz
Downlink Passband: 29.45 - 29.55 MHz Downlink Passband: 29, 45 - 29, 55 MHz

Downlink-Uplink Frequency Relationship:

FDOWN = FUP - 116, 456 MHz ± FDOPPLER

FDOPPLER = 4, 5 kHz near beginning of pass

F DOPPLER = 0 kHz near middle of pass

F DOPPLER = 4, 5 kHz near end of pass

FDOPPLER = 4, 5 kHz near end of pass

Beacon and Telemetry Frequencies: 29, 45

MHz, 435, 1 MHz with 435, 1 low output level.

Oscar 6, Oscar 6, Oscar 6, that's all you hear about. Well, you know, Oscar 7\* is planned; as a matter of fact, Oscar 7's\* design is under way and here's what they've got in store for ya':

- 1. The DJ4ZC/DJ5KO EURO OSCAR translator, 10-14 PEP linear translator, uplink 432, 123 to 432, 175, downlink 145, 975 to 145, 925. Passband Inverting plus low power mode 2.5W PEP for low battery operation.
- 2, 5 watt version of present translator uplink 145.9 to 146; downlink 29. ? to 29. ? (not yet decided)
- 3. Same as above but 1 watt, for a back-up.
  - 4. A 435.1 MHz Beacon.
- 5. Two redundant Australian Mark II 35-channel command decoders.
- 6. A WIA-PROJECT Australia's RTTY Telemetry Encoder, 60 wpm 5 level with 2125 Hz and 2975 Hz tones.
- 7. Identical Morse Telemetry Encoder, to that of Oscar 6.
- 8. A Codestore similar to the one on Oscar 6.
- \* To be accurate AOB will be given an Oscar number once it is successfully in orbit, but as of this date, it is planned to be Oscar 7.

A problem has come up on the matter of downlink frequency selection for the 2 to 10 translator due to the fact that many popular receivers tune, for example, 500 kHz ranges, which puts only 50 kHz of passband within easy range at one time. The downlink range could be shifted to 29.35 - 29.45 MHz and the beacon on 29.45, or even 29.40 - 29.50 MHz with the beacon on 29.45 MHz. As a consequence of the 50 kHz easily available per tuning range on many rigs, activity is concentrated between 29.45 and 29.50 MHz. That's all for this month!

(Information in this article courtesy Amsat Corporation and George Jacobs, W3ASK).

Countries Having Amateurs Using OSCAR 6

(As of March 6, 1973)

Argentina: LUIDMA, LU9MA
Australia: VK3ATN, YDB, etal.
Austria: OE3XUA, LFA, OE2OML
Belgium: ON4GF, DY
Brazil: PY2CSS
Br. Vincia Antarctica: VKØJV

Br. Virgin Islands: VP2VL

Bulgaria: LZIFO, AB, BW, DW, Canada: VE2BYG, VE3CUA, VE3TW, etal. Colombia: HK5MO

Czechoslovakia: OKIMBS, BMW, OK3CDI Denmark: OZIOF, OZ8SL England: G3PWJ, etal. Finland: OH3AZW, OH2RK, etal. France: FlUP, F2DC, F9FT, etal.

E. Germany: DM2BEL, CBD, BYE, DIN, DM3GJL, DM4VGN
W. Germany: DL3ZF, DLØVB, etal.

Greece: SVIAB Greenland: OX3EL

Hungary: HG5AIR, KDQ, KEB, HG2KRD Iceland: TF3EA

India: VU2UV
Ireland: EIGAS, EIUAL, EI7AF
North Ireland: GI3ONF, CDF, GI5AJ
Israel: 4X4MH

Italy: IISBN, TEX, I7SRR, I3LDS, MW, SNT, I4NU
Jamaica: 6Y5AG

Japan: JA8ARS, PL, JA1ATL, VOV, JA7AKB Luxemburg: LXIDB, SI

Marshall Islands: KX6HK
Mexico: XEIPY, RY, XA, CE
Netherlands: PAØJMV, JYL, WLB, PIIEHV
New Zealand: ZLIWB, ZL4JW, etal.
Norway: LAIK, LA8WF, etal.
Poland: SP2ACZ, AOZ, DX, SB6CAP, SP7AI
Rhodesia: ZE7JX
St. Pierre: FP8AA

St. Pierre: FP8AA Scotland: GM5MP, FLM

Scotland: GM5MP, FLM
South Africa: ZSIAW
Spain: EA3JE, EA4AO, DT
Sweden: SM2CFG, SM5LE, etal.
Switzerland: HB9ABR, AMH, IN, RG, WB
U.S.S.R.: UAIDZ, ZI, UAØSBI, UA2BJO
UC2RB, UA9FB, UA9HG, UB5AC,
UG6AD, UKIAAA, UR2EQ,
UW6MA, UT5DX, UY5RT,
UG5AIR, UG5AIE
United States: K7BBO, KIHTV, etal.
Wales: GW3FSP, LEW, MFY, NJW, NNF,
GW2HIY
Yugoslavia: YU3JS

Yugoslavia: YU3JS

(Continued from page 41) DHJ (Germany) and the noise were equal at S7. On the Beverage DHJ was 559."

He found that a 300 or 400 ohm resistor rather than the usual 600 ohm gave better front to back ratio. "Kills any signal from back end." WA8LJI uses a 100-foot top loaded vertical with 80 radials for transmitting. He says he has tested many antennas and the only one close to the Beverage is the vertical, but the vertical is 3 "S" units worse on S/N ratio. This is the setup he used to work JA7AO.

#### JUNE 160 METER TEST

With band conditions during June generally excellent and especially on the trans-equatorial path, the 4th Annual 160 meter Activity Period will be coming up next month.

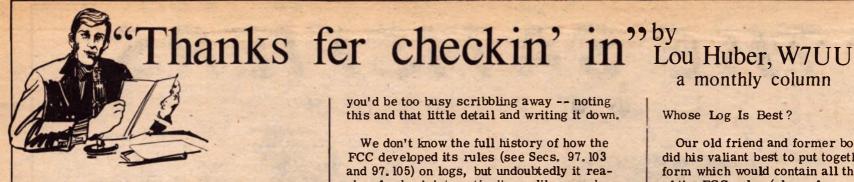
This world-wide effort to organize 160 meter effort during this period when conditions often are good on all paths at night, the test will be as follows:

Time: 0000Z to 0030Z daily Frequencies: Europe and Asia - 1825-1830 kHz

Others including W/VEs - 1800 - 1807 kHz

Stations north of the Equator to call 'CQ' during the first 2.5 minutes of each 5 minute period, stations south of the Equator to use the alternate 2.5 minutes. Those transmitting in the 1800-1807 kHz slot should check their frequencies  $\pm 2$  kHz as well as the opposite of the band. W/VE should avoid transmitting in the DX window.

There should be two or three days of exceptional 160 meter conditions in June. Check daily. LU5HFI/LU5EVM; YV5CKR, ZSIMH/9J2XZ/9J2LF plus VP8s, ZD9s will be on.



In the March 1973 issue we told of how Northwest Amateur Monitoring Service works, and said it was one of the most recent such services to spring up. Now we can tell of another -- the Piconet All-day Watch (PAW)-which began operating in Minnesota on 4 January 1971. It is thus about 6-1/2 months older

Don Johnson, WAØEPX, of Utica, Minnesota, founded PAW; he was at that time president of Piconet, the ham emergency net for thirteen counties in Southeastern Minnesota. When Don entered college in the fall of 1972 he asked LeRoy E. Youngs, WAØYVT, of Tracy, Minnesota, to take on the leadership of PAW. (Piconet, incidentally, is an abbreviation of Public Interest, COnvenience and NEcessiTy -- the basic tenet of the Communications Act -- and it is pronounced "pie-koe-net").

PAW operates on 3925 kHz weekdays from 9 a. m. to noon and from 1 to 5 p. m., and on Saturdays from 9 a. m. to noon. Like NAMS, PAW is loosely organized; there are no certificates, dues, etc. "We do have regularly scheduled control stations who monitor one full hour each day -- although this schedule is very flexible," says LeRoy.

#### HANDICAPPERS SERVE

Anyone with 4-MHz capability can be a control station; however, physically and visually handicapped members of the Handi-Ham System of Minnesota, Inc., make up most of the monitor controls. LeRoy has been in a wheel-chair all his life. "The ability to be of service to others through amateur radio is very rewarding to me and the other handicapped people in PAW," he says.

Unlike NAMS, PAW does report the number of check-ins, formal messages and phone patches handled. Totals and a resume of operations appear monthly in THE FLYER, club paper of the Handi-Ham System; also, the report goes to the ARRL Communications Department for publication in QST.

PAW's effective area covers not only Minnesota but extends to North and South Dakota, Iowa and Wisconsin. In March of 1973 PAW had 3, 453 check-ins during 169 hours of operation, or 20. 43 check-ins per hour. For that month 223 formal messages and 77 phone patches were handled.

A relaxed, informal pace is the rule for PAW (as for NAMS). "When things are slow we chew the rag or kid each other, and this way of running things works real well and encourages others to join in," says LeRoy. "The important thing is that everyone knows we are there and able to help when needed."

Are you schizophrenic, concomitantly ambidextrous\* and of a bookish nature? If so, you may be the perfect radio amateur, when it comes to keeping a station log. For it would take all those attributes for anyone to follow, to the letter, all the commandments in the FCC rules about the keeping of

Of course, if you were so blessed, you might not get much useful operating done; you'd be too busy scribbling away -- noting this and that little detail and writing it down.

We don't know the full history of how the FCC developed its rules (see Secs. 97.103 and 97.105) on logs, but undoubtedly it reaches far back into antiquity -- like, maybe, when spark was king and you could hear only one or two stations at a time.

#### The Old Order Changeth

Of course the situation is different now -but the rules are the same. Additions have been tacked on in an attempt to cope with modernity, from time to time. It is time now for a revision, for the thing is getting out of hand.

The purpose of a log, of course, is to provide a record of what you did, so that if necessity arose you could demonstrate that you did the right thing. A log might be crucial to your defense, were you ever to be accused of having done the wrong thing. Conceivably it could be very important to you if, for example, death, accident, destruction of property, disturbance of the peace or other such matters should be involved.

With all this in mind it seems (to us, at least) that the simpler a log can be, the better. One should be able to make entries of vital things without hindrance to communication; and communication itself should be the matter of greater importance.

Bookkeeping, or Radio?

As it is, one is confronted with the choice of being a good bookkeeper and a poor communicator, or a poor bookkeeper and a good communicator -- but he cannot be both!

We submit that it is impossible to fulfill the intent and purpose of the Communications Act ("public interest, convenience and/or necessity") and at the same time keep a legal log -- and that a revision of the FCC rules on logs is long overdue.

Toward this end we have some suggestions:

- 1 -- That all time be recorded in Greenwich Mean Time. (You can use any kind of time you wish, now).
- 2 -- That every log entry show at least the approximate frequency used for the transmission involved. (As it is now, all you need to show is the band you're in).
- 3 -- That Sec. 97. 103(a)(3) (requiring indication of the power used) be stricken from the rules. (As long as it's legal power, why need it be written on every line?).
- 4 -- That it be required that log entries be made at the moment the communication takes place. (Not transcribed later from hen scratches and vague memories of what went on.
- 5 -- That the FCC rules on logs contain a statement of why a log must be kept (so that you don't have to guess at it as you do
- 6 -- That Sec. 97. 103(b)(3) (requiring notation about third-party traffic handled) be revised so as to exclude a description of message content. (As it is, this probably is in violation of the secrecy-of-messages clause in the Communications Act).

Whose Log Is Best?

a monthly column

Our old friend and former boss, Ed Handy, did his valiant best to put together a good log form which would contain all the requisites of the FCC rules (plus a few goodies to help out in sending QSL cards). The result was the ARRL Amateur Radio Station Log Bookwhich is used more, probably, than any other log form in ham radio stations.

But we don't like it, and never have used it. We felt we would need a course in public accounting in order to do it justice -- and we are interested more in effective operating than in filling out the dozen or so column entries it contains.

So we muddle along with our own homemade log form (three columns), with which we feel we are doing the best we can to record what is really needed as a record of our operations. We do our utmost to satisfy the FCC requirements, but we let good operating take precedence over logging.

In recent months the FCC has shown a lively interest in revising some of the amateur rules, much to our displeasure. We suggest it would be better to work on the unwieldy, unnecessary and outdated logging

\* Able, for example, to pat yourself on the head with either hand while rubbing your stomach circularly with the other.

## NAMS

(Continued from page 18) Davidson and Mayfield open for fishing. If you're coming this way for a vacation about that time you'll also have Mt. Rainier and Olympic National Parks nearby.

A portable station will operate on 3970 kHz at the park to "talk in" any hams who feel unsure; possibly, too, 2-meter operation of a similar nature.

NAMS, in conclusion, today is livelier than ever (though a quick demise was forecast by some, when it started out). Once in a while 3970 kHz goes silent, if a control-station operator has to 'throw it up in the air" for some reason; but it never stays silent long.

"Where's NAMS?" is the query one soon hears. "Well, if there's no one in control, I'll take it!"

So come to the NAMS picnic, folks -- it'll be ham radio at its best!

## next month's issue

Marking two years of "Worldradio" next month's issue will feature a major story on Charlie Wells, K4SKI, and his trip to Liberia where he was honored for his role, as an amateur, in obtaining medicines for that country during an epidemic. Another highlight will be a story about Don Wallace, W6AM, titled "Sixty Years of Enthusiasm" by John Troster, W6ISQ. We'll have a story about how high school and college age U.S. hams gave inoculations and helped with health projects in South America. Details on how U.S. and Mexican hams teamed up to save a life will be presented. The story of Collins Radio will be told as well as tips on how to prevent the burglary of radio equipment as well as insur-

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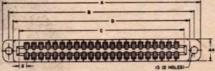
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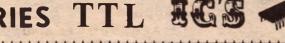
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## People Helping People

by Sister Mary, WA5VBM



Walt Huelsebusch, K8HBH, Cincinnati, Ohio.

One of the most interesting conversationalists of the Voices of IMRA is Walt Huelsebusch (pronounced: Hills-ah-bush). Born in Cincinnati, Ohio, in 1907, and living there all his life, Walt has had a very colorful career as an amateur and semi-probaseball player (first baseman and pitcher), newspaperman, and self-taught backwoodsman.

After graduation from Woodward High School in 1925, Walt played semi-professional baseball until he was 35 years old, in Kentucky, Ohio and Indiana, and even worked out with the Cincinnati Reds during the depression. While on the International Printers Union baseball team, he played exhibition games in Yankee Stadium, Wrigley Field, Forbes Field and many others. It was while playing a game in the Twin-Cities, Minnesota, that Walt met his XYI, Helen, who is a registered nurse.

In 1931 Walt went to work for the Cincinnati Times-Star Newspaper (now called the Cincinnati Post-Times-Star) and after spending 40 years working in the composing room (where all the type is set), Walt retired in 1972. During this 40-year stint at the newspaper, Walt fulfilled his military obligation during World War II, with three years in the Air Force working in a printing-related job in the Air Materiel Command at Wright Field, Dayton, Ohio.

With a name like Huelsebusch, do we have to indicate national origin? German, of course. Walt is 6-feet tall, weights 192 lbs. His eyes are brown and his hair is grey now. It used to be coal black. Walt and Helen Huelsebusch have been married for 30 years. They have one 27-year-old son, John, WA8EKT, who lives in Philadelphia, Pa.

Amateur radio has fascinated Walt since he was in the eighth-grade at school. At that time he built crystal sets and tube-type receivers, but never got his ticket until 1957, when he was 50 years old. He now has a Drake TR4-C and a Hy-gain beam. The beam is mounted on a 35-foot Rohn tower



which is on a hill, thus adding precious height. Walt also has 40 meter capabilities and a complete 6 meter set-up.

Besides radio, Walt has several other hobbies: Baseball, golf, fishing, hunting, and even some dog training (beagles). He also qualifies as a backwoodsman since he purchased a strip of land near Brainerd, Minnesota, about 12 years ago. There are about 100 feet of lake front on the property and Walt and his son, John, have cleared the land and built a cozy cabin with two bedrooms, living room, and kitchen. They have electricity and water, but no telephone service...so we often hear K8HBH/Ø while Walt spends his month-long vacation there each year.

Walt discovered the IMRA in 1969. It was a combination of the inaccessibility of his Brainerd, Minnesota cabin and the burglary of Walt's Cincinnati home while he was in Minnesota, which brought about his introduction to the members of the IMRA. Net Control Station at that time was Marie Sutter, WA8 LEI/WA8JLF, Cincinnati, Ohio, and she was able, via phone patches to Walt's brother in Cincinnati, to provide Walt with an assessment of his loss. Walt has returned the favor many times to the members of the IMRA by providing a steady outlet for Cincinnati traffic. It is a rare day that one cannot find him on the Net assisting Net Control Station or off frequency handling traffic.

Dr. John Schindler, W4RFA, assisted in two pieces of urgent traffic during April. One was an air evacuation of a gunshot victim from Honduras to Florida and the other involved helping to get a pump air-lifted to a 45-foot yacht, the IOLANA, off the coast of Haiti.

Shirley Bouquin, WA3RXQ, was out of commission for a few days because of an accident involving her eye. She is OK now and everything seems to be back in winking condition. Shirley takes Net Control every Saturday at 1800 GMT (don't forget the change in Net time).

Fr. Bob Conroy, WØOAK, had foot surgery to straighten out (literally) his ankle which had previously been set a-kilter. He was in St. Mary's Hospital in St. Louis for a few days, but he is back at St. Louis University High School, now...trying to teach the sophomores some geometry.

Sr. Alverna, WØZSW/WAØSFG, will be leaving Rochester, Minnesota, soon to assume a new assignment in Minneapolis. She hopes to take a rig along with her to keep in touch with IMRA.

Br. Bernard Frey, WA2IPM, is contemplating taking another trip to Central America. Some time later in the year he will be going to Honduras and Guatamala to survey the radio needs in those two countries for the Italian Franciscans of Immaculate Conception Province and then perhaps visit some of the other IMRA member stations in the area.

TI2 stations have been notably absent because of local power shortages in Costa Rica.

Electricity is being rationed in the city of San Jose from 7 a.m. to 7 p.m. most days. Pray for rain!

Leo Meyerson, WØGFQ, was among the music makers at the West-Gulf Division ARRL Convention in Dallas. As most Net members know, Leo is famous for his organ building and playing ability.

HR2 FP's all business trip to the states got snarled up when he was held in the hospital in St. Louis longer than he expected. He was there for overdue tests, but finally got a clean bill of health and proceeded on his journey which eventually took him to Fort Lauderdale and a short visit with the Pat Healys. (You just can't resist that swimming pool, can you Father Phil??)

Sr. Mary, WA5VBM, now has a phone and patch in her radio room. She will need help with the bill each month and she has only limited use of the phone due to a tight schedule, but the patch is available from 1800 to 1900 GMT and 2300 to 2330 GMT. This coincides with the IMRA Net and the Shriners' Nobility Net.

## NET CONTROL STATIONS FOR 000 GMT TRAFFIC NET SESSION:

MONDAY - Victor Anderson, WA2FLI
(Alternate: Joseph Wilson, W4DAV)
TUESDAY - Joseph Agostinelli, WB2ERC
(Alternate: Warren Mulhall, WA2BPV)
WEDNESDAY - HRIMM (Alternate: YSIACE)
THURSDAY - William Zack, WB2HDK
(Alternate: Frank Savat, WA5YOI)
FRIDAY - Warren Mulhall, WA2BPV
(Alternate: Frank Savat, WA5YOI)

Warren Mulhall, WA2BPV, just completed a couple of weeks schooling in Cleveland, Ohio for the company he works with. He reported into the IMRA Net March 25th to catch up on all the news.

Fr. Jude Bradley, WA2YNO, is looking for the IMRA Banners again. We know the whereabouts of one... who has the other two??? Please report to Fr. Jude or to Sr. Mary, WA5VBM. (What is this we hear about Father Jude going to Spain?? Vacation or business??)

Fr. Ed Schmidt, OA4AAN, Lima, Peru, has a new call...OA4SS. (for Super Star?)

Fr. Phil Pick, HR2FP, El Progresso, Honduras, was in the States for an "all-business" trip for two weeks beginning March 15. He came via Miami, Birmingham, St. Louis, to Bismarck.

Anita Oberholtzer, KZ5OA, will be in Sarasota, Florida, the 12th, 13th and 14th of April with the "Sweet Adelines" - a singing group from the Zone. After the singing competition, Anita will be going to New Jersey for a visit with her daughter and grandchildren.

Louis Forster, WA9CCB, Durand, Wisconsin, was in Honduras March 10 through 18, for the wedding of his son, Bob, to Mariantonia Palma Chavez, daughter of the Military Attache to Guatamala. The young couple honeymooned in Northern Honduras following the wedding and Louis spent a couple of days with Ernie Hinojosa, HRIMM, in Tegucigalpa.

Elmer Lunt, W4SFD, Pampano Beach, Florida, received his Advanced Class ticket in March after sweating out the results for seven weeks. Elmer is a sightless operator and works as a dispatcher for the local fire department.

# Two Hundred Meters and Down



by Clinton B. DeSoto

Courtesy of ARRL

Continued from last issue.

Part I - Pioneers

Chapter Three. . . Amateur Communication

... Even so, the number of worthwhile amateur stations on the air had, according to conservative observers, increased from perhaps one hundred and fifty in 1905 to five or six hundred. The number of small spark coils in use was several times that figure.

In early 1910 the first "Wireless Blue Book" of the Association appeared, dated 1909. It listed ninety U.S. amateur stations who were members of the Association, together with the call letters used, approximate wavelength in meters, and the spark length of the induction coil. Stations were listed in the following states: Massachusetts, New York, New Jersey, North Carolina, Missouri, California, Texas, Rhode Island, Oregon, Illinois. Ohio, Pennsylvania, Connecticut, Florida, Indiana, West Virginia, Montana, Washington, Minnesota, Wisconsin, and Maine. Wavelengths ranged from 32 to 950 meters. The average spark gaps were from 1/2 to 3 inches. Two stations had the exceptional length of 10 and 14 inches, respectively.

The second "Blue Book" appeared June 1, 1910. Meanwhile the number of copies of "Modern Electrics" printed had increased from the initial 2000 to 30,000. The Wireless Association of America continued to send out more and more gaudy membership certificates, and the cumulative numbers on the membership rolls mounted higher and higher. The "Electrician and Mechanic" continued to publish constructional information on current developments as before, apparently successfully, although no circulation figures are available. In the Middle West, "Popular Electricity", published in Chicago beginning in 1905, continued to supply its share of radio information as it had since 1908. D. Van Nostrand brought out A. P. Morgan's book, "Wireless Telegraph Construction for Amateurs", which quickly became the standard handbook for amateurs. The number of manufacturers offering amateur gear for sale grew steadily.

In the absence of legislation on the control of radio, some of the problems of administration were handled by the United States Navy, which had rapidly-developing radio interests. Amateurs were under no compulsion to observe the suggestions made by the Navy Department, yet many of them applied for "certificates of skill in radio communication" which were being issued in lieu of operator licenses (even commercial operators were not required to be licensed until the passage of the Wireless Ship Act on June 24, 1910). By September 30, 1910, the Navy Department had issued 477 of these certificates of pro-

ficiency, the Department of Commerce had issued 30, and a number had been granted by the War Department at Fort Omaha. While it is not known how many of these were issued to amateurs, the probability is that amateurs got the greater percentage of them.

Another significant development in amateur radio in 1910 was the beginning of the "wireless club" era. All over the country, in every large city, wireless associations were formed. The first of these on record is the Radio Club of Salt Lake City (Utah), founded in September, 1909. One of the earliest and most successful was the Wireless Association of Central California, formed at Fresno on May 27, 1910. Its membership reached 200 by 1913.

It was about this time that the first successful broadcasting was accomplished, addressed primarily to amateurs and to operators on ships at sea. The latter usually had little enough time to listen, so the amateurs got the benefit. The Jeffries-Johnson fight, in 1910, was one of the most notable of the pre-war broadcasts; amateur radio grew up with the million-dollar gate in prizefighting, but did not sag along with it.

By March, 1911, "Modern Electrics" was claiming a circulation of 52,000. Someone said there were ten thousand amateurs in the country, 40 per cent of whom had transmitters. On October 21, 1911, the Junior Wireless Club, Limited, which had more than doubled its membership, changed its name to the Radio Club of America. By the end of 1911 the membership had increased to twenty-five.

At about this time the ranges of amateur transmitters had increased to the point where the fellow with several kilowatts was sometimes heard three or four hundred miles in favorable sections of the country; after all, by 1912 the Panama station was being heard consistently in New York, the Middle West, and California. But the average radio amateur contented himself with moderate distances - five miles, for small sets, up to one hundred for the bigger fellows - and used his station for the most part in conversing with friends in other parts of the city.

One important activity was baiting the commercials. If a commercial station wanted to do any work, it was usually necessary to make a polite request of the local amateurs to stand by for a while. If the request was not polite, or if an amateur-commercial feud happened to exist, the amateurs did not stand by and the commercial did not work. Times without number a commercial would call an amateur station and tell him to shut up. Equally as often the reply would be, "Who the hell are you?" or "I've as much right to the air as you have". Selfish? Undoubtedly. And yet, the amateur did have equal right to the air with the commercial, from any legal or moral standpoint. He was seldom interrupting important traffic - contrary to accusations that have been made, there is no authoritative record that amateurs ever seriously interfered with any "SOS" or distress communication; on the contrary, there are instances when the constantly-watchful amateurs heard distress calls which were not picked up by the regular receiving points. And he was even then doing a useful work developing new and better radio equipment through experiment and use, and building the radio industry through his patronage of the manufacturers of parts and apparatus.

Scattered all over this broad land, these perhaps thoughtless but willing and eager enthusiasts were laying the foundation for the greatest industry that was to follow in their footsteps. Progress was always being made. There was ever something new, and after commercial concerns began to market radio equipment generally, progress was made far more rapidly than before. Discoveries began to multiply. Wireless apparatus, even the homemade kind, began to lose its crudeness. As the coherer and the microphone detector gave way to the crystal, with its increased selectivity and sensitivity, so the single-slide tuner displaced the straight aerial-to-ground hook-up and was itself displaced by the more flexible three-slide tuner. This, in turn, was superseded by the loose coupler, with the variable tuning condenser. Rumors about ways to utilize the sensitivity of the audion bulb, which needed no adjustment once filament and plate voltages had been set, began to circulate faster and faster.

The original simple spark transmitter was slowly being improved. Even the elementary spark coil or straight spark gap often had some form of antenna tuning. The more wealthy amateurs used high-voltage transformers. Power was limited by one's pocket-book, and some pocketbooks did not stop short of the five-kilowatt mark. The advent of the rotary spark gap was to begin a new era in spark transmission.

Wavelengths were to a certain extent accidental, but the aim was high. Unfortunates with limited antenna facilities had to be content with 250 or 300 meters; most of the big fellows used from 300 up - as likely as not around 1000. And in this band was where all the ship, and most of the government, and much of the commercial work occurred.

Obviously, some sort of regulation was essential. The tale of how that regulation came about is an heroic epic of legislative vagaries.

Chapter Four. . . The Coming of the Law

For the first twelve years of its existence amateur radio flourished without regulation. This lawless condition was not the result of lack of effort on the part of lawmakers. During the period from 1902 to 1912 twenty-eight bills dealing with radio were introduced in Congress. Only one of these, the Act of June 24, 1910, which made mandatory the carrying of apparatus and operators for radio communication on certain ocean steamers, was passed. Neither this statute nor the Act of July 23, 1912, amending it, had any direct bearing upon amateur matters.

Amateurs began to get into trouble with the government in 1909. In fairness to all concerned it must be conceded that they were plenty of trouble. Many of them had better and more powerful stations than those used by the Navy and commercial services, and their indifference to the pleas of these operators to cease operating when there was murderous interference was sublime. Their intolerance, which was the impersonal consequence of their obvious superiority, was equalled only by their contempt for the hapless commercial operators and their inadequate equipment. There were hundreds of high-powered amateur stations at that time. and with the Navy and commercial stations coming to only 15 or 20 per cent of the total. it was the amateur who dominated the air. (Continued in next issue of WORLDRADIO)

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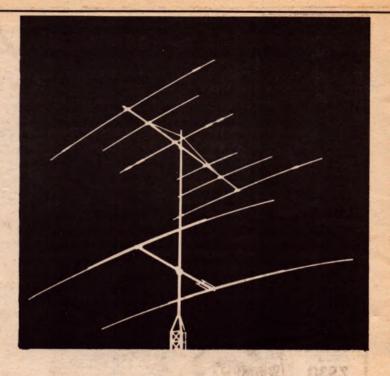
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Article contributions, advertising inquiries, comments and suggestions are invited.

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I read your paper avidly every time it comes out and think it's terrific. I marvel at the amount of material you collect on public service matters. I'm sure it does a lot of good for amateur radio ... George Hart, W1NJM, Communications Manager, ARRL

I enjoyed your editorial on Page 35 of the April issue. I have long opposed instigation of a caste system in amateur radio. I frequently agree with your comments on DX... John Attaway, K4IIF, DX Editor, CQ Magazine

It was very exciting to discover a group dedicated exclusively to the human side of ham radio, and stressing the use of this powerful tool to provide more of the people-to-people communication this world needs so badly. I take it as an indication that ham radio is ready for a significant movement in the direction of real communication...Cop Macdonald, WOORX, SSTV Editor, CQ Magazine

Have enjoyed the many worthwhile articles and feel you are performing a service to the Amateurs... Mae Hipp, K7QGO, President YLRL

A terrific publication... Dexter Anderson, K3KWJ

I look forward to receiving and reading each issue... Leon Stanley, W7KDB

I think Worldradio/News is one of the best things that has happened to ham radio and hope that you achieve a large world-wide coverage...John Thomas, K4NMT

Worldradio is beautiful ... Peter Penner, DJ6FR

Very nice newspaper...Din Psiloyannis, SV1DB

Every month I am waiting very eagerly for the Worldradio News because I like it so much. All the articles are very interesting and the spirit is very fine... Gunter Bormann, DK3YZ

The local club members who read your January edition were very impressed with your reporting of the Nicaragua earthquake... Ross Glover,

Your coverage of the Nicaragua earthquake was most timely ? d well done. The Dave Fraser Story (KH6BIH) was most touching and thought provoking... Ralph McCracken, W4YJK/KH6

Worldradio is certainly a wonderful news media for ham radio... Ray Davis Ferguson, WA1PRF

Once again I must tell you how much I am pleased with WORLDRADIO. Thanks again for a nice paper... Ralph "Andy" Anderson, KONL

You have found a big hole in hamdom and are doing a neat job of filling same...John Troster, W6ISQ

Worldradio/News is a great idea and I am much enthused about its treatment and concept... Francis Duffy, W9TV/7

It looks like what we need, bright fresh news about people... Richard Garlock, WA8SNR

You are doing a great job for a good cause...

James Freeman, WB2NHP

Reading Worldradio has made me feel proud to be counted among the fraternity of "hams" ... Harold Estok, W6JIP



# Newsback

## FCC

(Continued from page 2)
private information concerning character,
physical health, physical defects and FCC
examination test scores of applicants, and
disclosure was an unwarranted invasion of
personal privacy in violation of the rules and
the Public Information Act (Sections 0. 457(f)
and 5 U.S.C. Section 552 (b) (6)).

The Commission said that the United States Court of Appeals for the District of Columbia Circuit had ruled that Section (b) (6) of the Act required a balance involving "protection of an individual's private affairs from unnecessary public scrutiny" and "preservation of the public's right to governmental information". Getman vs. NLRB (1971). The Commission said that in weighing policy considerations favoring disclosure and non-disclosure as required by Section 0. 457 and the Court's opinion, the protection of an individual's right to privacy clearly outweighed Omega's right to the information.

Noting that Omega had emphasized it was seeking only information as to the names and addresses of the applicants, the Commission said it was unable to find any reasonable method to comply with such a request. It said the information is not maintained on any list or any forms which do not contain personal information, and to extract the information would place an "unreasonable administrative burden" on Commission personnel. It added that nothing in the Public Information Act or the rules obligates the Commission to compile a record that does not exist in order to satisfy a request for information.

Action by the Commission April 18, 1973 by Memorandum Opinion and Order. Commissioners Burch (Chairman), Reid, Wiley and Hooks, with Commissioner Johnson dissenting.

April 25, 1973

ACTIONS IN DOCKET CASES

By Chief Administrative Law Judge Arthur A. Gladstone on April 24:

SAN FRANCISCO, CALIF. (WILLIAM D. HELM) ORDER TO SHOW CAUSE WHY LICENSE FOR AMATEUR RADIO STATION WB6DMF/1 SHOULD NOT BE REVOKED AND SUSPENSION OF LICENSE. Ordered William D. Helm to respond, in writing, to certain interrogatories of Chief, Safety and Special Radio Services Bureau, and make such response available to counsel for the Commission in Washington, D. C., on or before May 4, 1973.

By Administrative Law Judge Chester F. Naumowicz, Jr. on April 23:

April 26, 1973

ACTION IN DOCKET CASE

By Chief Administrative Law Judge Arthur A. Gladstone on April 24:

April 27, 1973

ACTION IN DOCKET CASE

May 4, 1973

ACTION IN DOCKET CASE

REVOCATION OF KANSAS CITY, KANSAS, CITIZENS AND AMATEUR RADIO STATION LICENSES, PROPOSED IN INITIAL DECISION. Revocation of the licenses of Ronald G. Bozich, Kansas City, Kans., for Citizens Radio Station KBV-8379 and Amateur Radio Station WBØDCY, has been proposed in an Initial Decision by FCC Administrative Law Judge Chester F. Naumowicz, Jr.

By Commission order released October 31, 1972, Bozich was ordered to show cause why his licenses should not be revoked for various rule violations, allegations that he misrepresented to or concealed material facts from the Commission, and was lacking in candor.

Hearing was held on March 9, 1973 and the record closed on that date.

Judge Naumowicz said that the evidence presented by the Bureau, as well as Bozich's admissions, "clearly establishes" that Bozich was the operator of the station monitored by FCC engineers on the evening of July 23, 1971. He concluded that Bozich operated on a frequency not authorized for either service in violation of Sections 95. 41(d) and 97. 61(a); he failed to use properly assigned call letters to identify himself and the operator with whom he was communicating in violation of Sections 95. 95(c) and 97. 87(a); and that as a CB licensee, he failed to keep a current copy of Part 95 of the rules as part of his station records in violation of Section 95. 105.

Judge Naumowicz pointed out that Bozich was also accused of using his transmitter to carry on hobby type communications—forbidden by the CB rules, but authorized by the Amateur rules. Since he did not use either CB frequencies or call letters, there is no "warrant for assuming that he was functioning

as a CB operator rather than as an Amateur operator, "Judge Naumowicz said, concluding that violations of Section 95.83 (prohibited uses of Citizens radio stations), and 95.91 (duration of transmissions) had not been established.

Judge Naumowicz, stating that the rule violations which have been proven indicate that Bozich 'displayed total contempt for the very concept of regulated radio communication,' concluded that on the basis of the proven rule violations alone, the public interest requires revocation of Bozich's licenses.

Judge Naumowicz said that FCC engineers did not inspect Bozich's amateur station on the date of the monitoring in order to avoid alerting other stations located in the area of investigation, but conducted an inspection two days later--on July 25, 1971. In a letter relating to the amateur violations, Bozich claimed that his transmitter would operate "on 6 meters only," Judge Naumowicz said, yet the record establishes that at the time of the inspection his transmitter contained a 27.305 MHz crystal. Judge Naumowicz concluded that Bozich's assertion "can only be regarded as a misrepresentation, " and that it "was plainly made for the purpose of deceiving the Commission." The Judge also concluded that Bozich had displayed a lack of candor because in his letter relating to the CB violations, Bozich had implied he could not be guilty because he was at work at the time of the violations, but later admitted that he was in fact at home.

Having concluded that Bozich deliberately misled and deceived the Commission in his responses to the Notices of Violation, Judge Naumowicz said that although Bozich expressed contrition after the facts had been convincingly demonstrated at the hearing, "it is further concluded that . . . he has failed to show cause why his licenses should not be revoked".

ACTION IN DOCKET CASE

By Chief Administrative Law Judge Arthur A. Gladstone on April 27:

May 11, 1973

RECIPROCAL LICENSING PRIVILEGES FOR ECUADOREAN AMATEUR RADIO OPERATORS LICENSED IN THE GUAYAQUIL AREA (HC 2) On the basis of the assessment made by our Embassy at Quito, Ecuador that corrective measures have been taken which improves the Ecuadorian licensing procedures, the Commission will resume, effective at once, granting permits to holders of Ecuadorian amateur licenses issued by the Guayaquil Radio Club.



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For Sale: Heathkit AT-1 XMTR, CW, 4 bands, 6L6 final, dependable. WB6PAV, 19509 Flavia Avenue, Torrance, CA 90503. 370-4212.

MUST SELL--GOING TO SCHOOL! Heathkit SB-301 receiver \$170. SB-101 transceiver, AC supply, mobile mount, PTT mike: \$285. Both have 400 Hz, 2.1 kHz filters. Best offer. WB6SCM, 656 High St., Santa Cruz, CA 95060.

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