

The Worldradio News

Vol. IV, No. 1

July 1974

50¢

Your license topic at FCC-ARRL meeting

The May 10th meeting was the result of informal discussions between ARRL President Harry Dannals, W2TUK, and A. Prose Walker (W4BW) Chief, Amateur and Citizens Division, Federal Communications Commission, some dating back a year.

It lasted the full day, with an agenda rather well covering principal items of current amateur and ARRL interest. FCC Chairman Richard E. Wiley welcomed the League representatives and remained for part of the session.

Of the numerous petitions for amateur rules changes on file, some 43 deal with basic license matters. This has prompted an extensive study into the present structure, and a number of possibilities are being considered for an eventual FCC proposal. In current favor is a plan which might be called the "dual-ladder" system, one mainly HF and the other VHF. An "expert" classification at the top would combine privileges of both. One route would be similar to the present - Novice through General through Advanced, with various frequency privileges below 29 MHz. The second would be the VHF route, starting with a "communicator" no-code license, then moving up through Technician and a higher class such as "experimenter".

Separate licenses would be required for the two areas of operation (HF and VHF), although present licensees would probably be "grandfathered" in some fashion.

It is likely that a Notice of Proposed Rule Making will be issued before the end of this year, indicating the Commission's conclusions on the basic structure, along with a Notice of Inquiry soliciting comment on operator requirements and associated privileges for each proposed class, as well as procedures in transition to a new system.

A most extensive presentation was made by Prose Walker concerning the forthcoming (1979) World Administrative Radio Conference with suggestions for ARRL/IARU planning. He indicated that the special government committee studying the amateur service was seeking additional frequency space, such as expansion of 40 meters, and new band segments at 10, 18 and 24 MHz (please turn to page 47)

Possible repeater link-up

ACTION IN DOCKET CASE

Report No. 9520
June 6, 1974

Rule Amendment to Permit Linking Of Amateur Repeater Stations Proposed by FCC (Docket 20073). Amendment of Part 97 of the rules to permit linking of amateur repeater stations has been proposed in a rulemaking notice by the Commission. The action was taken in response to a petition (RM-2349) by the American Radio Relay League (ARRL) requesting deletion of Section 97.89(c) of the rules which prohibits more than two repeater stations being operated in tandem -- one station repeating the transmission of the other -- except for emergency operations. The ARRL claimed that some amateur radio organizations planning to develop networks of repeater stations for use in times of disasters were unwilling to implement their plans unless the networks could also be

used for other amateur operations; that in sparsely populated areas of the country, linked repeater stations could provide more reliable communications that could operate in the high frequency amateur bands; and that in the more densely populated areas, linking of repeater stations was neither necessary nor desired by amateurs, and the privilege of linking would be self-limiting. Since amateurs in more densely populated areas apparently do not desire to link repeater stations and since spectrum conservation is not as critical in the less densely populated areas as elsewhere, the Commission agreed with the ARRL that the prohibition was unnecessary. Interested persons may file comments by September 18, 1974, and reply comments by October 2, 1974. (Action by the Commission June 5, 1974, by Notice of Proposed Rule Making. Commissioners Wiley (Chairman), Lee, Reid and Hooks, with Commissioner Quello not participating.)

Amateur Radio Week proclaimed

STATE OF WASHINGTON

Office of the Governor

A STATEMENT BY THE GOVERNOR

Radio Amateur operations have provided numerous services to the public throughout many years as non-commercial volunteers. During emergencies they have rendered their services to bridge the gaps where normal communication media has been severed thereby facilitating aid and assistance to a disaster area.

The Radio Amateurs, using their privately owned and operated equipment, have proven their ability to contribute to the advancement of the field of Arts and Sciences in Radio Communications. Daily communications with Radio Amateurs of other nations have enhanced international good will. In readiness for any possible war-caused emergencies the Radio Amateurs maintain close liaison with Civil Defense officials through the Radio Amateur Civil Emergency Service to provide their services as may be needed.

During peace time they maintain a daily network of communications throughout the nation and function as the official emergency communication arm of the American Red Cross during times of disaster.

Each year the Radio Amateurs of the 50 states participate in a weekend of simulated emergency communications. During Expo '74 Washington State amateurs will operate their stations in activity designed to enhance the relationship between the state of Washington and other states and promote international good will through the communication of friendship provided by amateur radio.

Now, therefore, I, Daniel J. Evans, Governor of the State of Washington, do hereby designate June 16 - 23, 1974 as

WASHINGTON STATE AMATEUR RADIO WEEK

and call upon all citizens to join in saluting the amateur operators in expressing our grateful appreciation for the unselfish service rendered by these private individuals who contribute without remuneration to the welfare of our state and nation. both in time of emergency and in the expansion of the existing reservoir of trained operators, technicians and electronic experts.

Daniel J. Evans
Governor
Officials have announced a reciprocal licensing agreement has been reached between Canada and Honduras.



Senator Goldwater, K7UGA, "Amateur of the Year"

DAYTON HAMVENTION HONORS GOLDWATER

by Jack T. Shepherd, W8OMY

America's best known amateur radio operator was honored by being selected "Radio Amateur of the Year" at the Dayton Hamvention. The recipient was Republican Sen. Barry Goldwater, K7UGA-K3UIG, of Scottsdale, Ariz.

Goldwater was cited "in view of his many outstanding contributions to the advancement of Amateur Radio, performance of meritorious public service, and humanitarian assistance to fellow radio amateurs." The award was made by the Dayton Amateur Radio Association and presented by Judge Stan Phillips of the Common Pleas Court.

The Senator was first licensed in 1923 as 6BPI, and is one of an exclusive group of radio amateurs who have been licensed more than 50 years. While still a boy, he built a spark gap transmitter, and as a young man worked in a radio station. His interests in amateur radio has never ceased since that time. Goldwater is a member of the Old Old Timer's Club, immediate past president of the Quarter Century Wireless Association, and a prominent member of the American Radio Relay League.

In the Senate he sponsored the Goldwater Reciprocal Licensing Bill, which permits radio amateurs of other countries to operate their amateur stations while in this country, and helps obtain the same privilege for United States amateurs in foreign countries.

He has convinced many young persons to take up amateur radio as a hobby - particularly those young

persons who happen to be handicapped.

During the Viet-Nam War he equipped an elaborate amateur radio station. This station, operated as part of the Military Affiliate Radio System (MARS), provided over 150,000 phone patches between servicemen overseas and their families in the United States. This station was manned daily by members of the local radio club in Scottsdale. The Senator's interest in military amateur radio is well known - he is a retired major general in the U. S. Air Force.

Goldwater is active on 20 meter phone, and many amateurs present recalled radio contacts with the senator as he toured the Hamvention. In addition to his stations in Arizona and Washington, Goldwater has amateur radio installations in his car, his boat and his plane. In spite of the many demands on his time, he is still able to make contacts with amateurs all over the world.

Although the senator was scheduled as the main speaker of the evening he was not expecting the award, and said that he was "deeply honored" to receive it. In his prepared remarks he stressed the public service aspect of amateur radio, and complimented local amateurs for their fine work during the recent Xenia tornado.

He urged amateurs to get more young people in their ranks, and cited ways in which amateurs could help others - particularly the handicapped. "I am very proud to be a radio amateur," Goldwater concluded.

("Dispatch" Columbus, OH)

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ARRL



Events



around the world

SAFETY AND SPECIAL ACTIONS

By Chief, Safety and Special Radio Services Bureau on:

May 24 - Dismissed petitions by Paul Williams and Albert E. Coolen for amendment of Section 97.25(c) of the Amateur Radio Service Rules to grant credit for certain examination elements to amateur Extra Class applicants license prior to December 1941 (RM-2105, RM3376) (By Order)

The Commission, by its Safety and Special Radio Services Bureau, on the dates shown, took the following actions:

May 8 - Paul H. Sherman, Owosso, MI, licensee of Amateur radio station WB8-ETB. Ordered to show cause why the license should not be revoked for repeated violation of Section 1.89 of the rules by failing to reply to official communications (SS-619-74).

May 14 - Larry J. Ormsby, Metairie, LA, licensee of Amateur radio station WA5-KBZ. Dismissed proceeding on order to show cause (SS-480-73).

May 21 - Wilbur G. Culpepper, Jr., Portsmouth, VA, licensee of Amateur radio station WA4WRZ. Set aside order to show cause and terminated the proceeding (SS-614-74).

The Commission, by its Safety and Special Radio Services Bureau, on the dates shown, ordered the following licensees to show cause why their licenses should not be revoked for repeated violation of Section 1.89 of the rules by failing to reply to official communications:

May 21 - Romuald A. Stone, Pittston, Pa, licensee of Amateur radio station WA3-SQT (SS-665-74)

May 15 - John M. Atchley, Kearney, MO, licensee of Amateur radio station WB6-FDO/6 (SS-521-74)

Terminated the hearings and certified to the Commission proceedings on orders to show cause why the licenses should not be revoked:

Breckenridge S. Smith, Somerset, KY, licensee of Amateur radio station K4CHE (SS-530-74)

James L. Summers, Baton Rouge, LA, licensee of Amateur radio station WB5CIC (SS-461-74) (5/23/74)

May 29 - John A. Long, Fresno, CA, licensee of Amateur radio station K6VLG (SS-683-74)

Acknowledged receipt of payment for monetary forfeiture incurred under Section 510 of the Communications by the following:

May 28 - 1974 - Kelly W. Farthing, Corales, NM, \$25, licensee of Amateur radio station WN5HJC.

Terminated the proceedings on orders to show cause and certified them to the Commission:

Geoffrey L. Morse, Seattle, WA, licensee of Amateur radio station K7HOZ (SS-466-74) (Action 5/3/74)

Identification

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16 May 1974

All amateurs who took part in providing communications following the tornadoes in the Midwest during the first of April, and especially those in leadership roles, are urged to see that their activities are reported promptly to ARRL. The material is needed to chronicle amateur radio public service achievements and to provide information for QST coverage on the subject. Headquarters would also like the opportunity to view any films showing amateurs providing communications during the disaster for possible duplication for the ARRL film library.

23 May 1974

Attention DXers. Effective June 1, 1974 both Tibet and Zanzibar will be deleted from the ARRL Countries List. Contacts made June 1 and after with Tibet will be creditable toward the China, BY, listing, while contacts with Zanzibar will be creditable toward Tanzania, 5H3. The deletions will be reflected in the Honor Roll totals for the September listing. As of June 1, this will make a maximum possible total of 355 with a possible total of 35 deletions. June submissions for the Honor Roll can, therefore, be made on the basis of a minimum undeleted total of 311. Effective July 1, endorsement stickers will be issued in increments of 5 above the 300 level. Further details page 95 June QST.

30 May 1974

Though FCC figures show that in fiscal 1973 less than one percent of radio frequency interference complaints were actually due to amateur transmissions, such interference still is an important source of tension between an amateur and his neighbors. A new ARRL FRI Task Group has been appointed by ARRL President Dannels to coordinate League efforts toward legislation, as for instance HR 3516, toward technical measures and toward consumer education related to radio frequency interference. ARRL vice-president Vic Clark, W4KFC is chairman. Ted Cohen, W4UMF and Lew McCoy, W1ICP are members. Atlantic Director Harry McConaghy, W3SW, is board liaison. The group expects to produce recommendations for League action by the time of the July Board of Directors meeting.

6 June 1974

FCC has adopted an eighteen month experiment under which the Civil Service Commission will supervise commercial and amateur exams. About a hundred cities are involved in the Anchorage, Chicago, Detroit, Honolulu and Seattle FCC districts. The program begins in July and appointments must be made through the FCC districts. New Conditional licenses based on distance will not be allowed within 175 miles of cities affected by this trial. Sending and receiving tests will use cassette recordings with all grading by FCC personnel. Applicants passing either code or written test but failing the other will get credit toward the next attempted exam in the Anchorage, Chicago, Detroit, Honolulu and Seattle districts only. Complete information has been sent to all League directors, vice and assistant directors and to all ARRL affiliated clubs in the affected states.

To assist educators and amateurs in the preparation of classroom OSCAR activities, "Space Science Involvement" a complete curriculum supplement is available. Write to Bill Dunkerley, ARRL

DXPO '74

Plans are now firming up for a fabulous DX Convention. Plans call for a date of September 28, 1974 at Reston, Virginia. For information, write to chairman Stuart Meyer, W2GHK/4, 2417 Newton Street, Vienna, Va. 22180. Ask to be put on the mailing list for final details.

The Tri-Counties Amateur Radio Council (TRICAR'S) will be holding their 2nd annual picnic barbeque at the Union Oil Orcutt Picnic Grounds just south of Santa Maria on Saturday July 27. Featured will be the Santa Maria style Beef Barbeque first introduced to hams on a large scale at the ARRL Santa Maria South West Convention several years ago, and was again featured at TRICAR'S first Annual picnic last year. There will be no charge for swap tables. Talk-in frequencies are 146.94 FM, 146.52 FM and 3935 SSB. Overnight camping is not available, however for those coming from the North, excellent facilities are available in Santo Mario about 20 minutes away; from the South, there are facilities in Buellton about 30 minutes away. Turn off from Highway 101 will be plainly marked. Cost: \$3.50 for adults. There will be a door prize for pre-registrants prior to July 20. For ticket information contact Edith Barnnes, 943 Anchor St., Morro Bay 93442, WB6YCH, or check in any Wednesday on the Santa Barbara Section AREC Net on 3935 kHz at 2000 Pacific Time.

Sierra Nevada Hamfest will be held in Idlewild Park, Reno, Nevada, Saturday, August 10, 1974. Pre-registration \$10; after August 1, \$11. Western style barbeque dinner, and a lot of prizes to be given away. Free beer and soft drinks. For information, contact Nevada Amateur Radio Association, P. O. Box 2534, Reno, Nevada 89502.

PLAN WAY AHEAD

Mix a lot of pleasure with your fun. Combine a vacation in Canada's beautiful rocky mountains with your 1975 ham convention plans. The Calgary Amateur Radio association will host an international meeting on Friday, Saturday and Sunday, August 1, 2, and 3, 1975 - Calgary's centennial year.

It will include a Canadian division ARRL meeting, a CLARA meeting, and other groups not yet confirmed.

In addition to the technical meetings, surprises, exhibits and banquet, there will be several on-the-air contests. For the family there will be a full two days program for the ladies and for all children (3 age groups).

Watch for additional information in "Worldradio", or write 75CONVEN, Box 592, Calgary, Alberta.

1974 Pacific Division Convention and Greater Bay Area Hamfest. October 26, 27, 28, at the Royal Coach Motor Hotel, San Mateo, CA. Keynote speaker is A. Prose Walker, W4BW, Chief Amateur and Citizens Division, FCC. Other speakers include: Bill Orr, W6SAI, Antennas and Propagation; Ed Peck, K6AN, Towers, Zoning and the Law; Chuck Townes, K6LFH, Sister City International Program; Marion Henson, W6NKR, State RACES Director, Amateur Disaster Conference; Art Fury, WA6JLJ, Integrated Circuits and others. There will also be: main banquet, contests, prizes, exhibits, swap tables, Ladies program, ARRL forum and more including an OSCAR-AMSAT space symposium.



JHIWDX, JHIWIX, JHIWKS, JHIKEO, JHIVOE

VISIT TO JAPAN

by Glen Yabuno, WN6MUL

My trip to Japan was very enjoyable. I had the privilege to meet one of the finest Hams I've ever known, Mr. Taroh Yagi, JHIWIX. Mr. Yagi has been licensed since 1924. In the December issue of QST of 1934, JHIWIX, then J2GX, was shown with his 'modern' equipment. Taroh was very helpful in helping me select a suitable transceiver, the FTdx401.

JHIWIX can usually be heard on 15 meters and he is very helpful to Novices in giving them a contact. He has very often got up at four or five in the morning just to be able to contact other hams at a time convenient to them. That's the kind of great ham he really is. He has made over 11,000 contacts in the last 4 years. Before I went to Japan, Taroh went to the trouble of getting all the literature on the various equipment for me. He also found an English translation of the instructions for the FTdx401 when I found out I had a Japanese instruction book. Most of the shops I saw were not too big but had a good stock of radio gear and lots of employees.



JHIWIX, his XYL, myself, son of JHIWIX, my mother, my aunt

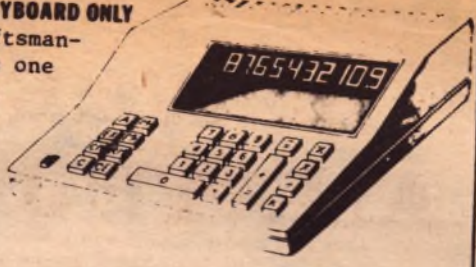


de Gil Baker, W5QPX

In the picture above (left) is Mike Friedrich, DJ5TH, visiting at my QTH. Mike was on a trip across the United States. He works for IBM in Germany and studied at Cornell on a scholarship. I'd like to see a "Rogues Gallery" in "The Worldradio News" of pics of "gringos" at DX QTHs and DX at "gringo" QTHs. Maybe it's time to bring back the International Ham-Hop Club.


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74H22 .35	7490 1.20
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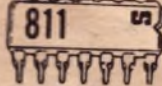
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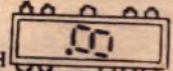
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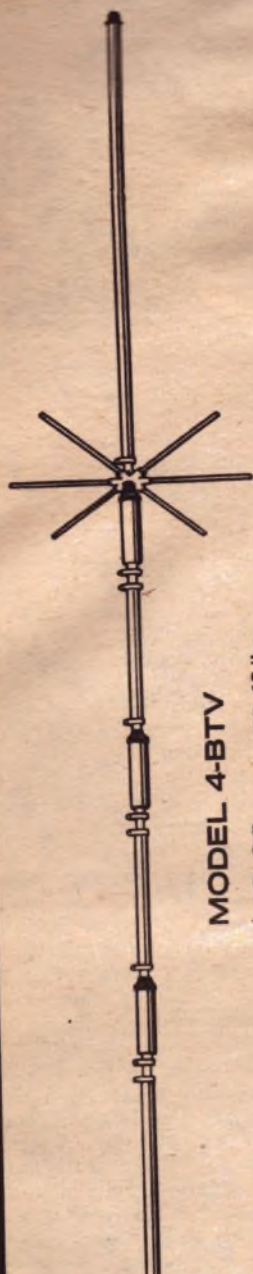
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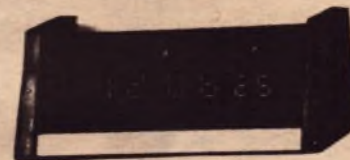


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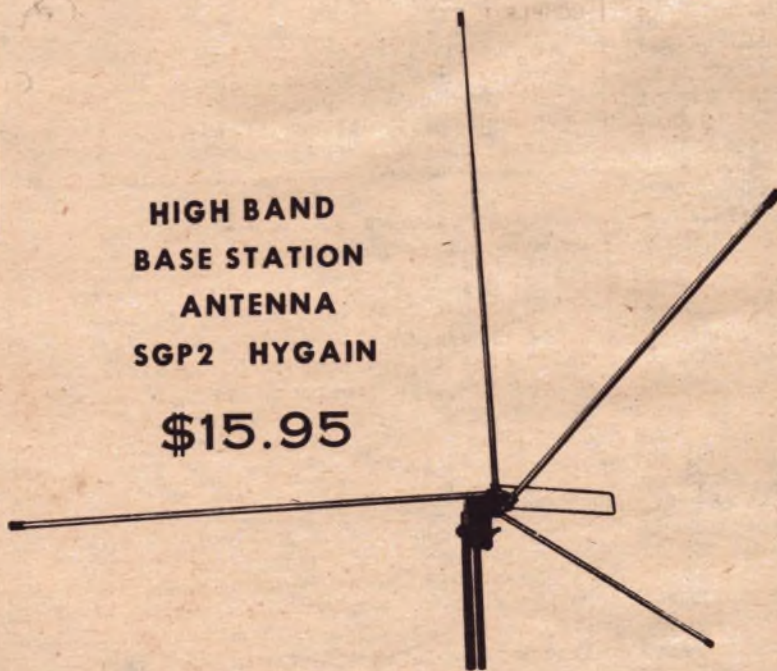
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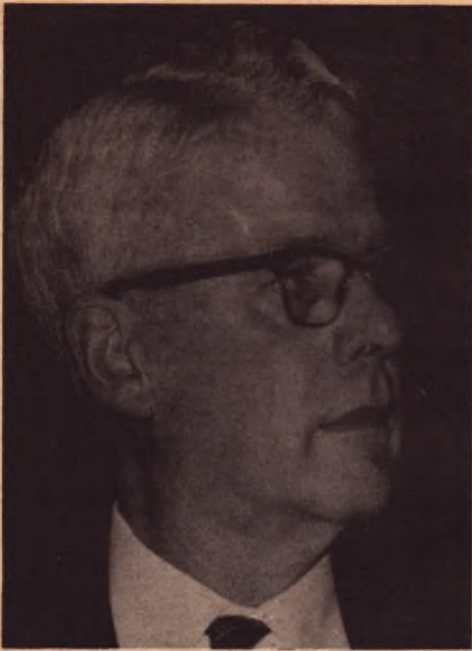
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DX FORUM

by Norm Brooks, K6FO

"Don't do away with the PHONE DXCC award!"

That was the sentiment of the Northern California and Southern California DX clubs, as they met in a joint conference at Fresno, CA April 27 and 28, 1974. It was the 25th annual get-together for these two famous DX clubs, and the event was fitting of a silver anniversary.

THE 1979 I T U CONFERENCE

Jay Holliday, W6EJJ, moderated the DX forum. He introduced Noel Eaton, VE3CJ, ARRL Vice-President and President of IARU to carry on the first portion of the program.

Eaton pointed out that the only reason for the existence of the International Amateur Radio Union is to preserve the privileges of Amateur Radio around the world. As to the 1979 International Telecommunications Union conference, this is the "big one". "If we don't cut it this time we're in trouble". Eaton painted a word picture of how the conference operates. Ten years ago there were 85-90 countries at the ITU conference. Since then, there has been a tremendous change in the make-up of the membership. There are now over 145 countries, the new ones being the new and developing countries around the world. Most, but not all of the new ones have no radio amateurs, and are not interested in Amateur Radio at all. Yet the conference operates on a "one man - one vote" principle.

Amateur Radio holds 13% of the frequencies from 3 to 30 MHz. When anyone wants more frequencies, guess where they look. These disinterested countries see us as a non-essential service, and we will need all the friends we can get to hang on to the frequencies we have. Only governments can make proposals at the conference, and vote on them. The IARU is only there as an observer. It cannot speak unless it is asked to. We must do our homework before the conference, and 3 to 5 years lead time is not too much. Eaton said he is proud that Canada, at the last conference, made the proposals to preserve the amateur frequencies as they are now.

The home country national society is the one to work on the government in advance. That's the RSBG in Great Britain, ARRL in USA, etc.

The way DX'ers behave in foreign countries has a lot to do with how those countries feel about Amateur Radio. Eaton told of a horrible example where a Canadian, licensed to operate in a foreign country overstepped the bounds of his license, and left ill feelings behind. As a result, the ITU Delegate from that country has already stated he will not vote in favor of Amateur Radio.

We must remember that operating Amateur Radio in a foreign country is "interfering with that country's foreign affairs."

DX convention

Anyone possessing inside information about the developing countries, and how they might vote at the Conference, is asked to get in touch with Eaton.

ARRL DX ADVISORY COMMITTEE

Bob Vallio, W6RGG, DX advisory Committee representative moderated this portion of the Forum. The DX Advisory Committee's objective is to make DX more palatable and pleasing for those who choose to chase it. Bob pointed out that correspondence to any member of the committee in care of ARRL Headquarters in Newington is also sent to other members of the Committee. In that way all members have the same input from the membership.

The Committee is currently studying country criteria. They solicit ideas. Send in your thoughts to the DX Advisory Committee in care of ARRL Headquarters.

Bob told about the recent Committee vote on doing away with the Phone DXCC certificate. After the committee voted, they received a great deal of correspondence, including telegrams, commenting on the vote. The greatest number were in line with the Committee vote, and the smallest number wanted to keep the Phone DXCC the way it is. Write the Committee if you have any more comments on this. The ARRL Board wants input before its July meeting.

Other DX items the Committee is studying are Rule 9, and 5 Band DXCC. Bob pointed out that under Rule 9, a W6 can move from San Diego to near the Oregon border and retain his DXCC status. If a W1 moved the same distance, he would cross several state boundaries and lose his retention of DXCC credit. Also, the Committee is formulating a recommendation to the Board as to how long 5 Band DXCC listings should appear in QST. If you have any thoughts on these two items, write to the Committee c/o ARRL.

Here is a new idea the Committee is pondering: Give an amateur DXCC credit at his home station, when that member goes on a DXpedition. This will avoid statements like "I won't go to Clipperton, if I couldn't be home to work it." This brought laughter from the crowd.

Bob closed his portion of the Forum by calling for a vote. Prior to the show of hands, Don Wallace, W6AM, made a plea for the retention of the Phone award. He said the Phone award had "P. R." value. He said visitors to his shack were more impressed when he says he worked 351 countries on phone, as most visitors do not appreciate CW operation.

The vote was as follows: No Change 38; Have one DXCC award only (eliminate the Phone DXCC) 22; Have three separate awards - Phone, CW, and Mixed 30.

DIFFICULTIES IN HIMALAYA

by Clyde Schoenfeld, W6KNH

My wife and I visited with Socrates Coutroubis, SV1AE, in Athens, for eight days. He is an extremely intelligent and knowledgeable amateur and we spent some time talking about Mt. Athos and the possibility of DXpeditions to that rare spot.

As he explained it, unfortunately in Greece the amateurs are split into two clubs. One group is not interested in the DXpedition idea, the other is so inclined. The prime mover in the pro-DX faction is Constantine Psiloyannes, SV1DB. The authorities are unhappy about the last expedition to Mt. Athos and don't want non-licensed foreigners operating equipment, even if there are local amateurs on hand. This problem is the same as it is in many countries. Marti Laine, OH2BH, is going to have quite a hurdle to overcome in order to operate there and I certainly hope he can make it.

I thought you would be interested in what we went through trying to operate our DXpedition in either Sikkim or Bhutan. We had been told we could expect a rough time in trying to pass through the "no man's land" separating those countries from India. A special permit called an "Inter-Line Permit" can be issued, which you present to the security forces. Applying to the Indian Consul in San Francisco we were told we could obtain the needed permit in 8 weeks. However, the permit did not arrive in time for our departure. We arrived in New Delhi at 5:00 a. m. along with two other Boeing 747's and were part of 1,000 people screaming to be passed by two customs and immigration officials!

After clearance we were met by my good friend Venkat, VU2KV. He didn't feel there would be any problem getting the needed permits. We obtained our VU2 licenses and operated in three Indian cities. Permit finally came thru for AC3 only and apprehension set in.

Since we had a valid license for Bhutan as AS5KV, we went to see the Bhutan Ambassador and also met with his First Secretary, who had been at the United Nations in New York. We were informed no foreigners were being allowed into Bhutan as there was room for only 125 visitors in the capitol and presently they were preparing for the coronation of the new king. All the rooms were being refurbished. To make the point, we were told that even Mrs. Galbraith, wife of Kenneth Galbraith, the former Ambassador to India, was refused entry.

We went to see our present Ambassador to India and were introduced to the Embassy's "Bhutan expert" who couldn't get in either! On our behalf the Greek Ambassador to India, Basil Vitsaxis, VU2AIK, spoke to the Foreign Minister of India. It

boiled down to - Indians can pass through but not foreigners. And so went many days of frustration.

To compound the problem, the Indian airlines were out on strike, the railroads were on strike and gasoline rationing was down to 4 liters or 1.05 gallons per week. We even talked to a camel herder about taking us in.

With the entry permit for AC3 in hand our thoughts turned that way.

One would have thought Sikkim would have been easier to operate from with AC3PT being the ruler of the country. In as much as India handles all the communications and foreign affairs responsibilities for Sikkim, we again visited Indian ministries. Days passed and we were running out of time. We wanted to go to Father Moran's (9N1MM) for Christmas Mass, so left Delhi for Kathmondu.

Nepal is a fantastic country. Father Moran is the greatest man I have been privileged to meet in my lifetime. He is revered and respected throughout Asia in a manner that is indescribable. Father Moran has spent more than 20 years in India and now 22 years in Nepal. At the mention of his name eyes light up and faces smile. He deserves every accolade. We spent eight days in Nepal. Being there was a glorious experience.

Then back to Calcutta. Still no word. If I have any advice it is "ultra patience is needed in Asia." If you don't have it, you won't get very far. Even with it you may fail. Telexes, letters proved no avail.

While we were waiting for license to operate in AC3 we toured more of Asia. In Ceylon we spent some time with Paddy Gunasekera, 4S7PB. Watched him run SEANET. A more efficient operator you'll never see. Paddy sends his warm regards to all at this convention.

We went on to Singapore, Malaysia and Thailand. Still no word. Then came a curt and undeniable NO regarding Sikkim. Where else to go? We were told that we could not operate from Bangladesh unless one is with the United Nations, or there performing a service for the government. The story on Burma was - we would not be allowed to operate there because of problems in that country. There is no amateur operation in Burma and will probably not be any for some time.

Ultimately things resolved to this: A valid license for Bhutan but no entry papers - Entry papers for AC3 Sikkim but no license to operate! We were 180° out of phase! So our hopes for a DXpedition to a rare spot were dashed.

But we haven't given up on AC3 or AS5KV and will keep you posted.

(please turn to page eight)



John Cashen, W6KNC

In December 1972, Gene Seymour, W6GQU, and Mike Kehr, K6GUY, put together a very fine operation on Fanning Island. It was a neat clean, one-week expedition to a badly needed Pacific Island.

They came back and within weeks were planning their next DXpedition. As they looked around the Pacific they had three main requirements in looking for a place to go. 1. It had to be rare enough to be of interest for a DXpedition. 2. We had to be able to get to the island and get away from it in the period of a normal two-week summer vacation from work. (and that's a tall order) and finally, 3. The one thing they regretted from Fanning was the combination of the DX and medical activity. The medical research, and running the medical clinic, gave them virtually no time to enjoy the island. So they wanted to take more people along this time.

Tongareva was located after much searching for a candidate which would fill the requirements.

The two-week requirement meant we could not sail to our DXpedition but instead would have to fly in. Tongareva has a fine 5,000 foot blacktop airstrip which is maintained by the island population. It is the only airstrip in that part of the Pacific, the northern Cook or Manahiki island group. The closest air strip to Tongareva is more than 600 miles away in the Southern Cook islands on the Island of Aitutaki.

We collected a team to put the DXpedition together, myself, of course, Pete Grabosky, WB6OOL, (who's in the audience) Pete Bissonnette, KH6HIF, and Phil Williams, 5WIAU.

The team of six people would fly in two flights to this island. We were helped by the other two members of the DXpedition who weren't going along, Dave Earnest, KS6DY, and Barry Dundas, ZK1CD.

The expedition was to have two separate moves to Aitutaki, which was our staging point. First was to be by commercial airliner.

We would fly in on the one flight a week that goes there, a Polynesian Airline flight. Others of us would go in by charter.

John showed slides of Pago Pago. His stop on the way to the DXpedition waited four days for the charter pilot... the plane was

a 17-year-old Beechcraft Bonanza. "Dave Earnest was our host for four days."

Slides of the Pacific scenes were shown.

Barry Dundas, ZK1CD, a Canadian, works for the New Zealand government. He just recently left Rarotonga after a stay of several years. He is an ionospheric scientist. His next post will be in Melbourne.

Without Barry the DXpedition would have been totally impossible. He laid out well over \$600 American to buy supplies, gasoline, food, batteries, all the expendables we would need on Tongareva. They were sent to the island two months before the expedition started.

We stayed with Barry for a night and met with representatives of the government and the press. Our expedition had quite a bit of advance notice. We were to perform medical research on Tongareva, and frankly, that was the only reason we were given permission to go to the island. It was because we were doing serious scientific work. No visitors are allowed to the island.

Aitutaki is truly one of the most beautiful islands in the Pacific. There were a thousand GI's on the island during WW II and they built the very fine airstrip. Landing there was the first time all members of the DXpedition had ever met in person.

At the Aitutaki hotel, the QTH of ZK1AI, the price was ten dollars per person, per week. It is truly an island paradise.

Here's our pilot, "Flying Eddie", Colonel Eddie Rast, 67 years old, retired living on Aitutaki, married to a Tahitian movie queen. He was a colonel in the U.S. Army, was at one time the commander of the Special Forces in the Far East, was the youngest colonel in 1942 in the European theater of operations.

He was as excited about the DXpedition as we were. He had never flown to Tongareva before.

There are no navigational aids of any sort in this part of the Pacific. LORAN stops at Johnston Island. The flight to Tongareva would require dead reckoning. Our airplane had 1300 miles of fuel. Tongareva was 600 miles away. We would have virtually no search time for an island that was only ten miles across. We could see maybe twenty-five miles at the horizon at our flight altitude of 10,000 feet.

It was just too risky. A more practical flight would be to fly instead due north to Manahiki, 500 miles away. We would have twenty minutes, if we couldn't find Manahiki we would return to Aitutaki. If we did find Manahiki, we could set a new course for Tongareva, 200 miles away, with virtual certainty of finding Tongareva. Of course, if we decided to do that we had passed the point of no return. Eddie's plane was the only plane in the area that could have made the flight.

At this time the expedition was five days late. It was now July 3rd. Mike K6GUY, had a pilots license and served as co-pilot on the flight. Gene, Mike, and myself would be the first ones in. We would go in on shifts. The other three were waiting for Eddie's return.

Down there somewhere was a little fine line of an island. We had no idea of how difficult this was going to be, and neither did Eddie. He had never had to do this before.

(please turn to page eight)



John Martin, VK3JW

John Martin, VK3JW, was given the convention's annual award as "DXer of the Year".

John told about the idea for the DXpedition to Mellish starting while they were on the DXpedition at Willis Island. He mentioned "You learn a lot about people when they are stuck on a little spit of sand. You can see some of the nerves starting to go and they get a bit frayed around the edges, and out of line.

"Willis was a rough trip and I profited from the mistakes that had been made there. For Mellish, I spent twelve months organizing before I announced that I would go. However I did make an unfortunate choice regarding a couple of the operators. They "bugged me" quite a bit before we ever left, so I decided not to take them.

"I wanted to take VK3ZT (A. L. Mathews), he's a top CW operator. His father died, so we lost the services of a good man. Then another operator convinced me to take the original two along, and I did that. Even though they made every determined effort to make sure the thing didn't "go".

"We had three transmitters working most of the time and two transmitters working all of the time. We made roughly 12,000 contacts. We did do quite well.

"The real trouble actually started when we got back home. These two got to work. One wrote a letter to the ARRL. I don't blame the ARRL for knocking the thing out, because those two insinuated that the logs had been padded. I feel when you make 12,000 contacts, you don't have to pad a log.

"They managed to get the matter hauled up before our governing body, I nearly lost my license, but we managed to convince them. The ARRL wrote to the WIA (Wireless Institute of Australia) and asked them to investigate the matter. They spent about 18 months trying to investigate it.

"Had it not been for the help of the W6 boys over here, and the fact that I kept in constant communication with the ARRL, I doubt if this thing would have ever been accepted.

(please turn to page eight)



The Worldradio News, July 1974



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TV repeater

WASHINGTON -- You could laze in your living room and swap home movies -- G-rated, of course -- with strangers miles across town.

Your friendly local police chief could watch a riot in progress without leaving headquarters. And deaf people could "chat" via their hands with friends 36 miles away -- the range of "Metrovision."

Some plucky experimenters calling themselves by that name, see those uses for "the world's first licensed amateur television repeater."

The "ham" operators have been firing up the repeater since February -- using TV transmitters almost as small as portable typewriters.

The repeater station itself is a jumble of wires, meters and cables in a metal rack, not that much larger than the ancient DuMont with which you stared away at Kukla, Fran and Ollie.

It's 160 feet above ground, in an apartment elevator shed -- protected by a phony "Beware of the Dog" sign. The nearby antenna looks just like an extended fishing pole, 25 feet long. From the roof top in suburban Alexandria, VA., you can gaze over an impressive hunk of downtown Washington.

And someday, Metrovision, Inc., hopes the territory will be studded with amateur TV enthusiasts. They'll aim their antennas at the repeater and have their friends' signals relayed to them through a system similar to Comsat's. "It's like having your own personal communications satellite, only it never leaves the earth," says Bruce Brown, one of the project's two co-founders.

From the users' homes, the sound and picture go over the air to the antenna atop Brown's apartment building. An extra-sensitive receiver amplifies the signal and passes it to the repeater's transmitter, which sends the signal (now high-powered) back to the antenna. Rebroadcast, the signal is strong enough to be picked up within the Washington area by ordinary home TVs equipped with special converter units.

Amateur TV has been around for years, but not in repeater form. No longer need the amateurs struggle along with big, high-powered stations just to broadcast a few miles away on the three-quarter-meter amateur frequency (somewhere below commercial TV's Channel 14).

Thanks to the repeater, Washington amateurs with the right equipment can now blast an 800-watt signal. Only ten hams use the repeater at the moment, but 20 more expect to fire up TV stations within a month, and Metrovision enthusiasts predict the system will spread rapidly to other cities.

Presently, you can't set up a Metrovision station unless you're a licensed radio amateur with \$400 to shell out for equipment. However, Brown an electronics engineer at the Naval Research Laboratory in Washington, sees commercial and public uses for similar systems.

By law, Amateur Radio cannot earn money for the hobbyists, so Brown and his Metrovision friends right now are using the repeater only for themselves. And they're also planning to contact deaf people's groups, police and fire departments and rescue squads. With transmitters in cars, Metrovision people can flash emergency scenes back to police. "I feel this really has value as a public communications system," says Brown. And amateur radio operators themselves can use Metrovision to swap technical information.

Frivolous uses abound, too. Possibly exchanging home movies, for instance. And the wife of a Metrovision fan recently broadcast a recipe for German chocolate cake. Also, some Metrovision people



TV communication system is demonstrated by Bruce Brown, WB4YTU, (l.) and Terry Fox, WB4JFI (r.)

show off each other's kids. No longer can amateurs go on the air clad in pajamas. So they say, "you've got to look presentable," says Brown.

Brown can "blame" himself for having to spruce up. He engineered the repeater system. The 28-year-old Purdue University graduate from Skokie, Ill., holder of a masters degree in electrical engineering from the University of Maryland, already has won minor fame for another gadget. While just a college student, he "made TV" -- the ABC network -- as the inventor of an automatic computerized lawnmower that zipped along without a human in control.

Across the country, amateurs had talked for years about setting up TV repeaters. Brown got into Metrovision after discovering, through a mutual friend, that Terry Fox also wanted Washington to pioneer the first such station. Fox, 23, originally from Vallejo, Calif., (near San Francisco) runs a videotape studio for a company in the Washington area.

Normally, government regulations would have prevented Metrovision from going on the air because of its extra-wide signal in the 3/4 meter band. However, Brown won a special waiver from the Federal Communications Commission. Metrovision, Inc.'s FCC call is WR4AAG; President Fox's, WB4JFI; Trustee Brown's, WB4YTU.

Another obstacle was financial. Without donated parts and labor, the repeater would have cost \$5,000. A corporation, though, gave Metrovision electronic components worth \$150. And George Gelestino of Oxon Hill, Md., a machinist, donated hundreds of hours of his time. The repeater's final cost: \$1,500.

"The system is low-cost," says Brown. He points out that Metrovision, Inc. charges amateurs only \$12 a year to use the repeater -- enough to cover maintenance. And that's on the honor system, just like the one educational TV stations use in "dunning" viewers. Only, Metrovision is "dunning" broadcasters instead.



Bruce Brown, WB4YTU, adjusts repeater

Ballyhoos Brown: "Be your own television star."

(For further information - contact Metrovision, P. O. Box 408, Falls Church, VA 22046)

MARCO

The Medical Amateur Council Inc. was organized at a meeting held in New York City in 1965 by a group of approximately 25 physicians from various parts of the United States who are also active amateur radio operators.

These gentlemen felt that there was a need in the amateur field for an organization made up of members of the various medical and allied health professions. It was initially felt that this membership would be limited to those holding doctorate degrees, but it was later expanded to include associate and affiliate members. From this small group of dedicated men it has grown into an organization which now consists of over 800 members. Although the majority of members are MD's, there are also large numbers of Dentists, Veterinarians, and PhD's in various scientific fields allied with the medical profession. Associate membership is held by students who are radio amateurs and in medical fields who are eligible to receive Doctorate degrees, and affiliate membership is available to those non-doctorate persons who have shown proficiency or technology in the various occupations as Registered Nurses, Licensed practical nurses, Electro-encephalogram Technicians, X-Ray Technicians, etc.

During the past eight years MARCO has

contributed in many ways to the public through service both medically and non-medically. It does this by conducting regularly scheduled radio nets on several of the amateur frequencies on a daily basis. During these net times, the members of MARCO can be reached for assistance primarily in the medical fields, but have aided in disasters by providing other information.

For membership information, contact: Dr. Stan Carp, K1EEG, 44 Main St., Saugus, MA 01906 (617) 233-1234.

Variety is...

by Carl Drumeller, W5JJ

Have you ever paused to think of what Amateur Radio means to various persons? It's one thing to the DX chaser, another to the Country Hunter, and a thousand and one other things to those other radio amateurs who're not dedicated to the more popular specialties.

The invalid who keeps his contact with the world, the retired person who avoids boredom, the busy and harried professional who finds relaxation in casual contacts, the avid youngster who fans his interest in things scientific, the . . . oh, you could go on for pages and never list all the spheres of interest nor the types of operators to whom they offer centering interest!

Although there are those who'd tie our activities to some one specialty (like traffic handling, MARS, contests, etc.), Amateur Radio thus far has managed to retain its freedom of choice. This is no mean accomplishment in a day significant by the trend toward lacing one's life into a straightjacket of endless "Thou shall nots."

Let's each one enjoy our particular facet of our radio activity, enjoy it with no thought of lessening the privilege of a quarter-million of other amateurs of radio to have an equal right to an equal enjoyment of what may be an entirely different phase. And, while you're at it, why not try taking a crack at some other type of operating? If most of your activity is on phone, try a bit of CW. If you mainly chase DX, enjoy a chat with "locals". Mix a little VHF with HF, FM with AM (Down Fido! 3A3J is just another form of AM!) He who limits his radio activity similarly limits the potentials of pleasure.

(From Collector & Emitter)

"It is extremely important today to have forces of friendship flowing from person to person and from land to land and we should use Amateur Radio to cultivate an awareness of others and their needs and to help serve world-wide peace." Jackie DeKamp, W6YKU

The Worldradio News, July 1974



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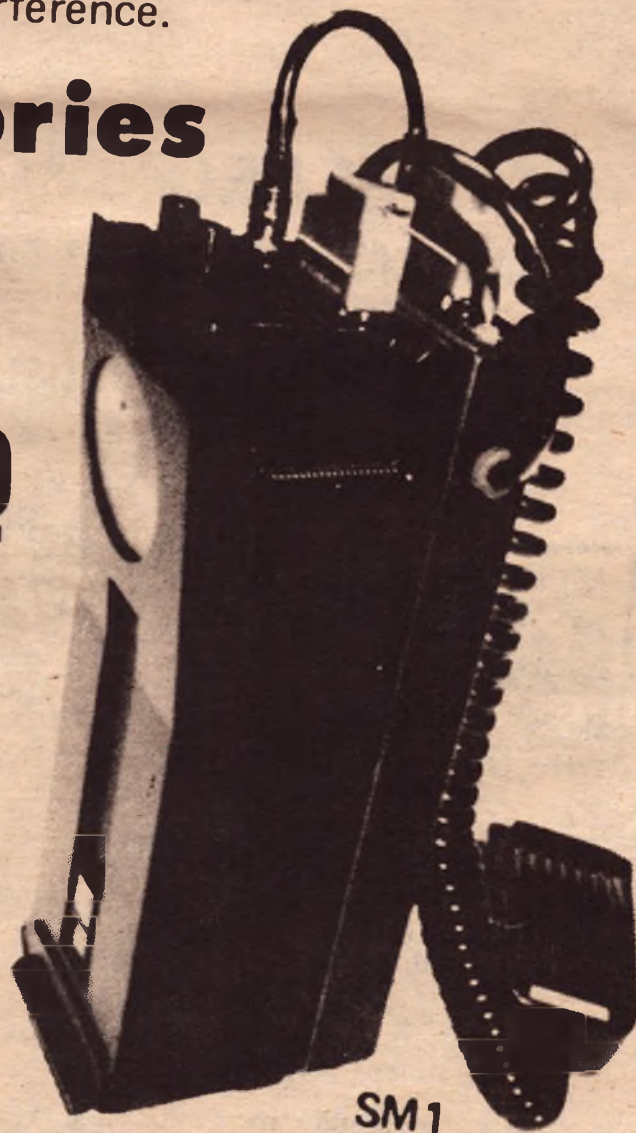
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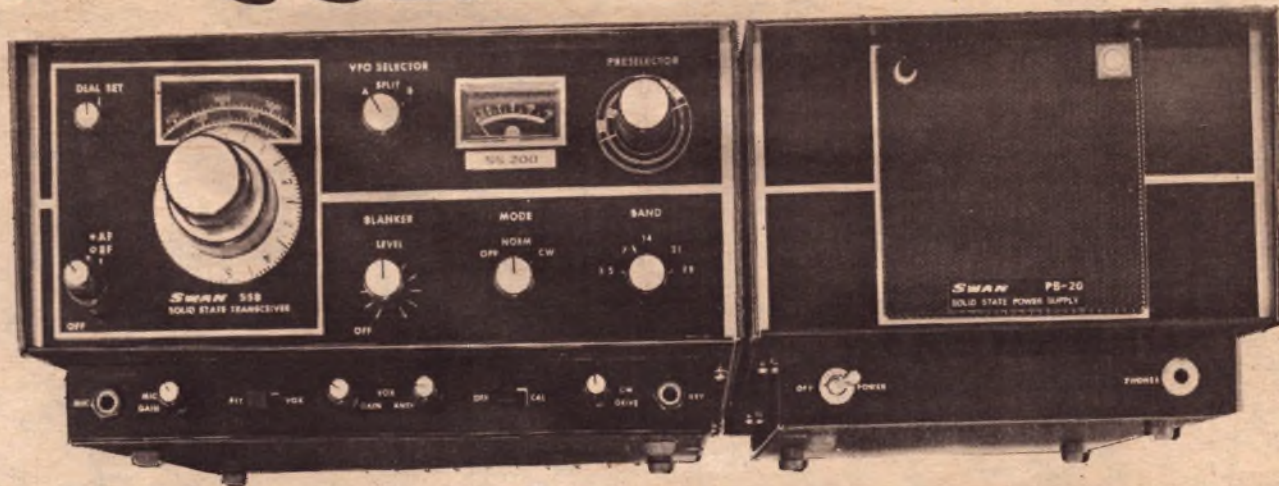


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station appearance



I certainly agree with your article (Worldradio, Sept. 1973, page 23) calling for more presentable ham shacks. Actually, I don't like the term "shack," since it's so pedestrian. I have (modestly) enclosed a couple of pictures of the WA6CPP Operations Center.

One feature everybody should have is a fire extinguisher. Just in case. The room was designed especially for use as the

Operations Center, with a 220-volt feeder and breaker panel for this room only. Next to the phone, in the "Index Cards" box is my card file. To the right of that is a digital clock. The unit back in the corner by the white chair is a SP-100 "Super Pro" receiver.

Not shown in the pictures, my desk is behind the operating position facing the other wall. On the wall above the desk is a



large framed map of the US showing contacts I've made by variegated pins, the color representing the band. This attracts more interest from visitors than the DXCC certificate, 5BWAS, QSL's from M1I, all VE, VO, VK, ZL and JA districts, and the collection of certificates. It must be something more tangible for the casual caller to appreciate.

The room features an outside entrance,

bathroom across the hall, air conditioned and heated, and is adjacent to the garage, permitting antenna feeders to go through the wall to the antenna farm. The book atop the receiver is my county-hunting log; my certificate (CHC) is above the breaker panel. I have 2200 now.

Paul Schuett, WA6CPP

de Darleen Magen, HC2YL

I enjoyed the article in "Worldradio" about the clean ham shack. Am enclosing some pictures of some operating positions that I have seen. They reflect well on Amateur Radio. It would do for many others to emulate the appearance of such as these. I agreed with the thoughts in the article that to help our "image" among non-amateurs (very important these days) we must make it appear that we take pride in being amateurs. A junky looking station is not the way to do it.

"Worldradio" would like to publish photographs of nice looking radio installations. These may give others ideas on how to develop their radio room into something that helps the "image" of Amateur Radio.

Do you have a rewarding Amateur Radio experience? An original idea, or one not so original? A thought? A pet peeve? If so, share it with the world. Send it to "The Worldradio News", 2509 Donner Way, Sacramento, CA 95818, USA.

Margaritella Edea, OE1MEW



Marten Martenson, K7AHO



Kent Ravenscroft, W0MU

QSL card of the month

W4UMF

Theodore J. Cohen
8603 Conover Place
Alexandria, Virginia 22308



Station	Date		
5X5NF	23 AUG 71		
Time	Band	Mode	Report
0122 _z	14.2 MHz	SSB	5-2

VIA VE6AKV

NICE TO MEET YOU,
DARLENE. VY 73, Ted

"Worldradio" would like to publish other QSL cards which, as the above, have as their theme "man and his world", or international friendship.

The Worldradio News, July 1974

DXpeditions

A Letter From K2FJ

Greetings Fellow Amateurs:

After many Caribbean DX-peditions and over 7,000 QSO's, I felt you might be interested in places of operation, equipment used, problems, costs, etc., and a bit of personal background.

Since being licensed W2TMI in 1947 and then K2FJ, it was very difficult to understand why there were no pile-ups when I sent CQ using those "exotic" calls! So, in 1968, while on a Caribbean cruise with XYL Ann, we stopped at Curacao. I operated PJ3CC at Chet's Coral Cliff Hotel. You wouldn't believe the pile-ups with that call! It was so nice to be wanted.

After being elected Town Assessor, I found the part-time income could be applied to the pursuit of my hobby, Amateur Radio. Plans were made and licenses obtained for a DX-cursion.

The antenna used for all trips was a Hustler Newtronics 4BTB trap vertical, with radials, and a top mounted RM-75 mobile loading coil for 75 meters. The first transceiver used was the SBE-34, then a Swan 270B. With encouragement from Ralph Green, W1-HGT; Stew Perry, W1BB; and Bob Mausteller, WA2MRZ to go to 160 meters, I reluctantly spent over \$700 for a FT-101B. This, together with increased air fares, was a bit painful, to say the least. For 160 meters, an inverted "V" was used, 35 feet up.

And now to those beautiful islands in the Caribbean.

K2FJ/KV4 - Operation for several days on St. Thomas, US Virgin Islands. Had pleasant visits with Clarence Seid, KV4AB; Les Scott, KV4EY; and Dick Spenceley, KV4AA.

VP2VAN - License cost \$5. See CQ July 1972, page 76. After a bouncing ride on a boat called the "Bomba Charger", I arrived at West End, Tortola, British Virgin Is-

lands. Across the bay was Frenchman Cay, where operations took place. The 4BTB was strapped to an upper floor railing. With a rental Land Rover, much of the island was seen, with all its yachting marinas. Several British amateurs were visited. Tortola (Dove Island), the main island, is mountainous, but has beautiful beaches. One, Long Bay Beach, is where Ed Seeger, WB8-LSD and Larry Beebe, WA8RXU recently operated VP2VBW. On my third trip, a very interesting scuba dive was made on a reef off Peter Island. This was a wonderful experience, while resting from the pile-ups. I say many poisonous black, spiny sea urchins. Just like pin cushions. Breaking them open with your knife allows you to view the beautifully colored fish feeding on the urchins. The last operation was made from the Colonial Manor Hotel at Paraquita Bay. An ideal site, with the sea on 3 sides and no mountains blocking the path to the States. Three operating trips were made as VP2VAN.

PJ8DX - Sint Eustatius - Northern Netherland Antilles. License cost \$8 U.S. - See QST August 1972, page 97. This is a beautiful green island, in what the Dutch call the Windward Islands. Maps show them as in the Leeward Island group. The people are most friendly. Blessed with trade winds, the climate is very comfortable. Two operations took place from the Government Guest House in Oranjestad, with the vertical mounted on a high cistern. One day a wedding took place in the lounge, so DX work came to a halt for a couple hours. Eustatius was not well known on the air, as only 3 other known operators have ever transmitted from this 8.1 square mile island. Commercial communications are available through the Lands Radio Office. My friend Carl Lijfrock is in charge.

On one visit, my son, daughter and I climbed to the summit and into the crater of an extinct volcano called "The Quill" (pit). This quiescent volcano can be seen for many miles and identifies "Statia".

With interest in the sea, I enjoyed some free diving with an islander. Two lobster were snared, 2 fish speared, plus 1-1/2 hours of viewing the beautiful reefs off Statia.

Amateur operation last trip took place from a private home. The trap vertical was donated to Carl and left in place. Code practice sessions were held. Hopefully a PJ5 or two will be active from Statia in the near future. PJ8DX was signed on three different trips to St. Eustatius.

PJ8DX/PJ7 - For the October '73 CQ WW SSB Contest, operation was moved to Philipsburg, Sint Maarten. This is another of the Northern Netherland Antilles and a popular tourist island. My friend Prof. John Irwin, K6SE/2 set up over on the French side of the island where he operated as FG-0AFA/FS7. We operated both stations many hours on the same frequency and same island, but with different calls and different countries!

VP2EEC - Anguilla. License cost \$25 U.S. (This charge is way out of line with other Caribbean countries). This flat, 35 square mile island is formed of coral encrusted on volcanic debris. Some rich soil grows cabbage, corn and cotton. Mostly there is low scrub. It gets very little rainfall and is arid. The government is associated with the United Kingdom and is run by Her Majesty's Commissioner.

The site chosen for this DX-pedition was Maunday's Bay Beach. Paul & Vera Rand all operate a wonderful cottage set-up on a remote but beautiful beach. Sea shells abound, and some large ones were obtained skin diving. There is no coral to interfere with swimming. Just sand, shells, and that crystal clear water! No power mains are available. A 4-1/2 KW diesel generator supplied power for the entire operating period of nine days.

Paul was very helpful in assisting with the vertical antenna erections on the sand beach. The cottages are on the beach and while talking with many stations the surf can be heard only 60 feet away. The view of Maunday's Bay is magnificent!

Even with the inconvenience of diesel generator maintenance and high cost of fuel this was truly the most wonderful place I have ever found for DX operating. The three abundant meals provided, the cooperation and friendliness of the Randall's, the climate, closeness of the sea, all added up

to the greatest holiday I ever have enjoyed.

As for operating, I arrived half-way thru the CQ WPX SSB Contest. After 5 days of constant pile-ups, my voice went bad. Medication was needed for a very sore throat. CW was then used.

The Europeans were wild about working VP2E - Anguilla. One very embarrassing thing occurred. During one stretch of SSB operation I found I was getting fabulous reports but couldn't give out anything over S1 or S2. That is until I discovered the 20 DB RF Attenuator was IN! Sorry. New rig you know.

On 160 meters 57 QSO's were made. Heavy QRN. New country for many. My thanks to Vince Labega, PJ7VL and Hud Hudson, K5JZN for directing me to this wonderful place - Maunday's Bay Beach Resort.

Thanks for the QSL cards. It's nice to confirm the islands for you. It's an effort, an expensive one. But, certainly it's enjoyable issuing out a "new country" on some band. All QSL's are answered. Hoping to work you again, maybe from a different location.

A short note regarding Bible verses seen on my QSL cards. I'm a firm believer that a Supreme Being had to create such a wonderful universe and the life in it. I feel it is proper and good that we think more on these things. In reading the bible, I found there is an eternal life. God, the Creator, has given us the way to this life; that is to believe and follow Jesus Christ. It's very important to me. Check it out.

Some personal notes. I reside on a farm near Buffalo, New York. Have 500 foot long wire, extended double-zepp and beam. Work as a TV broadcast engineer and born in 1927. QCWA # 7309 Niagara Frontier Chapter. Member Society of Wireless Pioneers. Former "Sparks" in US Merchant Marine during and after WW2. Also US Army-K2USA.

With best wishes,
Ken Palmer, K2FJ

P.S. -- If you hear K2FJ CQ'ing, please give me a call. Space your calls.

DX - pedition to
VP2EEC
KEN PALMER
LEEWARD ISLANDS
ZONE 8
18° 14' N
63° 5' W
GEN. 1.10 "AND GOD CALLED THE DRY LAND EARTH."
ANGUILLA

LAT. 18° 23' N
LONG. 64° 42' W
ZONE 8
VP2VAN
KEN PALMER
FRENCHMAN CAY
TORTOLA
BRITISH VIRGIN ISLANDS
BELIEVE ON THE LORD JESUS CHRIST
AND THOU SHALT BE SAVED.
ACTS 16:31
QSL VIA K2FJ

LAT. 17° 30' N
LONG. 63° W
LEEWARD ISLANDS
ZONE 8
PJ8DX
KEN PALMER
ORANJESTAD
SINT EUSTATIUS
NETHERLAND ANTILLES
GREEN AND DUTCH
FOR GOD SO LOVED THE WORLD THAT HE GAVE HIS ONLY
BEGOTTEN SON, THAT WHOSEVER BELIEVETH IN HIM SHOULD NOT
PERISH BUT HAVE EVERLASTING LIFE
JOHN 3:16
QSL VIA K2FJ

4X4

by Joel A. Bernards, WB2ZHM

I, along with a group of students from Brooklyn College, left New York City for Israel.

Of the 40 of us, no one knew more than one or two of the others, but by the time we arrived in 4X4 land, many were friends.

This was a three week trip, of getting to know the country and its people, plus three weeks at the Hebrew University in Jerusalem for studies.

Our first stop was the Negev, the rocky desert-like southern section of Israel. Also visited Massada, an ancient fortress built on a high sand dune, and the Dead Sea, where one can literally walk on the water because of the heavy concentration of salt.

Our first weekend was in Eilat, the southern most tip of Israel, which is famous The Worldradio News, July 1974

for its green stones, (made into jewelry), its beautiful coral, and its hot beaches.

Our second week of traveling was spent going up the eastern side of Israel, (the West Bank), and up to the occupied Golan Heights. Spent the weekend in the city of Liberias.

We then traveled to the port city of Haifa, where I met another ISSBer Israel Lavee, 4X4UF. I was at his QTH but couldn't get checked into the YLSSB System. Israel is a bachelor, in the army, and busy in the evenings. He also told me how hard it is to copy, with the jammer having a 60 over s9 signal.

We left Haifa to go back to Jerusalem where we would be studying at the University. My subject was archaeology, which included a field trip.

In Jerusalem, we toured the historic old city, as well as the new section. In the Old City, we visited the Wailing Wall, The Dome of the Rock and church of the Holy Sepulchre.

Dave Schlocht, WA2KGY, now living in

Jerusalem was kind enough to let me use his rig and check into the system a few times. I met quite a few hams and now some of my new found friends at the University know what Amateur Radio is all about.

Also met Ron Katznelson, 4Z4BL, at the university and Morshe (I forgot his call letters). I met several young hams, who were recent immigrants to Israel. Roy Mittelman, WA2PPQ was another person I ran into and found that he was on a trip similar to mine.

Need I say that I had a wonderful time meeting new friends.

(From "Voice" YLSSB)

DEPARTMENT OF CALIFORNIA
HIGHWAY PATROL

Mr. J. J. O'Brien
6606 Fifth Street
Rio Linda, California 95673

Dear Mr. O'Brien:

Officer LaBonte has informed me that through the use of your private amateur radio system you assisted this Department on May 15, 1974.

A very serious truck vs. car accident, caused by a wrong-way driver, occurred on Interstate 5 north of the Interstate 880 interchange. Officer LaBonte was in his private vehicle and unable to make contact with CHP Headquarters; however, he was able to make contact with you. You called CHP radio and requested that an ambulance be dispatched to the scene. This was shortly after midnight.

I wish to join Officer LaBonte in expressing our appreciation for the assistance that you rendered during this serious situation.

Very truly yours,

R. G. Drolette, Captain
Commander
Sacramento Area

(Editor's Note: Jay O'Brien is W6GDO,
Officer Louis LaBonte is K6KDU.)

Subscribe to "Worldradio". See page 11
Page 11



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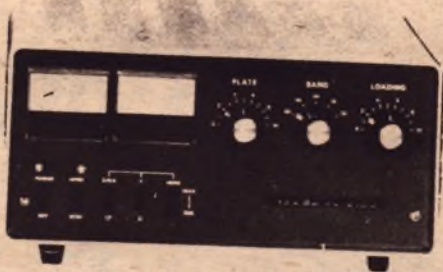


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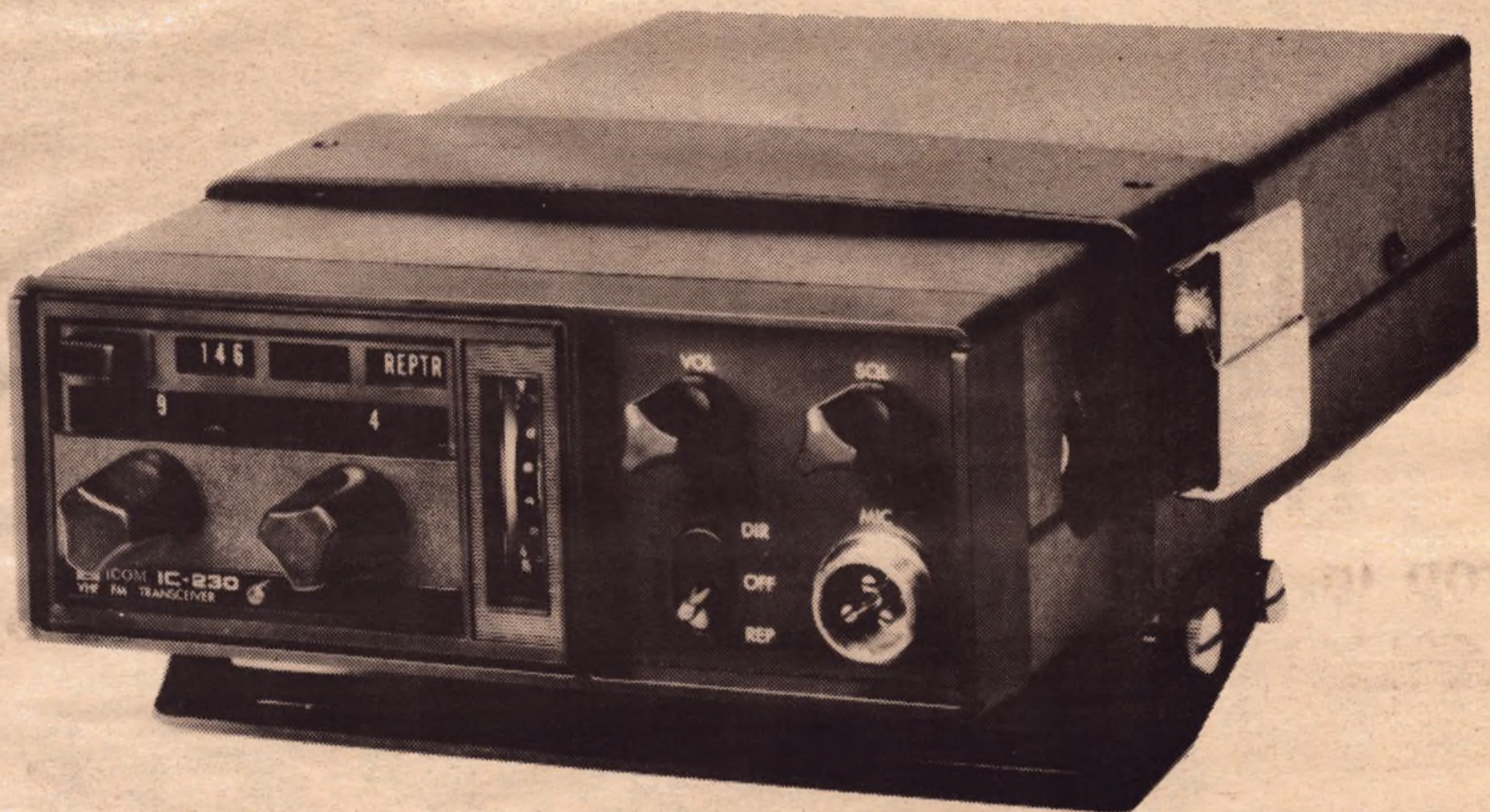
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profile



Gov. Goodwin J. Knight (seated) issued the first ham license plates bearing an amateur radio station call sign to Archie Waring of Oakland January 13, 1954.

Archie Waring, W6ACN, was born May 28, 1889, in the Territory of Idaho. His grandfather was a member of the first legislature there. (Fred Waring of the "Pennsylvanians" is a cousin.) The family moved to Oregon when Archie was four years old.

In 1905 he became a messenger boy and part-time operator for Western Union and that is where he learned the code. Later, in Saginaw, he taught four of his buddies their code, and they built rigs, but lightning hit, and that stopped their radio careers. However, they all got jobs working for the railroad. Archie's uncle was the first operator for the Railroad on the West Coast.

He came to California in 1906, shortly after the San Francisco Earthquake, which he says they heard in Oregon. In 1913 he was married.

It was in 1919 that his teenage neighbor built a crystal set on an oatmeal box and picked up some code. This got Archie interested again, and he became an avid shortwave listener. He subscribed to all of the radio magazines, and still has some old ones, though he threw many of them away in 1913 or '14 to make room for a new daughter. Some he gave to John Rinehart and Herbert Hoover, because they contained articles they had written, and wished copies of.

Archie remembers well the change from spark to tube-type rigs. He says he heard the comment then, "What good are tubes? You can't hear anything on them.", which he feels was not much different from the remarks he heard when SSB, FM repeaters, and even transistors came in.

He was still a short-wave listener when he heard guys talking about surplus stuff being available, and got some and tore them apart to find out how they worked.

Archie says the old saying, "You can't teach an old dog new tricks" is only true if the old dog is determined not to learn. It was in 1948, at the age of 59 that he decided he would like to get his license. In January, 1950, at the age of 62, he enrolled in a course at Laney Trade School. An accident in April which killed his wife and "tore him up pretty bad" slowed him down, but he stuck with it. In September he passed the Novice Test. Then he passed the Conditional, with one mistake.

He fixed up an old receiver and the first voice he heard was that of a friend - a Novice on 2 meters. This encouraged him to get busy and fix up an ARC-4 transmitter (which he still has, and which still works). He made a total of three contacts as a Novice.

To further prove that this "Old Dog" can learn new tricks, Archie passed his General test on May 16, 1953, and one week before his 81st birthday he took the Advanced test and passed. He plans to have his Extra before he reaches 90. (He is also currently enrolled in a Spanish course. He wants to be able to read the signs he passes in his travels, and to keep his brain alert.)

Archie was active in politics as a hobby for many years. He worked closely with now-President Nixon on occasion, and knows him quite well. (Archie feels certain that Watergate was a put-up job. He says everyone who knows anything about it knows that there was no information of importance in those headquarters.) He was friendly with Warren and Knight, and able to walk into either of their offices at almost any time with no problems. His advice for any politician is "Be as honest in public as in private life." He was on the District Republican Central Committee, and represented this district in the Republican Assembly.

It was in 1951 that the hams first put in a bill to obtain the privilege of having Call Sign automobile license plates. It was killed in three minutes. Archie heard about it, and at a board meeting where Governor Knight was answering questions he asked about it. It was the first time the Governor had heard of it.

In 1952 Archie joined the Oakland Radio Club, and was soon appointed a committee of one to look into what could be done to foster another. Shortly after this he received an invitation to a CCRC meeting and went for the opportunity to meet more hams. When he arrived he found that he was listed as the speaker. The CCRC also named him as their representative in the matter.

At a meeting of the Mission Trail and American Legion nets down in Southern California, Assemblyman Pat Kelly was

present. It was agreed that State Senator Johnson would present the bill if Archie would keep opposition down. The bill went through after midnight on the last night of the session. Apparently it was passed largely as a favor to Archie. They did not expect more than 40 to apply for licenses, and to get the bill through put it on a 2 year limit, expecting it to die after that. Archie predicted that at least 1,900 would apply. By 1954, 9,000 licenses had been issued. The total now is over 48,000.

On January 15, Archie went to Sacramento to have his picture taken with Governor Knight and the first set of plates, W6ACN. The Governor had refused to release them to him until he came up and the picture was taken.

Through all of this, Archie paid all of his own expenses, but time was important--his doctor had told him in 1951 that he had only one year to live!! He stayed active in politics until he was 70, and then had a hard time getting out.

W6ACN became a member of the Hayward (Calif.) Radio Club on May 24, 1957, making him one of the oldest members of the club in length of membership, and certainly the oldest in chronological years.

He is currently active on MARS - both a phone and a RTTY net. He also checks into the San Joaquin net, WPPS and WCARS. He prefers net-type operation because it is easier for him.

Never one to sit still and take it easy, Archie still drives his camper truck to hamfests all over the Western states. He says that much as he enjoys the hamfests themselves, with all those eye-ball QSOs, he enjoys the traveling and camping out even more.

He also enjoys his three daughters and their families, his 6 grandchildren, and 9 great-grandchildren, and is an obviously proud great grandpa.

We at HRC are proud to count W6ACN as a long-time member, and a friend!!

(From "Chewed Rag")

Chuck Bennett, WB8GQW, has prepared a list of supplies and equipment emergency-minded amateurs should have. If you would be prepared for a communications emergency, consider the following:

Radiograms	Scratch pads
Pens, pencils	110/12-volt desk lamp
erasers	Headphones
Station log	Radio Equipment
Flashlight	Coax, long, short, patch
Antennas	Maps
Microphone	Tools
Broadcast receiver	SWR bridge
Matches (water-proof box)	Speaker
Key, straight	Face towels
Water, 5 gallons	Toilet paper
Eating utensils	Mirror and shaving gear
Hand towels	Alarm Clock
Soap	Blankets
Can and bottle openers	Syphon (for gasoline)
Aspirin Tablets	Shovel and pick
Soldering Iron	Change of clothes
Extra gas and oil	Extension cords
Jumper cables	Mast sections and base
First Aid Kit	Tow cable
Hatchet, saw, axe	Phone directory
Rope, guy wire	ARRL operating manual
Extra xtals, tubes, fuses	Bug bomb
Foul weather gear	Generator 110/12v
ARRL operating aid 9	Food -- 3 days worth, not to be heated.
ID cards, signs, passes	Large wooden box to hold items of equipment.

(From "Central Ohio AREC Bulletin")

The 9th Annual Melbourne (Florida) Hamfest will take place on the 7th and 8th of September, 1974. Hours are from 9 a. m. to 4 p. m. Location is the Melbourne Civic Auditorium on Hibiscus Boulevard. Among the many features is Florida's largest swapshop, exhibits, prizes, etc.

The Worldradio News, July 1974

magic carpet

by Ilene Gale, WN6IBT

To put it romantically, ham radio reminds me of a "magic carpet". I have met so many wonderful people around the world, that it never fails to amaze me.

Many times I've sent out a CQ and when someone answers, I get flustered, because the call letters are so strange that I'm sure I've copied them incorrectly. Then I find it is someone from far, far away. After visiting for a bit, I almost invariably discover they are the same friendly, interesting type of person that I meet on every QSO.

I correspond steadily with a man in Japan, two others in New Zealand, and have received many letters filled with information, brochures and gifts. This way I've learned more about these countries than I could have any other way.

But my favorite contact has been with a couple in Des Moines, Iowa. Jim and I talked with Elmer, KØZCS a year ago. He is a friendly, happy man, with a very fine fist, who has been a General for 14 years. Through contacts with him, we found that his wife, Erma, understood CW and was interested in his hobby, but had not yet taken the Novice examination. As the months passed, we have talked, sometimes two or three times a week. Even made a perfect contact while they were on their vacation. We often talk "threesome" about many things, exchange letters and pictures, and came to feel we have become close friends. We have talked by telephone several times. (Jim and I haven't managed the General license so that we may contact by phone!)

This past August we were proud and happy to learn that Erma had passed her Novice examination and is now WNØIHH. I feel that by enjoying ham radio we have gained the friendship of this wonderful couple that we otherwise would never have known.

Page 18

To me, just making a contact is minor, compared to getting acquainted with friendly interesting people. And most of them are!

("The Blown Fuse" East Bay Radio Club)

OLD TIMERS CORNER

To our uncertain knowledge, the very first of our radio laws enacted in the U. S. was known as "Public Law No. 262", which is reproduced below.

The 61st Congress of the United States acting for the interest of safety on the sea approved a bill which, "Would require apparatus and operators for radio communication on certain ocean steamers." So was born the body of radio law which now is so very complex as to require specific legal training... nearly to the day, 64 years ago. It is well to acknowledge that the first "Law" was modified on July 23, of the year 1912, to include a requirement for auxiliary power supply, and that two or more persons be able to operate the equipment, and specific reference was made to include ships on the Great Lakes. ... Leland Heithecker, W5EJ

(Public Law No. 262 - 61st Congress) (S. 7021)

An Act To require apparatus and operators for radio communication on certain ocean steamers.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that from and after the first day of July, nineteen hundred and eleven, it shall be unlawful for any ocean-going steamer of the United States, or of any foreign country, carrying passengers and carrying fifty or more persons, including passengers and crew

to leave or attempt to leave any port of the United States unless such steamer shall be equipped with an efficient apparatus for radio-communication, in good working order, in charge of a person skilled in the use of such apparatus, which apparatus shall be capable of transmitting and receiving over a distance of at least one hundred miles, night or day; Provided, That the provisions of this act shall not apply to steamers plying only between ports less than two hundred miles apart.

SEC 2. That for the purpose of this act apparatus for radio communication shall not be deemed to be efficient unless the company installing it shall contract in writing to exchange, and shall, in fact, exchange, as far as may be physically practicable, to be determined by the master of the vessel, messages with shore or ship stations using other systems of radio-communication.

SEC 3. That the master or other person being in charge of any vessel which leaves or attempts to leave any port of the United States in violation of any of the provisions of this act shall, upon conviction, be fined in a sum not more than five thousand dollars, and any such fine shall be a lien upon such vessel, and such vessel may be libeled therefor in any district court of the United States within the jurisdiction of which such vessel shall arrive or depart, and the leaving or attempting to leave each and every port of the United States shall constitute a separate offense.

SEC 4. That the Secretary of Commerce and Labor shall make such regulations as may be necessary to secure the proper execution of this act by collectors of customs and other officers of the Government.

Approved, June 24, 1910

("Bulletin" Detroit ARA)

RADIO RIPOFF²

by Orin Levis, W6DZK

A factual article based upon recent experiences in the State of California (April-May 1974). The purpose of the article is to warn mobile amateurs about the possible gaps in their insurance coverage. No extensive research was done to study the variations in different company's policies, but as a rule, each case has to stand on its own merit.

Have you ever walked up to your car, glanced in, and discovered that your beloved rig was GONE?

It matters little whether it is "early-cheap" home-modified surplus, or the newest synthesized 2-meter rig. That horrible, empty, sinking, unbelieving feeling flows over you as you stare at the vacant spot under the dash - hoping against hope that the wandering rig will - magically - re-appear. Don't hold your breath - it probably really is gone - for good. The chance for recovery, according to the police, is small.

The advent of cartridge players, stereo solid state radios, and small ham rigs (to name a few goodies) has resulted in one or more of the above items being transported around the globe in almost every conceivable vehicle from dune buggies to pogo sticks. Inevitably, some of the

"have-not" citizens decided to become "haves", and a flourishing new trade was established -- removing electronic gems from vehicles (sans permission). Some folks say that the "father" of this nefarious business was Rip Van Sony - hence it is called "Ripping Off". However, others say it merely describes the technique used by some to get the equipment out.

Be that as it may - the result is the same. The bereft former owner now has to go through some routine formalities with the police, and he becomes a "victim" in Case # 74-15410 XYZ**.

Even though you may end up in the rear bottom of file drawer #1001, these police records are necessary to impress most insurance companies. And who knows? They might actually catch the guy/gal, or the fence.

This brings us to possible rip-off number two -- trying to collect insurance money in sufficient quantity to remove that sad lump from your breast.

"No problem", you say, "my company pays everything - no sweat!". Well, I hope you are right. It seems that the "have-not" citizens have been so busy that

many insurance companies were moved to insert "Exclusion Riders" in their policies. They say, in effect, "We will not pay for musical equipment or radio gear in vehicles unless permanently installed".

"Ah-ha", we thought, "our factory-supplied bracket is screwed onto the dash, and the power cord and antenna lead are attached to both the car and the rig".

ZAP! Any sort of quick release or thumb screw nullifies the mounting on the car - and these are fairly common so that the rig may be used as a home station or in a second car.

"How about the wires? You can't call this rig portable!"

Oh yes they can -- the wires may not be plugged in or screwed on. Use bolts and tape, or solder and tape -- (makes a messy antenna coax connection, and microphone and power cord hookup, and probably requires butchering the equipment to comply).

If you have violated any of the above commandments (and the policy may not spell them out)-- your vehicle insurance does not cover. ZAP! Rip-off #2 complete.

If you are fortunate enough to have a "home owner's policy" which covers loss of personal property away from home, you may collect on that -- minus a healthy deductible (Liberty Mutual Insurance Co., Sacramento office), and at least one (All-state Insurance Co.) has a choice of \$100,

\$50, or zero deductible - at increased premiums in the same order. The latter company pays 111% of their share after the deduction. Under this arrangement the \$50 deductible becomes bearable, and the premium is modest. Zero deductible is rather expensive, but might be warranted if your gear is particularly costly.

Remember - this is the home owner's policy -- not the vehicle policy. If you are a homeless waif, you will have to look for something else.

Any company will check with the police, and this is where your case File # so-and-so comes into play. Let's hope your car was locked!

Better look at your own policy - and get a ruling from your agent, preferable in writing. If unsatisfactory, you can modify the installation until they say OK, or rely on the home owner's or other policy which will partially cover under most circumstances. Shop around for the lowest deductible you want to pay for.

Based upon what local claim adjusters say, there must be a large number of trusting mobil-ers driving around who believe that their vehicle insurance is covering their rigs. It may, or it may not - don't gamble - check it out!

Sleep well! (even if you have to bring the rig into the house).

RA

Sent via KV4FZ
14.234 MHz
1915 GMT
19 July 1969

His Excellency U. Thant
Secretary General
United Nations, New York

To avoid an undue risk of losing human life the multi-nation crew of the papyrus ship RA decided to interrupt the manned part of the navigation experiment upon having covered 2720 miles or about 5000 kilometers of ocean voyage. In comparison it should be stated that the shortest distance from Africa to America is about 1600 miles.

Partly dismantled and with reduced sail the papyrus vessel continued its westward drift in the direction of the lesser Antilles. Our decision was unanimous and caused by the presence of large numbers of sharks jeopardizing the safety of underwater repair-work necessitated by the last storm passed through.

After two months of coexistence on an undulating raft-ship part of which was permanently awash, and with a roofed living quarter for seven men measuring nine by twelve feet, we have had ample opportunity of getting to know each other and no opportunity of getting more than an elbow-space apart night or day.

Upon our conclusion of this experiment it is our joint desire to express to you, Mr. Secretary General, and to anyone interested in honest work for peace and the improvement of international relations, that man has too much in common to be separated by political blocks or racial barriers.

It is not an empty phrase to speak of the unity of mankind but it is a disgrace to the human family that we in the second millennium of the Christian era keep on building paper walls between us that entice and confound the majority of mankind who, for geographical reasons, have never had the opportunity to really get to know man on the other side of the fence.
The Worldradio News, July 1974

We the undersigned have neither the same skin color nor the same faith. We come from different political and cultural upbringings, and speak seven different tongues. We have probably come out of this experiment as much the same individuals who entered it, at least to the extent that none of us have attempted to alter the others.

Yet being pressed together under extreme conditions, and forced not only to co-exist but also to cooperate for common survival, we have seen with our own eyes and felt in our bones that whatever splits up mankind is artificial and can be tolerated or ignored whereas whatever unites mankind is real and profound, and is waiting to be utilized with the greatest benefit for whoever looks for it in an effort to build bridges between nations in areas where religious-political currents tend to drift nations apart.

We are proud of having had, with your kind permission, the honor of sailing 5000 kilometers under the United Nations flag, and in rewarding multinational cooperation.

It is our hope to see a great increase in the number of private citizens that directly or indirectly attempt to make their governments realize that the United Nations flag, symbolizing the ideas of building bridges and tearing down barriers, marks the only realistic road forward for man in a space age when our common world is getting ever smaller and the national arsenals ever larger.

Thor Heyerdahl, Norway
Santiago Genoves, Mexico
Norm Baker, U.S.A.
Yuri Senkevich, U.S.S.R.
Abdoulaye Djibrine, Chad
Georges Sourial, U.A.R.
Carlo Mauri, Italy

Five years ago, on 19 July 1969, your editor, WB6AUH heard, on 20 meters, the message which has been reprinted above.

The message bears reading and re-reading. When it was first heard, the ideas and choice of language created a tingling effect. Today, after several readings, the impact is still there.

We are grateful that a casual tuning across the band on a warm, lazy Sunday afternoon led to coming across those thoughts. Ears perked up, this was something great pouring out of the receiver. Longhand writing attempted to copy the message which we had stumbled across about one-third through

its transmission. What a wonderful use of Amateur Radio... to carry such ideas! A letter to Dr. Heyerdahl brought the complete text, as reprinted above.

One must admire a man who, in his mid-fifties, faces the physical hardships and risks of such a voyage in a fragile craft to prove the validity of a theory. Only the most determined would repeat the ordeal.

On the second voyage the entire crew of the first attempt rejoined him and another volunteer, Kei Ohara of Japan, went aboard. Heyerdahl said of the crew, "all will voluntarily interrupt their careers to resume this experiment in coexistence. Their skin colors range from white to black to yellow, their philosophies from capitalism to communism and their education level from the illiterate to the university professor."

The trip across the Atlantic had scientific purposes as its primary mission, but Heyerdahl said another purpose was "to demonstrate that men of different racial, national, political and religious backgrounds can meet again and continue to cooperate in peace, even after the hardships endured together during two months on RA I".

The gallant crew successfully completed the second voyage and Heyerdahl sent a message saying they had demonstrated that men from opposite sides of today's main political borderlines can work together in peace.

Their craft was pulled from the water after its 3,200 mile journey and sent to Oslo, Norway, to take its place in a museum beside the Kon-Tiki, the balsa raft in which Heyerdahl drifted 4,000 miles from Peru to Tahiti in 1947.

Landing in Barbados after the two-month crossing of the RA II, Heyerdahl said, "I think we all want the world to realize that man is man and if we collaborate, if we cooperate, we can survive." The Norwegian scientist said, "We demonstrated that modern man could live together in close quarters regardless of color, beliefs or origin. We arrived as the best of friends, certifying that none of these obstacles is real. We hope this can be a message to people who believe in international cooperation."

Hearing that original message, via Amateur Radio, five years ago was one of the incidents that eventually led to the starting of this publication and the shaping of its direction and goals. It was a deeply moving experience and one that should be shared.

Ham Spirit

I received a phone call from Sylvester Connally, W1MD, who asked that I put an emergency call on the YL1SSB system to locate a man on French St., Martin Island in the Caribbean. This man's wife had been taken to the hospital and the call for locating him, was initiated by the Chief of Police in Weston MA.

The message was passed to the control by VX2AS and at frequent periodic intervals the system sought a Caribbean station. As luck would have it, we had no checkins from there all day. However, the main thing is that the system tried. The next day, I received word from W1MD that (as was agreed upon) simultaneous efforts on nets and on other bands had brought results. It was unnecessary for our system to continue with the search. Word was received from Raymond Kruse, WB4TRK, that the gentleman had been located.

This is a fine example of the spirit exhibited by worthwhile radio amateurs and this is to thank the system on behalf of myself and of W1MD.

Jack Brennan, W1EKG

Send a friend

I thought you would be interested in seeing a copy of "Worldradio". At the publisher's suggestion, I've asked him to send you one. Hope you enjoy it.

name of guest

address

city, state, zip

my name

clip and mail to "Worldradio", 2509 Donner Way, Sacramento, CA 95818

Reward

by Alex "Red" Coulter, WB6ZWG

Why did you get involved in Amateur Radio? Perhaps you had extra cash and wanted to keep it in circulation, or could it be you had a surplus of free time and wanted to be involved in something. Perhaps you're a brainy guy who can breeze through FCC exams with no strain, or could you be a ham for the enjoyment it offers.

The fascination of experimenting with construction projects -- the thrill of working DX -- the satisfaction of organized net operation -- the excitement of fighting QRM and insects on Field Day, or the many good contests that are available -- they all combine to make Amateur Radio an incomparable avocation. With all the absorbing interests, I wonder if many of us possibly fail to remember the one enduring reward which comes to all of us through our amateur activity.

That reward is the many friends we establish directly or indirectly through Amateur Radio. Friends are the outstanding result of communication, and Amateur Radio is communication, par-excellent. From the day we first start work toward an amateur license we begin to make new friends. We find willing help in learning code and theory, or someone to help us back on the track when we goof on our first construction project. Some of those new found friends are far away and we will probably never see them. However, near or far, they are all friends and sooner or later we will have the heart-warming experience of visiting a ham in some distant place, or calling on one that we have contacted on the air, and being welcomed like one of the family.

Now that we are involved in Amateur Radio, do we feel that we are entitled to any and all rewards it has to offer? To set

the record straight, I say here and now, that if you aren't a member of ICTPAR, you are not entitled to all rewards that are available. Only through ICTPAR can you be a true amateur in every sense of the word. As a capacitor or indicator returns energy to a circuit from which it was taken, so might ICTPAR provide you with the means of returning something to the hobby that has given you so much. ICTPAR is your INDIVIDUAL CONTRIBUTION TO PERPETUATE AMATEUR RADIO. ICTPAR requires more from you than just a friendly attitude when you rag-chew with Orvil Nicefeller of East Over-shoe, Alaska. ICTPAR requires a lot from the ham who seems a difficult part of the contemporary scene.

It's distressing to find such an overall lack of interest in the perpetuation of the Amateur Service. The attitude seems to be... I like to rag-chew, or work DX, but I'm not interested in club work, getting mixed up in amateur politics, or helping anyone. Many seem to feel that with the payment of a few dollars dues to ARRL that they have done all that needs to be done. In other words... "let the ARRL do it, after all, whatta' we payin em' for."

Let's take a good close look at this hobby we enjoy so much. If we examine regulation 97.1, we find the FCC definition of the fundamental purpose of the Amateur Radio Service expressed in the following five principles...

- (a) Recognition and enhancement of the value of the amateur service to the public as a voluntary non-commercial communication service, particularly with respect to providing emergency communications.

via the satellites and new submarine cables will permit the user of about 50% of the high frequencies, the Fixed Service, to give up some space.

Unfortunately, the development and use of a suitable satellite service for the two mobile services appears to be only in the planning stages. Broadcasting (International) will be a lively competitor (especially in other countries) for any space which might be squeezed from the other services.

Convincing the U.S. to adopt a position of proposing expansion of amateur frequency allocations may be difficult. Selling this to the other countries, who will participate in the world allocation conference, will be even more difficult.

Not many countries see any benefit to their national interest in having any Amateur Radio Service, let alone providing for expansion of its frequency allocations. Therefore, it is essential that amateurs all over the world strive to "sell" the Amateur Radio Service. They must conduct their operations in a manner which will serve to enhance their reputation with their own and with other governments.

I know of one country which was convinced, by a U.S. amateur working there, that Amateur Radio would encourage the development of technicians, engineers and communications and broadcast facilities in that country. Thanks to him, the nation should be on the side of the amateur service in the next allocations conference.

Let us hope that many more countries can be sold on amateur radio in the relatively short time remaining before the conference.

(Auto-Call)

"Spectrum Allocations for the Amateur Service" A. Prose Walker, QST March 1974, pages 146, 157.

- (b) Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.
- (c) Encouragement and improvement of the amateur radio service through rules which provide for advancing skills in both the communication and technical phases of the art.
- (d) Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.
- (e) Continuation and extension of the amateur's unique ability to enhance international good will.

Is there any question in your mind that the Amateur radio service may not currently fit the above five definitions?

Where do you fit as an amateur? Whether you agree with everything the ARRL does isn't important. It is important we each realize the ARRL is the only organized body representing Amateur Radio. The task facing them is beyond the capabilities of the few paid staffers. The ARRL will be more effective in representing us if our support amounts to more than a subscription to QST. On second thought, perhaps you are one of those hams that feels... "who needs em"? If so, I suggest we turn back the calendar and remind you that some thief has been stealing our frequencies from under our noses. In case you haven't heard, LORAN has almost extinguished one of our good amateur bands... 160 meters. 80 is alive with foreign commercial stations and all but the low end of 40 is nightly reduced to a shambles by foreign broadcast stations and jamming. Our 20 meter band is periodically invaded by commercial

RTTY... and we have already said a short prayer for our dearly beloved but departed 27 MHz band. "Or didn't you know that once it belonged to the amateur?" Unless you have been living in a cave in Kuka Monga, you must know they are after 220 MHz to turn it into a playground. Who knows where they will strike the next time. And there will be a "next time" unless we shape up.

Amateur Radio has plenty of justification for using its share of the radio spectrum. Commercial and government radio services can not possibly render the emergency service of Amateur Radio.

With every flood, hurricane, earthquake and other natural disaster we find that ham radio is the only service that is 100 percent effective. Despite the babble that we gush forth, we are valuable in thousands of other ways.

But we have to keep reminding them of our value lest they forget. We must jump at every chance for publicity and continually blow our own horn, unless we want to witness the decay of the Amateur Radio Service.

(From "Splatter" Kern Co. RC)

Challenges

Many eventful opportunities are enlarging the world of Amateur Radio. Ham radio is experiencing new growth and interest. Many families are enjoying exciting and worthwhile Amateur Radio. Ham activities are an attractive means of visiting with friends and meeting new acquaintances. Enterprising amateurs are finding new challenges... George McGinley, W6OGM

Viewpoint: XE

de Alex, XE2IO

Most amateur 2 meter FM operation in the Tijuana area is the result of activity promoted by the VHF Section of CREBC (Club de Radio Experimentadores de la Baja California, A.C.).

The VHF Section is currently a group of 10 radio amateurs committed to electronic building and experimentation and to a greater utilization of the radio spectrum VHF and above. Consideration for admittance to the group requires either a Radio Amateur License or a Degree in Electronics Engineering. Three of our members currently hold such degrees. Three others should receive theirs in the very near future.

The first project undertaken by the VHF Section was the selection of a "Team" to design and construct a repeater system to improve communications in the northern part of the state. The first phase of the project is the completion of the Tijuana Repeater, XE2RBC. Repeaters are also planned for Mexicali and Ensenada, with the capability of being linked on command, thus providing a highly effective communications system.

In a country like ours and in particular in a state like Baja California, the radio amateur is often called upon to bear the brunt of emergency traffic with a wide range of priorities. We must not be caught unprepared, if we are to continue to justify our existence.

One of the principal problems facing Baja California amateurs concerns the large number of commercial stations operating illegally in the 2 meter band. This activity has been principally promoted by one of the amateur radio stores in San Diego, which has gone so far as to send technicians to help set up and maintain the units. The store manager has repeatedly stated that

he intends to continue to sell what he pleases and to whomever he pleases.

In the face of such incontrovertible logic, the situation was quite discouraging. The nearest monitoring station was almost 1000 miles away and complaints had to be sent to Mexico City. The recent installation of the Tijuana Monitoring Station, however, has changed the polarity of the situation. Even though the station cannot spend all of its time listening to the amateur bands, it does listen to complaints by radio amateurs. Several systems have been recently reported and have been summarily removed from the band. Unfortunately, almost immediately, others spring up to take their place. The battle continues. We do not intend to lose.

Perhaps U.S. amateurs with their greater numbers and better equipment could help us find and identify some of these illegal stations. "Cassette" recording noting time, date, frequency and other pertinent data would be extremely helpful.

In any event VHF activity in Baja California promises to continue to grow. Hopefully, this growth will take place within the spirit of friendship and mutual respect and that has always characterized the relations between radio amateurs of different countries. It is in the radio amateur tradition that we do so and we should not settle for less.

(From "Squelch Tales")

For cementing better international friendships and excellent (about 95%) QSL return, write in the language of the DX station that you worked. How? With K3CHP's DX QSL GUIDE. It contains a list of numbered radio amateur sentences translated into 54 languages. Simply select and copy sentences in the language of your choice. \$3.95. Joe Mikuckis, 6913 Furman Parkway, Riverdale MD 20840

FCC

by Bill Grenfell, W4GF

At a recent meeting sponsored by The Goddard Amateur Radio Club, the chief of the FCC's Amateur and Citizens Division, A. Prose Walker, W4BW, discussed preparation for the upcoming 1979 international radio conference which will be concerned with radio frequency allocations throughout the whole communications spectrum of interest to radio amateurs.

Concentrating on the spectrum and the bands below 30 MHz as being critical to the continuation and growth of an Amateur Radio Service as we know it, Walker observed that reduction of interference and room for expansion in the high frequencies is most important.

He then proposed that the preparation for the ITU 1979 allocations conference provide for: 1) removal of all other services now sharing amateur M.F. and H.F. bands and expansion of the size of those bands, and 2) three new H.F. amateur bands. The ideal suggested (1) would be to obtain the following free and clear of all other radio services: 1750-2000 kHz, 3500-4000 kHz, 7000-7500 kHz, 10.1-10.6 MHz, 14.0-14.5 MHz, 18.1-18.6 MHz, 21.0-21.5 MHz, and 28.0-29.7 MHz. He then discussed, and answered questions on, the considerations and possibilities involved in such an undertaking.

I will try to present the highlights in the following paragraphs.

The first step in any expansion of amateur allocations requires U.S. amateurs to convince their government to adopt such expansion as part of the U.S. proposal for the new world frequency allocation table. The U.S. position must include consideration of the Aeronautical and Maritime Mobile Services and the Broadcasting and the Fixed Services, as well as the Amateur Service. Hopefully, the added channels

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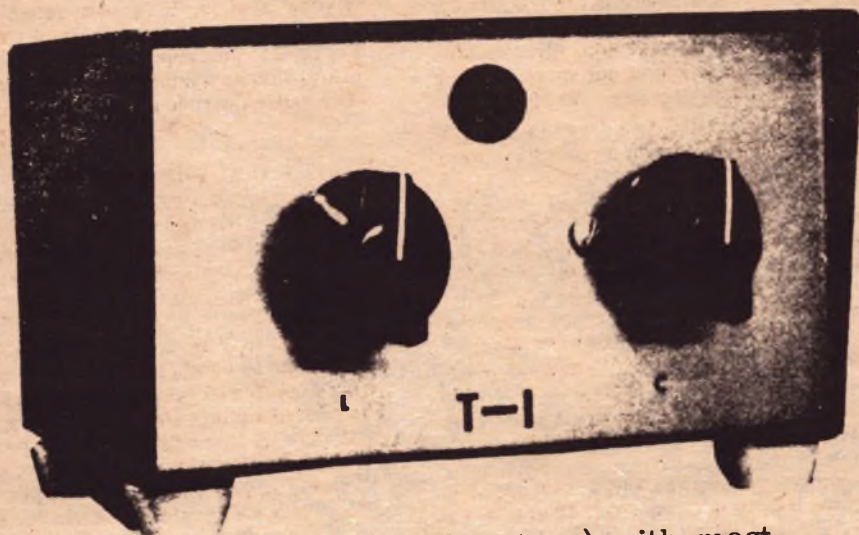
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CALLING

by William G. Blankenship, Jr., K4DLA

In the recent past a number of MIDCARS members (including myself) have received FCC Official Notice of Violation for failure to properly identify as required in Section 97.87 (a).

I was cited for failure to give the call sign of the Service Control station on my final transmission, but merely announced that I was QRU and gave only my own call sign.

In answering the notice, I asked FCC to clarify a part of the regulation which states, "at the end of an exchange of transmissions between amateur stations, the call sign (or the generally accepted network identifier) shall be given for the station, or for at least one of the group of stations with which communications was established." In reply, FCC said, "The rule states that 'the network identifier' may be used for the station or stations with which communication was established."

I interpret this to mean that on those occasions when it is difficult, especially for mobiles, to ascertain with certainty the call sign of Service Control, it is legal, upon making a final transmission to sign by saying, "MIDCARS, this is -- (your call sign)." It is obviously preferable to use the call sign of Service Control if you are reading him Q5. The point is, we must, when acknowledged by Service Control, upon completion of our transmission, sign his call, or the word MIDCARS, plus our own call sign.

In summary, the so-called "tail-ending" rule was declared acceptable by FCC several years ago. This means that when calling a DX station, or when checking into a net, your call sign only can be given. When making the final exchange of transmissions the call sign of the station with whom you are communicating (or the generally accepted network identifier) must be given in addition to your own call sign.

If we carefully follow regulations pertaining to Amateur Radio, we can save the FCC unnecessary paperwork. Let's all make an all-out effort to abide by all regulations and continue to operate in an efficient but courteous manner.

ANNOUNCING THE CITY OF WINNIPEG CENTENNIAL AWARD

His Worship, Mayor Stephen Juba of Winnipeg, and the Winnipeg Amateur Radio Club are pleased to offer The City of Winnipeg Centennial Award, in commemoration of the Centennial of the city of Winnipeg, Canada, in 1974

REQUIREMENTS:

This award is available to amateurs and SWL's meeting the following requirements:

- 1) All amateur operators must make a minimum of 15 contacts with VE4 amateurs located in the City of Winnipeg.
- 2) DATES: only contacts made between Jan. 1, 1974 (GMT) and December 31, 1974 (GMT) are valid for this award.
- 3) Any mode(s), any band(s)
- 4) QSL's NOT required.
- 5) Cost: 50¢ or 2 IRC's.
- 5) Submit full log data (date, time, stations worked, mode, band, name of operator) plus fee to the following address:

Winnipeg Amateur Radio Club Award
P. O. Box 352
Winnipeg, Manitoba

This certificate is in full color showing the Centennial symbol and is signed by Mayor Juba.

NOTE: This award replaces the Worked All Winnipeg Award for 1974
Page 22

LIGHTNING HAZARD

by Louis Sieck, K4NE

So you feel safe after you have disconnected or grounded the antenna feed line? Not necessarily!

If you have a rotatable beam or quad, there is usually an 8 or 4 wire cable connecting the rotor mechanism with the rotor control box. This cable leads down the mast or tower into the control or operating room. Unless there is some form of disconnect between this cable and the rotor control box, part (usually too much) of the lightning surge at the antenna or tower will find its way into this cable.

Very often this cable runs parallel with the coax used as an antenna feed or transmission line. This enhances the chance of capacitive pickup from the braid of the coax, since the rotor cable is usually unshielded.

In a recent case, nature added to a July 4th local fireworks display.

Lightning struck the upper tip of a fibre-glass quad spreader holding the 20 meter driven element of a quad at my station. The last six inches of the spreader disappeared, leaving a "puff-ball" of fibre-glass resembling a feather duster or cotton ice-cream cone such as one finds at carnivals. The eyebolt holding the antenna wire was unharmed but dropped down since its support was lost. There was no damage to the antenna or coax transmission line.

All the antenna feeds were disconnected and grounded outside the shack. Yet the lightning surge entered the house thru the rotor cable, burned out the CDR control box, entered the stripline 120 volt a.c. connection strip thru the control box a.c. cord, passed into the receiver and exciter which had their a.c. cords plugged into the stripline, and caused considerable damage to the receiver and exciter.

Some of this could have been avoided had the a.c. cords been disconnected. But the best preventative measure would have been to disconnect the rotor cable.

There is an eight-pin Jones plug disconnect in the rotor cable outside the shack now which can be connected to a grounding plug, all eight connections strapped together and wired to a ground rod.

Truly a few ounces of prevention are worth a few pounds of replacement parts!

From S. P. A. R. C. - G. A. P.
St. Petersburg, Florida

WEAK SIGNALS - STRONG NOISE

by Dean F. Harris, WA4BAT

Poor band conditions and generally weak signals during the day, forced me to clean up my mobile. The ignition noise and hash was such that I could not copy anything but very strong signals.

All of my mobiles have been Chevrolets so my fixes are pretty well all GM. However, they are general and should apply to most cars.

Self generated noise is from two principal sources - ignition high voltage, which is engine speed related, and alternator/regulator circuit, which, except for whine, is not engine speed related and sounds like popcorn.

Ignition noise is self evident. I prefer the shotgun approach to eliminate radiation of ignition noise. I use braid from old RG8U to shield the entire high voltage cable system. This, along with a ground on the tail pipe usually eliminates any ignition noise even on models with plastic inner front fender skirts.

The most difficult to identify is whine and hash coming from the alternator/regulator system. Drop the belt off the alternator and start the engine. If your popcorn and whine is missing, you have found the source.

For whine, install a .5 mfd 50v mylar or similar capacitor from the alternator output (red wire) to ground. At the regulator, replace the paper "condenser" with the same type as above. This will eliminate the whine, and on models with the internal regulator ('73) or very short leads to the regulator, this may be all that is necessary.

If the popcorn still persists, do not place capacitors to ground on the field circuit (blue wire). This could destroy the alternator. Instead, replace the field wire with a shielded braided wire - RG58AU is satisfactory. Ground the shield at both ends, solder and tape connections.

After completing the above, you will be tremendously surprised at the improvement in your receiving ability. My mobile is now so quiet, I can copy stations that do not move the "S" meter! Yours can be too.

(from MIDCARS)

CONVERSATION

by Gregory Ginn, WB6ZNM

When non-ham friends ask about what hams talk about on the radio, I begin to think.

Tuning across the bands will bring in stations from all over the country and the world. What do we talk about? Signal reports, commercial rigs, antennas, QSL's, DXCCs, and, of course, the proverbial weather. A real involved QSO might get into a person's work.

Needless to say, many of these friends are not exactly impressed with the bulk of conversations on the amateur bands.

There are many exceptions, of course, but we are exploring the norm. What can we do to add more life to our QSOs? Do we even want to do anything?

Let's admit it---many of us are content to merely exchange a report and perhaps a QSL. That's fine if people enjoy it, I have a suspicion, however, that there are other hams who would like a conversation with their QSOs. If you fit into this latter category, why not attempt to expand your QSO's

Psychic Net

A net is sometimes a good way to bring amateurs with similar interests together.

For some time, I've been thinking about a net which would have the purpose of exploring ESP, para-psychology, psychic phenomena, and different philosophies. Maybe we can try some "on the air" ESP experiments.

I have no organizational plans (band, freq., time, etc.) as yet. I am only asking now for those interested to write me with their ideas. Also let me know about a few of the things you have read about or experienced regarding the subject matter.

If the idea progresses, we'll let you know about it here.

Recent observations of 'Auto-patch' use reveals that some stations are using these facilities from their home stations, apparently solely for the purpose of avoiding the regular long-distance telephone tolls.

This is strictly an illegal practice as it is considered defrauding the telephone company of revenues. Such practice could jeopardize both the amateur operator and

the repeater station and should be avoided by all means. It appears that the telephone companies, the mobile telephone services, many public services and industrial two-way radio users are closely examining amateur auto-patch operations. Some are jealously wishing that they had similar facilities. Others are scrupulously eyeing such amateur operations to see if they cannot be halted altogether.

The mobile telephone services, especially, are concerned that they are being gypped out of their rightfully due revenues. So it behooves us all to watch our P' and Q's when using the auto-patches.
(from Minuteman Repeater Bulletin)

STANDING WAVE RATIO

From an Engineering Report
Hy-Gain Electronics Corp

SWR (standing wave ratio) is a measure of mismatch between the load (antenna) and the impedance of the feedline. A transmission line terminated by resistive load equal to the impedance of the line will have an SWR of 1:1.

If a 50 ohm coaxial line is terminated with a 25 ohm non-reactive load the SWR will be 2:1. However, if the resistive component is measured along the line, it will vary depending upon the distance from the load.

At an electrical quarter wave from the load it will reach a peak of 100 ohms falling to 25 ohms at one half wave and repeating this cycle every half wave. Inductive and capacitive reactances introduced by the coaxial lines vary with the distance from the load but are zero at the one quarter wave points.

The varying resistive and reactive components in a coaxial line not terminated in its characteristic impedance make SWR measurements on a random length line almost meaningless.

By taking advantage of the 1:1 transformer characteristic of a half wave length (or multiple) feedline, an SWR bridge can be used for a more meaningful SWR measurement. By inserting the SWR bridge at a half wave (or multiple thereof) from the load, the SWR bridge will see accurately reflected the load impedance without any inductive or capacitive reactances introduced by the coaxial cable. Under these conditions, the only error introduced is line loss.

Since the isolation between the forward and reflected sensing elements on a standard SWR bridge is only about 20 db, SWR readings of 1.7:1 or less cannot be fully relied upon. Accurate antenna impedance measurements requires the use of an RF bridge which can measure the resistive, capacitive and inductive components which make up the antenna input impedance.

Bill Anderson (WB4TJH) a television cameraman who halted a chase by ramming his company vehicle into a bank robbery get-away car carrying three robbers and two hostages last week, will be honored by the Justice Department.

U. S. Atty. Gen William Saxbe and FBI Director Clarence Kelley will present Anderson a medal, made especially for him, at ceremonies Wednesday at the FBI National Training Academy at Quantico, Va

One of the robbers killed himself, and two others are in police custody. The two women hostages were unharmed.

(From "The San Diego Union")

Those who need Delaware on 144 and 220 should listen for WA3QPX Mondays at 7:30 p.m. on 145.025 and Sundays at 9:30 a.m. on 220.25 - both SSB.

The Worldradio News, July 1974

HELP! a fellow ham

John Kammerer, Trustee
23 New Street
Katonah, N. Y. 10536

Fellow Amateurs:

One of our members, Leonard Mendel, W2OVC, is being sued by a group of five of his neighbors for one million dollars. They are charging him with, among other things, "malicious interference, and maintaining a public nuisance".

Perhaps a direct quote from the complaint filed against Lenny will best illustrate the unreasonableness of the action:

"... and graphically portrays the overpowering, overwhelming and horrendous sight of these monstrous towers (ed. note 40 feet!)... as to cause her mental anguish, pain and suffering, her living in deathly fear, and causing sleepless nights and fright..."

Another quote:

"... (he transmits) from two channels with high power and back and forth: all this subterfuge and surreptitious activities by defendant in abortive attempts to deceive (the FCC)..."

Their case appears groundless, The Engineer-in-Charge at the New York FCC Field Engineering Bureau, Henry Paulisen, has stated in a letter dated 13 March 1974, in paragraph II:

"Inspection of the station revealed that the equipment was in compliance with Part 97 of the Federal Communications Commission's Rules and Regulations governing Amateur Radio Service".

The HHRL's TVI Committee, in two separate instances, visited W2OVC's shack and determined through on-the-air tests that his signal is clean. He is using high quality commercial gear of recent manufacture. It may be well to point out that, at the time of these tests, Lenny was not a member of the HHRL but approached us after a suggestion by the FCC that he obtain local assistance in ascertaining his station was in proper working order. He joined HHRL at a later date.

All this makes interesting reading, but the fact remains that even if he successfully defends his case he will have sustained legal costs in his own defense which will run into several thousand dollars. Pre-trial preparation alone has cost him almost \$2,500 already. He can use financial help.

His plight could be yours. Won't you chip in a few bucks to help?

The HHRL is accepting contributions for the "HHRL-W2OVC TVI Defense Fund". Please make your check payable to that fund, and send it to:

HHRL-W2OVC TVI Defense Fund
Pox 73
Katonah, New York 10536

Thanking you in advance, sincerely,

Anthony Anzevina, WB2KDE
President,
HARMONIC HILL RADIO LEAGUE.

de Dr. Sam Rosen, WA2RAU

I have had the pleasure of knowing Leonard Mendel, W2OVC for many years when he was a member of the New York City Police Department. Since his retirement from the Police Department, he is living on his limited retirement pension. He deserves the financial help from all hams who are capable of donating any amount.

de "Off Resonance"
"Perhaps you will want to help him - and protect all of us at the same time."
The Worldradio News, July 1974

book review

GLOBETROTTING VIA AMATEUR RADIO

A book reviewer is supposed to be very objective. The question arises as to just how straightforward can one's views be about a book written by a friend. The problem is compounded when the reviewer (WB6AUH) is mentioned several times in the book, (as is "Worldradio") and he helped the author get her amateur license. So you'll have to take the opinions of the only book reviewer we've got.

"Globetrotting Via Amateur Radio" is by Darleen Magen, HC2YL-WA6FSC. She really is a whiz-bang kind of gal. Not only did she partake in this adventuresome journey, and write a book about it, she also set all the type for it (and we can tell you that is quite a job.)

The book starts telling of the vacation trip she and her husband Gene Souigny, WA6-DKW, took to Tonga Island in 1970. While there Gene had a fatal heart attack.

(Note: The radio Gene had taken with him was a Swan Cygnet -270 borrowed from the Swan Company. Upon his death the unit was purchased by WB6AUH, from Swan. The rig was obtained to be a living memorial to Gene. It is to be loaned out to doctors, relief agency staff, etc., going overseas on short-term volunteer missions.)

Gene and Darleen were a magnificent ham radio couple. Their mailbox was filled, not just with QSL cards, but with letters from all the corners of the globe. Many foreign amateurs, when in California, would stop at the Souigny's home in Sacramento. They had made many friends and Darleen had worked tons of countries on 15 CW. But to Darleen and Gene (as apposed to the attitude of many) those were not just countries and cards, but people.

After Gene's burial on Tonga, Darleen returned to Sacramento. She wanted to return to Tonga, just to be there for a while. She also wanted to get her General so as to be able to enjoy reciprocal licensing privileges.

She always was a smashing CW operator. You should see her on a typewriter. It sounds like the heavy weapons platoon just opened up. But, she was, and by her own admission, rather light on the theory. We mention that only to give you an insight into the kind of person Darleen is. In 30 days, through a magnificent, gung-ho, effort she went to San Francisco and passed her General.

She went back to Tonga, taking a Swan 500C, and attended to putting a marker on Gene's grave.

The adventure that followed takes up 350 pages. There are 150 pictures. Darleen, being a friendly person, started receiving invitations from other points in the Pacific. Then the word spread. People who had hosted her in their homes told others about Darleen. More invitations started to come. The book tells of the real Amateur Radio spirit. This is a story of the warmth, and feeling of camaraderie that exists between internationally-minded amateurs.

Darleen's journey took on far greater proportions than she had ever imagined. Her travels captured the imagination of Amateur Radio. Where did she go? Well, just pull out the countries list and run your finger down it.

After points in the Pacific it was off to Africa. Then came an invitation from King Hussein, JY1, to stay at the palace. Through the Mediterranean and up into Europe. She came back to the U.S. through Iceland. After a stop in the States she went down to Central and South America.

There were amateurs who received a special award "WAC-D", Worked All Continents Darleen.

(please turn to page 47)

international gift shop

Many of the amateurs around the world are engaged in arts and crafts. Since this is an international avocation it would be nice to have some articles in our shacks or homes which would reflect the international taste of Amateur Radio. This would also help the overseas amateurs.

For example, Ole Petter "Pep" Rasch-Olsen, LA1GM, is a silversmith by trade. Using his professional skills he also makes call sign lapel pins and call sign belt buckles. He can also make anything special that is desired, such as engraving names and calls in enamel. Pep sent me a 14 K gold call sign lapel pin. It drew lots of comment and people asked about it. It was nice to be able to say "A friend of mine in Norway made it".

Phil Pector, W7JXE, met Pep while he was in Europe and Phil has a magnificent looking call sign silver belt buckle. You may write for prices to LA1GM at Bjornsvikvein 24, 1312 Slepends, Norway. Address it to Gullsmid O. P. Rasch-Olsen. Pep visited the USA in 1972 spending three weeks in the Boston, Mass. area.

Other amateurs around the world are engaged in making drinking mugs, jewelry, blankets, wearing apparel and many other items. Phil showed us a terrific turtle-neck sweater that a ham in Sweden makes. We thought we'd devote some space in "Worldradio" to the individual handcraft products made by foreign hams.

We'll have to charge a little commission on the sales of the products to help pay for the paper the notices are printed on. (With the price of newsprint going up every couple of months we can't give much of it away.)

We think this will be a real service to the foreign hams. The other day we got a letter from an amateur in India who told us that they couldn't buy radio products from the US because they didn't have any foreign currency. There are many countries in the world where the local amateurs have never even seen an IC. (Makes one want to run over to Babylon Electronics, buy a handful and send them off somewhere.)

So, if you have any foreign ham friends that personally make a handcraft item, tell them about our new service. Some of those Indian tapestries are beautiful and would certainly look nice decorating your home. The serving trays from Thailand are real conversation pieces.

We can kill two birds with one stone. Have some nice looking objects in our homes, and give a little hand to some folks who, through no fault of their own don't have access to the abundance of goodies that we do.

As always, we're open to any and all comments, suggestions and ideas. One way, when you want to send some parts overseas is to mark on the package, "Used items - No Value Gift". We'd also like to hear from those who have got parts into countries using various (but legal) methods to get around the sometimes 200% duty. Think how it would be if all our electronic equipment came from somewhere else and we had to pay twice what the gear was worth to get it into the country. Maybe we can set up a swap shop with items for parts. Or use mint stamps of a country as a medium of exchange. Again, let's hear your ideas.

"It is not enough that you should understand about applied science in order that your work may increase man's blessings. Concern for man himself and his fate must always form the chief interest in all technical endeavors, along with the concern for the great unsolved problems of the organization of labor and the distribution of goods - in order that the creations of our mind shall be a blessing and not a curse to mankind. Never forget this in the midst of your diagrams and equations... Albert Einstein

product review

BUDWIG ANTENNA CONNECTOR-INSULATORS

Nifty! That's the word to describe the antenna connector and end insulators manufactured by the Budwig Manufacturing Co.

The connector is used for attaching a coaxial feed-line to a dipole, inverted V, or quarter wave wire vertical. Instead of the usual glop trying to run coax to an insulator separating the halves of a dipole, one merely screws the PL-259 plug into the Budwig connector. The ends of the dipole are wrapped around the heavy wires that come out of the Budwig connector.

The connector is small and light, will handle full legal power, is weather tight, comes completely assembled and has a rain drip surrounding the coax fitting.

While it is small and light, it is also very strong. It is made of acrylic menthyl melhacrylate copolymer. Under the A. S. T. M. test method it has a tensile strength of 18,000 psi. Compressive strength 30,000 psi and a flexural strength of 34,000 psi.

In case that means about as much to you as it does to me, we'll talk about the strength in a practical way. About five years ago I was putting up an antenna. One of the Budwig insulators was laying in the alley when a big truck ran over it. The result: one of the three small ridges on the end insulator broke. But, it was still completely usable.

Here at "Worldradio" the drafting and layout area is in a basement with cement walls. Once to show someone how strong the center insulator was, I threw it against the wall as hard as I could. A very small piece chipped off. Its ability to operate as an insulator and connector was not harmed in the slightest.

It is assumed that in every day use the units will not be subjected to trucks running over them, or being thrown against cement walls with all the thrust that 195 lbs. can muster up. Field Day emergency communication preparedness kits and DXpeditioners may want the strength and reliability that such units offer.

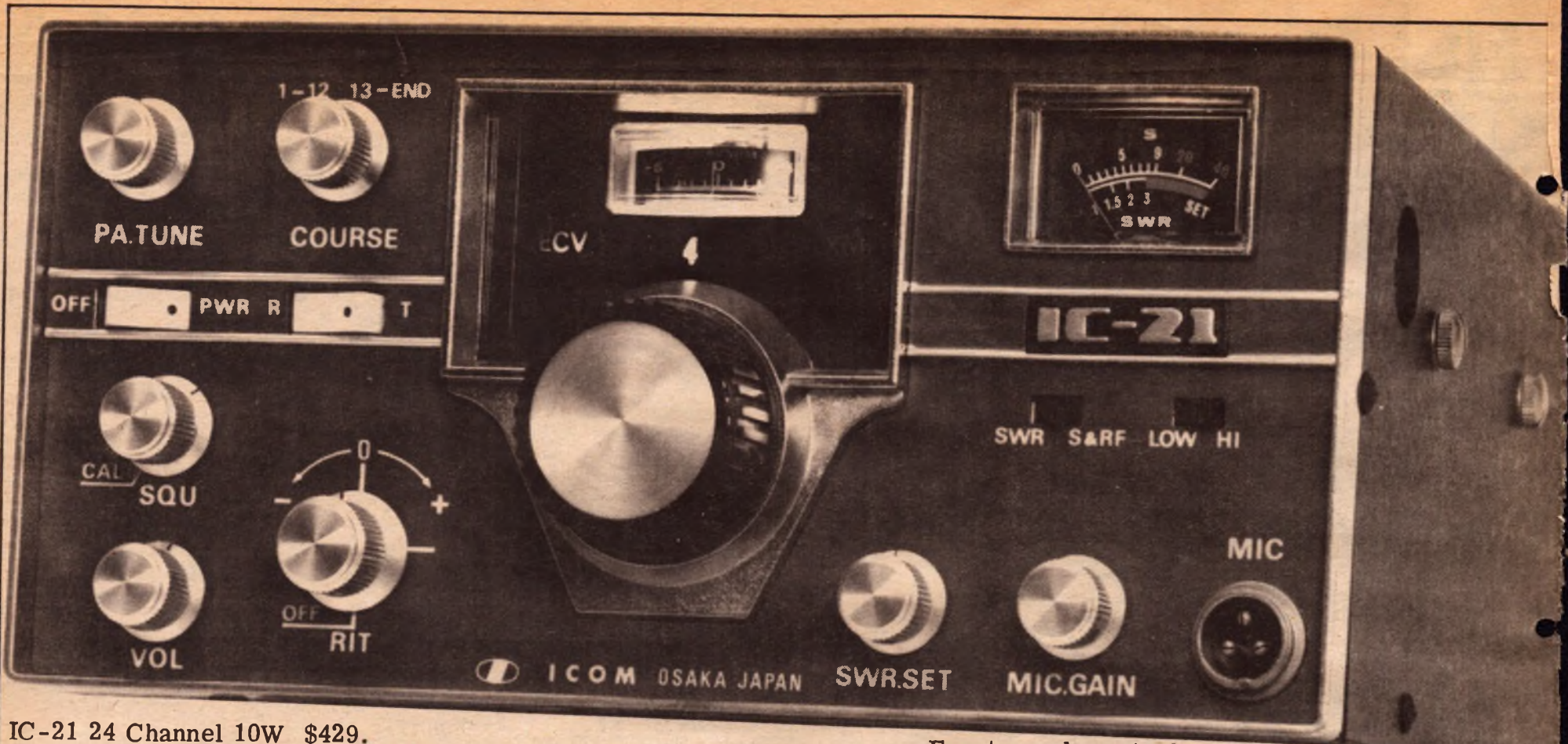
With Field Day coming, an order was sent in to Budwig for his units. The insulators are 99¢ for two of them. The center insulator is \$3.95. You also receive a complete instruction sheet, with proper antenna lengths spelled out for several places in all bands, 80-10.

You will even find out the dielectric constant and the dissipation factor. It's almost like the little girl who read the book about penguins and said "That tells me more about penguins than I wanted to know". It may be a carryover from the fact that in his other lines (grommets, cable straps, etc.), Budwig is a supplier to such firms as Litton, GE, HP, Beech Aircraft, Lockheed, ITT, etc.

What appeals to us is the neat appearance of the antenna connector and the end insulators. You can tell that a lot of thought went into them. We appreciate the extra concern shown by the inclusion of the instruction sheet. It shows that little extra touch.

In the language of the consumer publications we can say "highly recommended". The chief honcho of Budwig Manufacturing is Gilbert "Bud" Budwig, K6LQ. Mailing address of the firm (in business since 1935) is Box 97, Ramona, CA 92065.

NEXT MONTH: We will have a review on a unit every amateur should use, and very few do. It is an item that will really make a difference. It's quite new on the market and has features that others like it just don't have. It costs but \$40. We're still in the middle of testing it and it looks terrific.



IC-21 24 Channel 10W \$429.

Front panel - actual size

IC-230 Frequency Synthesized 10W \$489.



slip it under your dash

Front panel - actual size

IC-22 22 Channels 10W \$289.



Front panel - actual size

slip it under your dash

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Drake TR-4 TCVR was \$429 NOW	\$395.
Swan 11XC AC pwr supply	\$85.00
Johnson Valiant XMTR	\$149.95
MARS LE-2 phone patch	\$14.95
Lafayette HE-23 preamp.	\$29.95
Collins 204F1 2-30 MHz XMTR (orig cost \$21,000.) make offer	
Galaxy GT-550 TCVR	\$395.
Galaxy SC-550 w/AC PS	\$79.95
Gonset 2M Sidewinder w/FET rec. front end	\$189.
Galaxy III SSB TCVR	\$139.
Galaxy DC-35 mobile PS	\$49.
National NCX-3 SSB TCVR	\$169.
National NCX-A AC PS	\$69.95
SBE SB-34 SSB TCVR	\$295.
Globe Scout Novice XMTR	\$39.
Heath HW-16 Novice TCVR	\$89.
Raytrack Autolevel	\$39.95
Tone Burst OSC. 6 tone	\$25.00
SBE SB1-LA Lin Ampl.	\$139.
Hamm XC-50A SSB XMTR	\$195.
Linear System Mob. PS	\$79.95
Grebe Receiver (Antique) make offer	
Sangamo HV filter cp 15mfd 6KV (like new).....	\$39.95
Electro Transformer, HV plate 220-240 in, 446OV 1.6A out	\$149.
Galaxy DAC-35 Phone patch/ speaker console	\$69.
Galaxy RV-1 remote VFO	\$49.
Galaxy V SSB TCVR	\$219.
Heath IG-82 Sine-Sq Gen	\$19.95
GR capacitor decade	\$19.95
Kirk fiberglass 20M quad poles/ spiders/Delta Loop mounts	

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reach out

Just imagine how much more Amateur Radio would mean to you if you were blind.

John Freeland, W8GSN is organizing a Novice group of blind hams at the West Virginia School for the Blind at Romney, WV 26757. Novice crystals are needed or send a check made out to "Blind Girls Amateur Radio Club" at the above address.

I have QSO'd their first novice, WN8RQY, and more are on the way. Money is needed for better equipment and a vertical antenna. Give a thought to what Amateur Radio would mean to you if you were blind.

de Ambrose McKenzie, W3BHE
(from "Auto-Call")

This is a personal appeal. Just for any old used postage stamps anyone can scrounge up from incoming mail. This project keeps two Indian boys in boarding school just from the sale to tourists of the used stamps mounted for beginning collectors.

Any used stamps help and we need them on paper so they can be soaked off without damage. Can anyone help? Send stamps to Jack Lipsy, WB4RWT, 1139 Woodbrook Dr., Largo, Fla. 33540.

THE HANDI-HAM - An Example For Us All

by Ward Jensen, WØTLE

While the Handi-Ham System consists of both handicapped and non-handicapped members, it is principally the former of whom we speak.

As we hear them on the air, we are not aware of any handicap unless there is some speech impediment which we cannot help notice - but then, - there are many "verticals" - not generally considered "handicapped" who have speech defects like stuttering, wheezing or some peculiarity - so we say that just plain hamming does not admit of any handicap.

We are not so sure that hamming in general can be quite so proud of its record when we listen to some of the "dog in the manger" types of operating, the reluctance or defiance, or a request to QSY for a net, a phone patch, or even an emergency - or foul language, smut or commercial selling, or openly flaunting the rules and regulations. Fortunately, this kind of operation is minimal and we tend to police ourselves but some of it does exist.

Since Public Interest, Convenience or Necessity are the reasons we are privileged to be hams at all, let us look at the Handi-Hams - maybe we can learn something from them. We invite you to listen to or check in with the Piconet All Day Watch, daily at 3.925 MHz or the System Saturday Afternoon Roundup at the same frequency.

On PAW, the first thing you will be asked is "Can we help you" now isn't that something - a handicapped person asking if he or she can 'help' us instead of asking us to help them!

With enthusiasm, they will put you in touch with your station, run your phone-patch or handle your traffic or report on the weather and roads. They will want your name and QTH and invite you to check in again - and mean it.

Page 26

Their politeness, open friendliness and desire to be of service most certainly ought to 'rub off' on the rest of us - we are certain it does - at least on most of us. Perhaps we can ask for no more than that and hope it improves us - hope it improves all amateur operating - hope it awakens us to the importance of public service - shows the way to extend courtesy and to help our fellow man.

Perhaps if we let some of the Handi-Ham type of operating rub off on the rest of us we might convince all citizens of the world that Amateur Radio deserves to be, and can be enjoyed both as a service and a hobby.

Anyone wishing to contribute used equipment to the Handi-Ham System may contact Courage Center, PH. 288-0811. Any equipment not used will be sold at ECI and turned into cash for the System. So dig out that attic, basement or garage! We will be waiting for your call... Staff, HHS Courage Center...



Armond, K6EA, having an "eyeball QSO" with Mary, WB6SSZ, who is blind and deaf. She is one of the group that must use CW only. (Picture by Larry Kriner, WB6KKG, taken at SAROC, 1974)

THE FORGOTTEN HAM

by Armond D. Brattland, K6EA

As a fully articulate amateur, spending most, if not all, your operating time on SSB, what is your reaction when suddenly confronted by a group of persons 'talking' only with their hands?

Let us hope it's not as one fellow expressed himself by saying, "Look at that bunch of freaks!" He then sharply quoted, "Except for the grace of God--" etc., and asked what he would do, if he were deaf, or mute, or both. He replied that he hadn't thought of it and he gave the same answer, when asked about how many hams there might be in the U.S., or even in California, that were so handicapped.

It's quite an experience to carry on radio communications with someone for some time and then suddenly learn such person was blind, deaf, a mute, or had several of such handicaps.

In one case I first suspected that the FB operator taking my traffic was blind, when I asked him for the correct time. Later on when he came to realize that I knew his secret, he mailed me some of such traffic, copied on a braille mill, to further flabbergast me. Otherwise, he never talked about his problems on the air and he seemed to resent it if others did.

Much like complaining about 'sore feet' and then to learn that the other fellow has no feet--, before complaining about one's operating abilities, better first know what his handicaps may be. It might be that he copies by feeling of a speaker, or through bone-conduction. Perhaps, if one had known, greater pains would be taken to always send good CW!

Besides, those amateurs now operating despite their handicaps, one wonders how many others there are that have had strokes and lost their voice, or other facilities and now only listen to their old friends on SSB. Maybe many of these wish that someone would help them get back on, even if only on CW from now on.

Such help would have to be given without fanfare, for usually it is embarrassing for

handicapped persons to say much about their afflictions, until they become well acquainted with you. Likewise, they may be reluctant to ask for help, for fear that you will merely show pity for them and then go on your way. They don't wish pity, even if sincere and surely not polite gestures.

What they need is help!

In Minnesota, within the "Handi-Ham" system, an effort is made to maintain an atmosphere of cheerful helpfulness, while treating the problem realistically. In other words, make no fuss about being sorry that a person may not have full use of their hands, but get busy trying to figure out how they can operate a keyer and do something about it!

Within the "Handi-ham" system, a central exchange is maintained for receiving requests for help, so that, without embarrassment to anyone, the requests can be farmed out to those volunteers in the system who are closest to the person and best able to render the required help. Such central exchange is essential now, particularly during this transportation crisis.

Generally, former active amateurs, now handicapped, will require help putting up antennas and working out switching and station arrangements. You may also be called in to help select and obtain suitable equipment.

There are a great many handicapped persons who require training to become amateurs and especially to get them set up with antennas and receivers, so that they can 'learn by listening'. The 'listening' in many cases, being through the fingers.

In an area with such a heavy 'ham population' as in the Western States and California, it surely can never be a small undertaking to help furnish such needed help. Also, it should not be saddled on the backs of only a few volunteers.

Whatever is done, whether to follow along the lines taken by the Minnesota "Handi-Ham System", or to start something else, an active organization is long past due and there should be no further delay in getting it underway.

HAMS LEND A HAND

by Clair Showalter, W4UJL

For 19 hours, over 50 Central Florida amateurs supplied communications for the United Cerebral Palsy Telethon held in Orlando, at the Municipal Auditorium and televised by WBDO Channel 6.

This operation was organized and supervised by C. E. "Buzz" Showalter, W4UJL, ARRL Emergency Coordinator for Orange County, utilizing the Central Florida Repeater Association station (WB4QEL) and the Daytona Beach Repeater Association station (WR4ADC).

Our job was to relay pledge information from the counties and cities surrounding Orlando from Wildwood to Ocala to Leesburg to Kissimmee - St. Cloud to the East coast cities of Daytona Beach, Cocoa Beach, New Smyrna Beach, Melbourne, with the in-between cities of Deltona, Debary, Sanford, etc., with all information and traffic received at the Municipal Auditorium via WB4QEL, FM repeater.

In addition to our communications network, nine amateurs were invited to participate on the VIP Panel and for one hour, they acted as telephone operators, visible on TV, receiving and initiating telephone calls for money pledges for Cerebral Palsy. Those amateurs were: Robert Luman, W4MPQ, Leo Drescha, WA4MUB, Allen Burnett, W4UFY, Albert Canning, WB4HAK, Georgia Denman, K4ZXS, Mike Connell, WA4FNJ, Charles Walters, W4RHE, Dwight Sprow, W4E2C and William McInnis, WA4WBG.

W4UJL presented a check for \$100 from the Orlando Amateur Radio Club to the Cerebral Palsy Fund. Other amateur clubs involved were: the Lake County Amateur Radio Club,

The Kennedy Space Center Radio Society, The Daytona Beach Repeater Association, The Central Florida Ground Wave Club and the Central Florida Repeater Association.

All in all, it was an outstanding event, which not only contributed to the community from a monetary standpoint, but also provided an excellent test of our equipment, services and organizational abilities if and when an emergency occurred.

("Florida Skip")

Nostalgia

by Joseph Brownell, W2BSI

If you are one of the old, old timers, nostalgia may mean "spark" to you. If you just received your ticket, the "old days" may mean the old repeater rules. Nostalgia has something for everybody. How do you see it?

Do you remember....

- Your first QSO?
- Your first DX QSO?
- Your first YL QSO?
- Your first phone QSO?
- Your first message?
- Your first QSO with W1AW?
- When most transmitters had balanced outputs?
- The Globe Scout?
- Your first DX pile-up and you couldn't believe it?
- The first liar who answered your painfully slow CW with "Got landline must go CUL 73, de...?"
- The first time you heard the word "squelch" and were too embarrassed to ask what it meant?
- When Windom antennas were all the rage?
- When your first ticket was Class B?
- When TVI was called Tennessee Valley Indians by AM operators afraid of being overheard by unwilling neighborhood SWLs?
- When you could buy radio parts in a radio store?
- When any radio operator was called "Sparks"?
- When mobile operators put converters on their AM car radios to receive ten meters?
- When an antenna farm meant a maze of flapping, folded dipoles made out of 300 ohm twin lead?
- The first time you heard SSB on the upper end of 75?
- Your first transistor circuit?
- "Old Yellar" who wouldn't talk to any K or WA call on 75?
- When the first articles on shielding brought questions of "Why? Is something getting into the rig?"
- Your first rig?
- Your first hamfest?
- When you bought a second transmitter and began to talk about the "Big rig"?
- When a single 807 was a respectable final and a pair of 807's was big stuff?
- The first time you saw an ARC-5? Conelrad receivers?

(From "Hilltopper" Tompkins County (NY) Radio Club)

"Amateur radio doesn't measure its success by volume of traffic, gross revenue, or audience - but simply by how well it has served humanity... George Jacobs, W3ASK

Join the other friends of "Worldradio" who help publish a newspaper dedicated to the best in Amateur Radio

Your subscription makes it possible for us to bring news of the warm and wonderful people who engage in this wholesome activity known as Amateur Radio.

Our staff is determined to make this publication useful and valuable to you. We hope the news in this paper is of benefit and that you find it helpful in achieving the enjoyment, and opportunity for service, possible in this wonderful hobby.

The more you know about something the more you enjoy it. We are most vigorous in our efforts to bring you a great newspaper about Amateur Radio. You are cordially invited to be part of this project.

The Worldradio News, July 1974

Worldradio-Three Years Old

This issue marks three full years of "The Worldradio News".

An axiom in publishing is that if a new publication can make it to the three year mark, it is here to stay.

Three years. In some ways it seems like it went by in a flash. In other ways it was a long, hard struggle. And in some ways it seems like we are just at the beginning.

An anniversary is a time to look at the past, where we are now, and to the future.

For your editor the past three years have been the most personally rewarding years of my life. While previous occupations (TV newscaster, radio reporter, magazine and newspaper writer, war correspondent, documentary film producer) were interesting and challenging, nothing before presented the satisfactions there are in publishing this newspaper.

The difference between "Worldradio" and working in the press, is the warm and affectionate rapport this paper enjoys with its readers. They write and talk about "our paper".

And the mission of this paper is different. As opposed to telling daily how vicious man is to his fellow man, this paper goes after subject matter that brings such as Rasheed Jalal, YK1AA, to call it "a wonderful journal making friendship between the radio amateurs".

We're thrilled when someone like Harold Estok, W6JIP, says, "Reading Worldradio has made me proud to be counted among the fraternity of hams."

The pleasure of working on this paper comes from being aware of the strong feeling of commitment that the readers have towards their paper.

What we are trying to do is report on what warm and wonderful people are doing with Amateur Radio. While we tell about it all, we emphasize the international friendship, emergency communications, public service and humanitarian aspects. Such avenues are the important areas of this great avocation. These activities are what makes Amateur Radio interesting and meaningful.

We see our purpose to be one of bringing information, inspiration, and hopefully to move our readers to a course of action. We are inspired by our readers. It is an awesome responsibility to run "the bulletin board" putting up for display the ideas of the dedicated and involved amateurs.

We find it fascinating and exciting to chronicle the activities of the enthusiastic, highly motivated and productive amateurs.

The support for this publication comes from those with wide horizons. They have active minds and bring vitality to their activities. It caters to the truly interested and thoughtful. It is read by those who see action and adventure in Amateur Radio.

Unfortunately, those who want their intellect to be challenged are not the majority. They are a minority. And thus, we haven't had an easy time of it. Our loyal, long-time readers have known of the struggle over these years. We have missed several issues. Not too long ago we missed two issues in a row. That was a blow to our professional pride. We'll tell you why we missed the issues.

FCC Official Clears The Air
(continued from page 36)

tainment equipment need to address themselves to.

Q: Any additional information about that meeting of ARRL and FCC officials?

A: Yes. That there must be cooperative The Worldradio News, July 1974

We have a very, very small staff. On page 44 you see the names. All those with calls are non-paid part-time volunteers. We have but one full-time employee (WB6-AUH). The non-calls are part-time with their hours adding up to another full-timer.

So, with what amounts to two full-time employees we put out this paper. If you were to turn this 48 page paper sideways, slit the edge, you would find 96 magazine size pages of material. Put out by two people. Crazy! Impossible! But somehow we do it.

Obviously, this is not a big deal publishing company. The paper is produced in a private home. Kind of nice, you can get up from the dinner table and in a few moments be back at the typewriter. (it is now 10:45 p.m.)

We started with very little capital. And we must wait for the billings to come back from the advertisers from one issue, in order to pay for printing the next one.

We recently took in some investors, will be taking in some more, so the worst of our troubles are over.

We learned a lot about people when we missed the issues. A few wrote in and cancelled their subscriptions. On the other hand we received more lifetime subscribers than in any other similar period. And we previously wrote about the magnificent gift of Lee Shaklee, W6BH. While we received a few grumbles, at the same time practically every renewal was for two and three years. What a difference in attitudes! We learned a lot about people then. Some grumble, some want to help.

Over 10,000 hams will see this issue. For those deeply committed readers who are concerned about us here's what you can do (we aren't asking for anything) give a gift subscription. If one out of ten readers would give a gift subscription (we send a card in your name) it would mean a great deal. We could get some new typesetting equipment. Right now we get it repaired, use it awhile, take it back in, use it, take it in, etc. It's the spark gap of typesetters. A new one would make a world of difference.

But things are really on the upswing. A new major advertiser will be in the paper shortly. (Nice guys in Nebraska). Speaking of advertisers, we should give a tip of the hat those firms that started supporting "Worldradio" way back when and have been with us ever since:

Babylon Electronics, Qument, Wilson, Communication Specialists, Magnum, Webster Radio, Fallert's Engraving, Golden West Crystals, Robot, Swan, Autek, S & R. Palomar, SBE, ETO, Taylor Communications, ICOM, and we welcome our more recent supporters. Tell them where you saw their advertisement. Buy from the "good guys" in this paper.

What of the future - - We are constantly searching for ways to improve reporting on the excitement and drama in Amateur Radio. More and more leading amateurs are sending us information. We believe "Worldradio" is potentially the most powerful influence for the good of our hobby/service. We are dedicated to being useful and valuable to those with zest. We like the keen and eager amateurs. They are a very select group.

effort between amateur groups in all countries to back proposals, so there may be an expansion of frequencies allocated at the next worldwide conference.

The FCC wanted a single sitting with league directors since we'd met individual directors from time to time. We were able to let league officials understand what ideas we were thinking about.

Our goal is to present an "uplifting" publication, one that makes a contribution. We want to serve the community of Amateur Radio. Will you help us publish such a newspaper?

Three years. Twenty-nine issues. Do you remember some of those early ones? Sixteen pages. Slowly we climbed to twenty. There will always be a warm spot in our heart for those who came aboard then. They made a dream come true. They had faith. They made it happen.

Three years. We have so many to thank for their help. All the amateur magazines and many club bulletins have made mention of us. The ARRL Staff, Directors, and SCMs assisted us in many ways. Our lifetime subscribers are magnificent people. Those who have contributed articles, shared their experiences, shown others the way, are to be congratulated. The many who have written letters, they are a source of strength. We regret the work load has prevented answers to all of them. And thanks to the many subscribers that we never hear from. We know your thirst for information and ideas is out there. Thanks to those readers who come up to our booth at the conventions to say hello. Thanks to the Sacramento hams who would come over to a garage that was cold in the winter, hot in the summer, and stick thousands of mailing labels on the paper. Thanks to our printer (Sacramento Suburban Newspapers), engraver (Precision Graphic Arts) computer (Associated Data Services) for your extensions of credit and understanding. Have no fear, you'll all be paid.

To all of you we give a promise - and that is to do the very best we can so as to justify your faith in us. We think the Worldradio crowd gets more out of Amateur Radio. Probably because they put more into it.

Through the years we had always hoped to share the enjoyment (and work) of putting out this paper with others. Recently we found two gung-ho folks. Jack, WA6TRZ and Dorothy Schwartz, have worked miracles around here. They share in the enthusiasm because as they say, they "believe in the paper". Away from his regular job Jack was been here building shelves, many other tasks, and recently installed fluorescent lights in the area where we lay out the paper (now we can see what we are doing). Dorothy has been setting type and handling the subscriptions, doing the bookkeeping and helping us work our way through the mounds of correspondence. With folks like that on the team we're going to go a long way.

Three years ago, in issue number one, we listed the following objectives:

"Worldradio: a publication for the amateur radio operator who is interested in the world around him and its people. It will cater to the active, enthusiastic, motivated, involved and public service minded.

Worldradio is an international chronicle of the incidents of Amateur Radio. We shall report on all that is newsworthy.

Our journalistic efforts will concentrate on the amateur as a (1) volunteer communicator - particularly in emergencies, calls for medical aid and international message handling; (2) one concerned with international good will. An amateur who is interested in meeting amateurs of other nations on the air, corresponding with

them, and meeting with them in person will enjoy reading Worldradio.

There is no group in the world that can contribute as much to international friendship as the amateur radio operator. We shall also promote Slow-Scan TV because of its potential as a private "window on the world".

This publication will be at the forefront of reporting on, and supporting humanitarian projects related to Amateur Radio and those in which operators are involved. You are invited to suggest projects, programs and to send in reports (and photographs) of your emergency, humanitarian, or international friendship activities and also to report on such efforts by other amateurs.

Worldradio is making available a Swan Cygnet 270 available to amateurs going to other countries on short-term projects such as volunteer physicians, relief agency personnel, or similar endeavors. The rig and the carrying case are ready to go.

We shall tell about, and assist those who help the blind and handicapped amateurs. We shall also be assisting missionaries, peace corps, and others in the remote areas of the world to use and enjoy Amateur Radio.

Amateur radio operators who travel, or live in foreign countries, whether for pleasure, business, government service or on military duty will enjoy reading this publication. Those who plan on traveling will find it useful.

Worldradio will also relate how amateurs serve the public interest in their own communities. We intend to display on our pages, for example, their role in search and rescue operations. We are interested in publicizing the lifesaving abilities of Amateur Radio.

This publication will not engage in controversy or bickering. Worldradio will stress the fellowship among amateurs, the positive aspects and challenging utilizations.

Complimentary copies of Worldradio will be sent to those who hold the future of Amateur Radio in their hands. Selected national leaders, legislators, lawmakers, heads of telecommunication departments, etc., will be able to read it and understand what a valuable resource "ham" radio is to the world's people.

Through Amateur Radio the world is a global village. Worldradio tells about it."

Three years ago those were our objectives. How well we fulfill them is up to you.

Three years. We've made it. You made it happen. Your support meant a great deal to us. We feel we have lots of friends throughout the world. Let's hear from you. With Dorothy's help, now you'll get answers. Your comments and suggestions have guided us to where we are today. There are more heights to climb.

On each of our anniversaries we have shared our progress with you. The worst of the battle is over. We're now in a period of great growth. We shall not be using this space again for this kind of report. Instead, it will be used for material that fulfills our mission. And we are counting on hearing from you to keep us on the right track.

It's ten minutes until midnight. Good night. Good luck.

changes which can be made at the back of the unit without removing from the cabinet. Try it, you'll like it. Who said CW is dead?

(Florida Skip)

The 1977 ARRL National Convention will be held June 3 - 5 in Toronto, Canada.



dx

by Gary Stillwell, W6NJU

FRESNO DX CONVENTION

Elsewhere in this issue you will find the full story, and pictures, of the Fresno DX Convention.

UPCOMING OPERATIONS

While no frequencies are yet available, looks like there will be an operation from Kingman Reef sometime in June. Keep a lookout for KP6KR. This operation is sponsored by the Northern California DX Foundation which will also handle the QSL's.

No late word on Mt. Athos, but plans indicate an early July operation by OH2BH and company.

San Hutson, K5QHS, will be heading to the Caribbean late this month and plans to operate from Martinique, Dominica and Guadeloupe. The schedule is: Martinique June 28-July 1 using FM0AYZ, Dominica July 2 - 3 signing K5QHS/VP2D, Guadeloupe July 4 - 6 using F0/FG7. Frequencies to watch are 3815, 7205 and 14205. 160 mtr buffs might also listen on 1805. QSL's to K5QHS.

Nauru will be activated from last August to mid-September by JA1OCA using the call C2IDX. Operation will include two stations with linears covering all bands, from 160 thru 10 meters.

VQ9D and VQ9BP are aiming for an operation from Des Roches late June or early July.

Tim, BV2A, on Formosa was issued a permit on April 18th for operation on 14025 CW and 14218 SSB.

The Russians will be making the call sign roundtable to commemorate the 30th anniversary of the liberation of Soviet territory from Nazi occupation in 1944. U30A opened on May 8, followed by U30R on May 9th. A station will be on the air from each city for 24 hours starting at 0900 with the suffix derived from the city name. They evidently will all have the 30 in the prefix.

160 METERS

Don't forget the 160 meter Trans-Equatorial Tests during June and early July. Alternate calling periods with the Northern Hemisphere using the first 2-1/2 minute segments and the Southern Hemisphere using the last 2-1/2 minute segments. Look for Europeans and Asians on 1825-1830 with South America 1800-1808 and Africa (ZS) on 1930-1935. Times are daily from 0000 - 0030 GMT.

DX ADVISORY COMMITTEE

Lynn Lamb, W3BWZ, along with Robert Shank, W5AO and David Kiley, WA8ZDF as a sub-committee of the Advisory Committee are studying matters regarding DXCC country criteria. The questions they are asking are:

1. Should the number of DX 'countries' be: Increased, Decreased, Remain Same
2. In general, do you think the present DXCC criteria for determining what is a country (for DXCC purposes) is: Adequate, Inadequate
3. Should DXCC continue to recognize as countries, small, uninhabited reefs and atolls?: yes, no
4. If, in attempting to establish new criteria for 'DXCC Countries', it was apparent there would be a large shift in total countries, would you be in favor of this change?: yes, no

5. Should Rule 9 of the DXCC Rules be changed?: yes, no

6. Should ARRL offer a separate DXCC .. CW Only?: yes, no

7. Should ARRL offer a separate DXCC .. Phone only?: yes, no

8. Should we just leave the whole matter of changing the countries list, awards and DXCC in general alone and continue the way we are now?: yes, no

I'm sure this committee would welcome your comments to these questions or any other ideas you may have. Comments should be sent immediately to Lynn Lamb, W3BWZ, Route 1, Box 207A, White Plains, MD 20695.

The DX Advisory Committee has just put out a letter to all who have written regarding the elimination of the Phone DXCC giving the reasons the elimination decision was made. Apparently it was felt that Phone DXCC has increased pressure to operate phone and thus has decreased CW operation, that the administration of the award was a burden on the Headquarters staff and tended to create the 'list' or DX Net type operation which was undesirable. The Committee is re-considering their recommendation and would appreciate any further comments on the Phone DXCC matter.

PREFIX CHASERS HAVE A FIELD DAY

May must have been a prefix chasers dream, or possibly it might have been a nightmare. There seemed to be activity all over the place with special events, ITU Week and Armed Forces Day. As we can

put the pieces together, here is the latest available QSL information. Calls carried in the last column will not be repeated here except for minor corrections.

KD1ITU to WA1RDN	KF7ITU to K7LTV
KF1ITU to W1DMD	K7ITU to K7NHV
KJ1ITU to WA1STN	KC8ITU to K8DYZ
KK1ITU to WA1UWC	KI8ITU to WB8EUN
KL1ITU to W1RSS	KI8QKY to K8QKY
KP1ITU to WA2UWA	KJ8ITU to K8CJQ
KQ1ITU to W1NXZ	KQ8ITU to W8II
KR1ITU to WA2UWA	KY8ITU to W8SH
KY1ITU to W1DGJ	KY8TT to K8DAA
KC2ITU to WB2EQE	KD9ITU to W9MTT
KE2ITU to WA2DHG	KS9ITU to WA9LZA
KF2ITU to WB2OEU	KW9ITU to K9WEH
KH2ITU to WA2UWA	KY9ITU to W9JUV
KK2ITU to WA2UWA	KZ9ITU to W9AES
KK2ITU to WA2UWA	KD0ITU to K0SGJ
KQ2ITU to W1DXA	KU0ITU to WA0TKJ
KR2ITU to WA2UWA	KV0ISU to WA0KHF
KS2RPI to WA2EAH	KX0ITU to W0PGA
KT2RPI to WA2EAH	WO1ITU to WA2UWA
KW2ITU to WA2UWA	WS1ACR to W1YSE
KX2ITU to WA2UWA	WS1ITU to WA2UWA
KY2ITU to WB2FVO	WT1ITU to WA2UWA
KB3ITU to W3CRE	WD2ITU to W2TUK
KF3GGM to K3IVO	WM2ARS to WA2CCF
KJ3ITU to W3GJY	WP2ITU to WA2CCF
KK3ITU to W3KT	WQ2ITU to WB2GGM
KQ3ITU to W3AZD	WT3REE to WA3PMI
KU3ITU to K3CHP	WU3USA to W3ADO
KW3ITU to WA2UWA	WS4ITU to W4DC
KX3ITU to W3AU	WV4ITU to W4IML
KF4ITU to W4ZM	WY4TBS to WA4WTG
KK4ITU to W4WSF	WM5BIL to K5YIN
KX4ITU to W4REZ	WI6ITU to W6ISQ
KY4ITU to K4OD	WT6ITU to W6NUT
KZ4ITU to WB4SGV	WW6ITU to YASME
KH5ITU to W5RTQ	WX6ITU to WA6AUD
KQ5ITU to WB5IZN	WZ6ITU to W6SC
KX5ITU to W5SBX	WC8ITU to WA8TDY

KY5ITU to K5RWK	WF8HOF to W8OYV
KD6ITU to W6LS	W8ITU to W8RSW
KE6ITU to YASME	WJ8ITU to WA8GPX
KK6ITU to W6PAA	WD9ITU to W9AES
KU6ITU to WA6AHF	WS9BGF to W9HRE
KX6ITU to WB6APG	WQ0KSU to W0QQQ
KZ6ITU to W6GBY	

And just to add an international flavor we also had the following:

PP1ITU to PY1SQ	SK0ITU to SK0CC
PP3ITU to PY3BDE	SQ0ITU to SP5BB
PQ7ITU to PY7ARX	XJ3ITU to VE3WT
PR2ITU to PY2ON	YU0ITU to YU0SRJ
PR3ITU to PY3BXW	ZV1ITU to PY7APS
PR6ITU to PY6CO	ZV6ITU to PY6AM
PR0ITU to PY2DSE	ZV0ITU to PY1AA
PS2ITU to PY2JY	ZW4ITU to PY4AKL
PS5ITU to PY5OE	ZW7ITU to PY7BQO
PS0ITU to PY7NS	ZX1ITU to PY1BMB
PU2ITU to PY2ASA	ZX2ITU to PY2DSQ
PU3ITU to PY7DX	ZX4ITU to PY4AP
PU6ITU to PY6AFZ	ZX6ITU to PY6TW
PU7ITU to PY7AZQ	ZY8ITU to PY8JO
PV0ITU to PY4LW	ZY2ITU to PY2FRW
VA6WDX to VE6LB	ZY4ITU to PY4AKL
VA7MRE to VE7BCF	ZZ4ITU to PY4KL
VX1KE to WA1WBH	ZZ6ITU to PY6SB

All of this activity must really have given the Post Office a surge of business.

Remember we would like your comments as to items you would like covered in this column.

Special thanks for information to the DX News Sheet, West Coast DX Bulletin, QSL Managers Directory and CQ Magazine.

Many QSL cards are not mailable to DX stations under current postal regulations. For domestic use QSL cards may be as small as 3x4-1/4 inches; for international mail cards must be between 3-1/2 x 5-1/2 inches minimum to 4-1/4 x 6 inches maximum. Better get that ruler out!

DXer: for cementing better international friendships and excellent (about 95%) QSL return, write in the language of the DX station worked. How? With K3CHP's DX QSL guide. It contains a list of numbered radio-amateur sentences translated into 54 languages! Simply select and copy sentences in the language of your choice. \$3.95. Joe Mikuckis, 6913 Furman Pkwy., Riverdale, Maryland 20840

What was your biggest thrill in Amateur Radio? Share it with the world. Send your story to "The Worldradio News", 2509 Donner Way, Sacramento, CA 95818.

CHEER UP!

For those of you who may have despaired of receiving a response you have long-awaited to your QSL card, cheerful news has been released by Bob Bigley, WB8FNE: just four (4) short (?) years ago Bob contacted MP4PEU in the Bahrain Islands and promptly shot off a card; well, by bamboo raft and covered wagon Bob received a return QSL a few weeks ago!.....

(From "Radiops Log")

Attention the following hams:

DJ7JN, DJ7XC, DL1DU, F3KW, HE9RAP, I3VK, I1BUE, I1NWN, I3ZDI, K1WHS, LA1FH, LA1GM, LA4HL, LA1TE, LA6ZH, LA6UD, LA5PM, OE8TF, SM4IM, SM4EIM, W1NWP, W2UIB, WA6RNQ, W4MOS, W9IGP, W9FBO, W9HLA, WA7RPZ, K9SQG, YU3AB, YU3BC, YU3CW, YU3TXT.

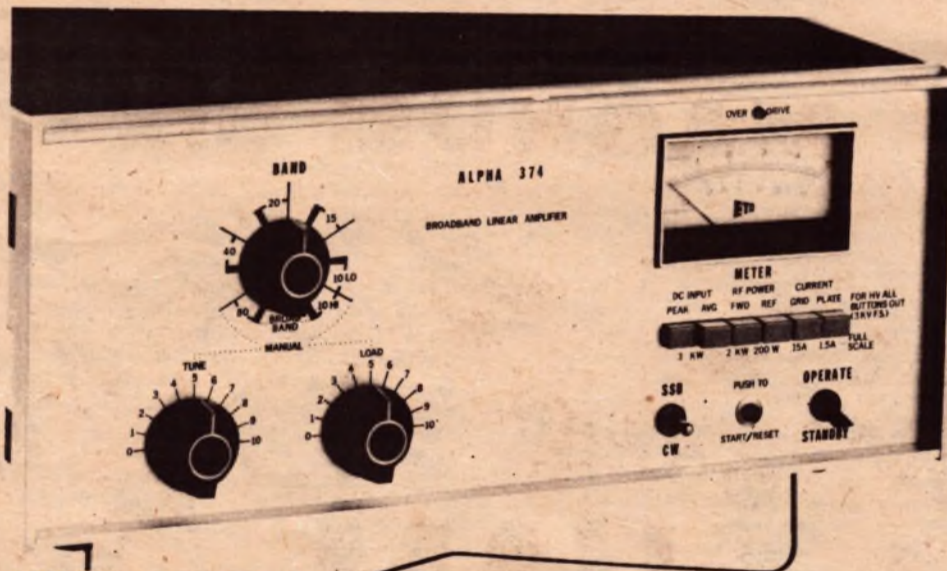
Phil (Fifty) Pector, W9LDX still exists and sends best wishes to his friends. He is now W7JXE. QTH - 1304 E. Silver St. Tucson, AZ 85719

ATTN: Dagny Taggart -- what is your call now and what is your QTH. Sorry we lost contact. Hank Rearden c/o "Worldradio" 2509 Donner Way, Sacramento, CA 95818

Looking for a meaningful gift for a ham friend? May we suggest a subscription to "Worldradio"? It will be a reminder of you twelve times a year. Please refer to page nine of this issue.

The Worldradio News, July 1974

HIGH POWER and EFFICIENCY versus CONVENIENCE...



WHY COMPROMISE? ALPHA 374 DELIVERS IT ALL!

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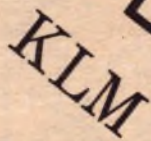
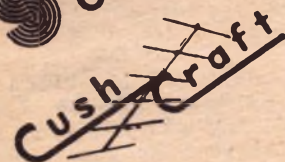
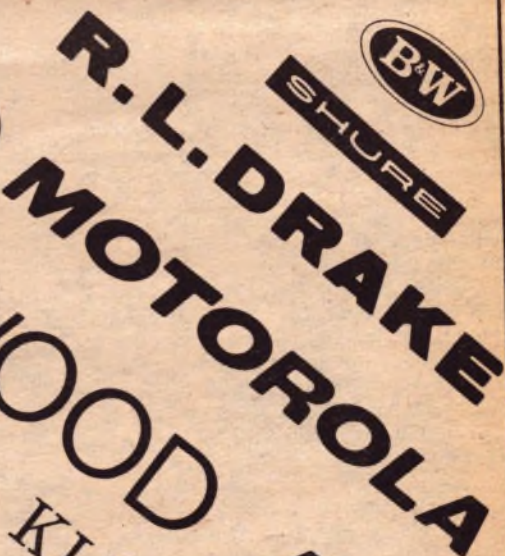
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SOME THOUGHTS ON 2-METER FM

By Paul Schuett, WA6CPP

Two-meter FM is one of the greatest things to hit amateur radio in its history. While not everybody is getting on, there is a considerable amount of activity. This is not without its problems, however.

It appears from this vantage point that one of the things sorely needed is more simplex frequencies. Many operators obtain crystals for all the repeaters they can hear, seldom use them, and moan and groan about the QRM on .94.

There is considerable activity on repeaters that should probably be carried on a simplex channel. Almost every repeater several times during the day is tied up with miscellaneous chit-chat that is of little or no interest to most of the stations monitoring. In many instances the operators are not so far apart that they could work just as easily simplex (or on the telephone). The problem is that .94 is busy and that's the only simplex channel they have. Or maybe somebody comes on and wipes them out.

Your friendly local repeater is a nice thing to monitor. If someone wants you, they know where to call. It works the other way, too, since you can call the other guy. The problem is when the commute hour or the rag chews come on, all of a sudden, you have a lot of racket in the shack. If most of the traffic could move to a simplex frequency, one could do his other work in relative peace and quiet.

Part of the problem is that most rigs come with only a 146.94 simplex channel. Working that frequency is like trying to find a clear spot in the general part of 75 at 7:30 p.m. According to the allocations table promulgated by the ARRL and more-or-less agreed upon nationally, this is not a simplex frequency -- it is a repeater-output frequency. Using .94 is necessarily compounded if there is a 34/94 repeater in the area.

A nationally-accepted frequency for simplex is 146.52 MHz--but it has heavy use and is almost like trying to work on .94. There are a number of other simplex frequencies on the list, but unfortunately, in central California the situation is confused by a number of repeater inputs or outputs being on these frequencies listed as "special cases."

Nothing in the rules prohibits using FM anywhere on the 2-meter band except in the CW portion. In the Technician's authorized part of the bottom of the band there is room for 33 additional simplex channels starting at 145.02 MHz and going to 145.98 MHz. One reason this was never encouraged was because of AM activity in this area, especially on 145.05 MHz (the place to get an AM contact). (145.05 and 145.35 are compatible with the spacing and setup between 146 and 148.)

However, with the growth of FM, it seems most of the AM activity has disappeared from the 2-meter band (there never was too much sideband), and the problem is now lack of activity in the bottom of the band, instead of the top! Another problem

is that some popular equipment will work only on 2 MHz of the band, so it is almost impossible to operate below 146 MHz with some equipment.

Presently, the only "allocated" channels to simplex are 146.52 and 147.54 in this part of the country. Obviously, this is not enough for the reasonable use of the band. It is possible to find other more-or-less unused channels in the regular sequence without going to oddball frequencies. For instance, 146.46 is supposedly "reserved" for remote base intercom use, although most of these fellows use .94 to the chagrin of base station operators. Some of us find this an ideal channel to use around town; even with the big signals from these remote bases there is no problem using this for a simplex channel.

It is nice to be able to find a quiet place to use as an intercom with your friends for use in spotting DX or whatever. A good place to monitor without having the shack filled with miscellaneous chit-chat; someone who wants you knows where you are--and it works the other way too--you can call somebody else if you know where he is.

With due consideration for the AM and sideband operators on 2, I would propose that 10 channels, starting at 145.71 (or perhaps 17 starting at 145.50) be used for simplex FM operation in the same spacing and sequence as the channels above 146. Considering the declining use of AM on the band, there should be no encroachment on the rights of others to start moving down from 146. Such an idea will be slow to start, since manufacturers still, for some reason, put .94 crystals in the sets, and the public is usually slow to adopt to new thinking.

Moving routine QSOs to simplex channels and keeping the repeaters reasonably clear for those who must use the repeater to make a contact should make an improvement over what is already a good thing.

FM INFORMATION

by Bernie Mallory, W6ECE

FM is a different way of amateur life.

It has been developed by technically inclined amateurs interested in developing new operating modes, remote control, and interference free operation, and a desire to get away from boring, stereotyped low band operation.

Q codes, useful on CW, have no place on any phone operation, and particularly on FM. Such things as QSO, QSY, QTH, QRM, continual rig description, and "let's see what shall we talk about now --(key down for 20 seconds)-- well, let's see" ... (etc., etc.!) are not desired operations.

Also, "QRZed the frequency", (who is calling the frequency??), (no one was calling you), or the classic heard on 94---QRZed the station QRZing the frequency". This type of operations sends most FM operators hurrying to their OFF switches. You should hear the down channels being turned off when this type comes on. Use plain english. Do not try to sound "hammy".

On an FM receiver, when a signal goes off, there is a definite indication in the audio squelch action that the transmitting station has stood by. Such phrases as over, go, and go ahead, over to you, etc., etc., are not needed.

Because of the channelized operation of FM there is no need for calling CQ, or long, or repeated calls. Proper calling procedures are:

W6XXX, mobile six, listening 94. (nine four, not ninety four). This indicates you are simplex on 94, or five two, or seven six, etc.

W6XXX monitoring 34/94 in Red Bluff. This indicates you are going through the repeater and may be out of range of sim-

plex and expect an answer through the repeater. Determine your range and then go simplex if possible, or change channels

It is desirable to give your location and frequency as many stations may be listening to several frequencies from several mountaintops, all coming out of one speaker. They will not know which remote to answer you on, unless you indicate where you are. Many stations listen to .34 or .94 monitors on as many as four or five hilltops located up to 400 miles apart.

To properly use and monitor a calling channel, a station should have a receiver dedicated to that channel, on at all times. Transceivers are great, but they offer no way to monitor a frequency while the operator is channel hopping. Very often station "A" will come on .94, call friend "B", get no immediate response and change channels. Two minutes later "B" shows up, calls "A", gets no response and changes channels, etc. etc.

Amateurs are notorious for not giving honest signal reports. (You are five and nine plus 40 db, OM, but I missed your call, name, location and report.) Just because you can hear and understand a station does not mean that he has a good sounding, quality signal.

A report, given from a two inch speaker mounted in a transceiver under a dashboard, pointed at the floor, in a truck with windows down going 55 MPH on a rough road, does not really mean a thing. Many station give reports such as "sounds fine, full quieting" to stations with only 15 db quieting into the repeater, alternator whine, or vibrator hash, heavy clipping or distorted audio.

Learn what a good signal is, what 10, 15, 20 db quieting and full quieting signals really are. Get a decent speaker and microphone on that imported or domestic black box. Just because it is new and you paid megabucks for it, does not mean it sounds good.

As in any social group, community, club, fraternity, or what have you, there is bound to be growth and change. However, in our growth, let us not destroy the foundations on which we are building. Those who may not agree with part of, or all of these philosophies, are entitled to their own viewpoints. But in disagreement, please do not destroy the usefulness of that which has been carefully and laboriously built by many over a period of years. Those who would rather operate in a different manner should, and are urged to find and join other groups who think like they do, or develop their own simplex and repeater channels.

There are other simplex channels available, particularly in the lower 2 MHz of 2-meters. The 220 MHz band desperately needs development and many channels are available there. Find your own frequency and do your own thing, talk all day and all night without ceasing, QRZed the frequency to your hearts content. Just don't do it on .94.

These suggestions are given sincerely, and with some levity, to help you continue to make FM enjoyable, and 146.94 a useful calling channel where all stations can be assured of assistance in time of need, and a quick exchange of greeting and information when needed.

(From Mt. Vaca "News")

FMs visiting Mexico City will be pleased to hear XE1VHF, 146.16/146.76 repeater operated by Association VHF de la Ciudad de Mexico. Club President, Roberto Green, XE1WS/W2GFO suggests prospective visitors contact him at Palmas 1460, Mexico City 10, Mexico, regarding possible temporary operating permit. A second two meter and a 450 machine (already licensed as XE1UHF) are planned.

(From "WR8ABC's" Lake Erie ARA)

Birthday Present? May we suggest a gift subscription to "Worldradio". We send a gift card in your name. See page nine. The Worldradio News, July 1974

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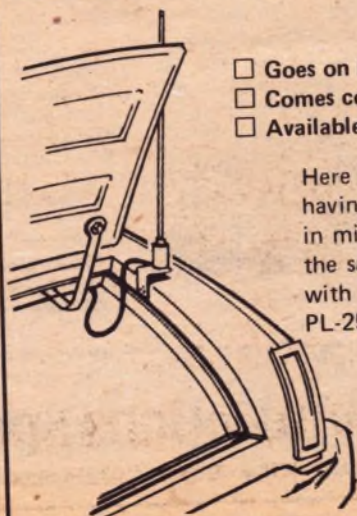
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by Rich Osman, WBØHUQ

As most all of us know, operating through OSCAR-6 is quite some experience. I could sit here and ramble on, but I'll let W2GN tell you himself. Operating with this gentleman is an experience itself.

OSCAR MOBILING

by Fred J. Merry, W2GN

Part of the fascination in OSCAR-6 operation is hearing just about how your signals are doing as you listen to them on the 10-meter down link.

While I was installing 2 meter gear in a new car recently, it came to mind rather readily that all I had to add to the two-meter gear to have a mobile OSCAR-6 ground station was to provide crystals for the up-link, keying facilities, a ten meter receiver and a ten meter antenna. One trial after the installation was complete indicated that we were "in business". On an overhead pass the signals came through on the down-link for almost the entire pass from S-3 to S-6.

The rest is history of what apparently are the first mobile to base station contacts through an amateur satellite. A schedule was made with Jack Colson, W3TMZ, for the first QSO on orbit 1983, 22 March 1973. This contact was made immediately, although with some difficulty due to a high noise level at my end.

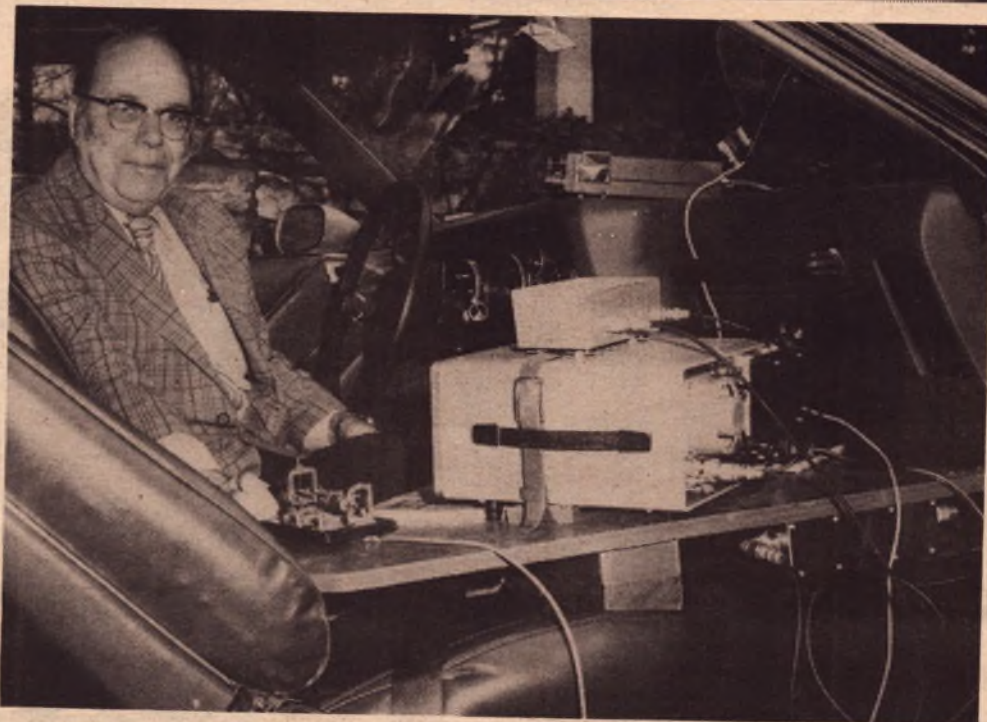
I thought I had picked a good spot, overlooking the city of Albany, New York, and for miles around. It was good when I tried it in the daytime. But, on the evening overhead pass of OSCAR-6 the noise from all those lights in the city came up. It almost masked Jack's signal which is normally easy copy. Thus was learned the first lesson on locations. Now, I look for an electrically-quiet location off the main highway where it is flat for a few miles around and free from any nearby obstructions.

OSCAR-6 has the 900 mile altitude built in. Communications through OSCAR-6 can be had anywhere that you can "see" the satellite and are free of excessive electrical noise. Quiet spots are easy to find, out in the countryside. Receiving conditions are usually just great compared to the home location.

Completely fascinated by my easy success, I drove to various nearby spots to try the overhead passes. Contacts were made as follows: Orbit 1990: Joe Patterson, W5VY, Orbit 2002: Russell Planck, W9RGH, Orbit 2003: Ralph Bradley, W9MAL, Richard Zwirls, K1HTV, Orbit 2008: K1HTV, W9-RGH, Donald Brown, W1JSM and Orbit 2015: Guy Black, W4PSJ, Alois Middleton, W7ZC.

With the confidence inspired by these QSOs, I drove over to ARRL Headquarters on 26 March and made a demonstration in the parking lot under all those antennas with Bill Dunkerly, WA2INB, and Dave Summer, K1ZND, in the car. We readily made contact on orbit 2028 with W7ZC, William Hunter, K4TI, and Harlet Gabrielson, K6DS, thus generating some enthusiastic discussion during the lunch hour.

The 2-meter antenna up to this point was a 5/8 wave base-loaded whip. I next tried a squalo mounted the standard distance above the car roof. With this antenna, I worked Lloyd Rasmussen, KØDDA, on orbit 2065 and W4PSJ, and Winfred Clark W9JTY, on



Orbit 2077. It didn't seem any better than the whip so I put that back on and worked W7ZC and Harry Walsh, W8DX, on Orbit 2078. Next I tried the "big wheel" setting on a box over the car roof. I worked Paul Carlock, WØJKF, F. G. Titus, VE3TW, and Lester Yates, K4TI, on Orbit 2090 with the wheel but again it didn't seem any better than the whip. These meager tests are not conclusive, of course, Some day we will know what is the best vehicle antenna for these overhead passes.

The next episode occurred on the Monday evening OSCAR-6 net on 3855 kHz on 2 April. I briefly summarized the results of the mobile operation suggesting that we know it works but what, for the present, can we do with it?

The obvious answer to this question was Vermont.

Less than an hour drive from my location, it had no known OSCAR-6 activity. As luck would have it, I had to make a trip over to Bennington on 5 April. So, while the net was buzzing along, I figured the orbit times and it was left on the net that I would be on at Bennington for Orbits 2152 and 2153. We hadn't scheduled the weather, and the morning of the 5th found me in an April snow-storm a couple miles west of Bennington working Jack Colson, K1HTV, Randall Smith VE2BYG, and James Welch, WB2-DEI, on Orbit 2152 for what were probably the first OSCAR-6 QSO's from Vermont.

For the next orbit 2153, with some help from a QST by W3TMZ, the boys had found me and I worked K1HTV, Carl Brown, W3-LUL, WØJKF, David Robinson, K7BBO, W5VY, W7ZC, James Spitler, W6BGJ, W8DX and Richard Long WA4JID from the Battle Monument Hill in Bennington. I got a tremendous kick out of this as it was the first time in my over 50 years of operating that stations were trying to work me. It

is testimony to OSCAR-6 coverage that all U. S. districts except nine were worked on these two passes.

The hardware used is shown in the photographs. It is all standard commercial gear easily-duplicated. If you plan, as I did, to use CW, an operating platform is needed. I used a piece of plywood hooked under the dash and held down by a seat belt. For safety, everything must be securely fastened. This plywood board and the gear on it can be removed in five minutes or less if the wife is riding in the front seat.

I hope my experience will prompt some more mobile work. OSCAR-6 offers the world's most exciting repeater operation.

Primer

Walt Dixon, W4DWN, AMSAT - 1184

What's an OSCAR? OSCAR stands for Orbiting Satellite Carrying Amateur Radio.

AMSAT-OSCAR 6 is the sixth in a series of satellites made by and for hams. It was launched in October 15, 1972 as a passenger-payload with NASA's Tyros weather satellite. It is still flying after more than a year of operation.

It has made more than 6,900 orbits of the earth and has been used by nearly 2,000 stations worldwide. More and more users are appearing on OSCAR every orbit.

How to locate and use AMSAT-OSCAR 6? The uplink to the satellite requires a 2-meter SSB-CW signal between 145.90 and 146.00 MHz. To receive signals from the satellite tune between 29.55 MHz and 29.45 MHz.

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a. All of Zone 5 plus W8, VE3, ZL and VK must have one (1) confirmed contact.

b. Zone 4 (Minus W8), Zone 6, 7 and Zone 25 must have two (2) confirmed contacts.

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2. All claimed contacts must be confirmed by submitting QSL's showing proof of contact.

3. Effective date for the start of the award is 10 January 1974. All QSL's must indicate a date of 10 January or later.

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5. Award requests should be submitted to KH6IHP (ex-W7EOT), the Awards Coordinator: Stephen M. Carson, KH6IHP, 1624 Kaweloka St., Pearl City, Hawaii 96782.

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The data given is the initial orbit for the day in GMT. The satellite is turned on by ground control at 0000 GMT same day. As of the present OSCAR is ON (GMT) Thursday, Saturday, and Monday, the satellite coming from South heading North. The data given indicates the time OSCAR will be crossing the Equator and Longitude degrees West.

To find the time for the next orbit add one hour and 55 minutes to the initial orbit time. To find the location for the crossing of the Equator add 28.75 degrees to the West Longitude degrees of the initial orbit. You can do this indefinitely gathering information for a year or more with good accuracy.

OSCAR crosses the Equator at an angle of 102 degrees further West on each pass. Communications through OSCAR can last as long as 25 minutes depending on distance of OSCAR from you.

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AMSAT-OSCAR 6 is proof that radio amateurs are capable of designing, building, and operating long-life communication space-craft that can serve a useful purpose. It has made space communication a reality for radio amateurs on a regular basis throughout the world. Data from the satellite has also contributed significantly to increasing scientific knowledge, especially in the field of radio wave propagation.

It has also served as a valuable educational tool for budding engineers and scientists.

In numerous primary and secondary schools, and in colleges and universities the satellite has been used for first-hand experience in space communications.

(Florida Skip)

The Worldradio News, July 1974

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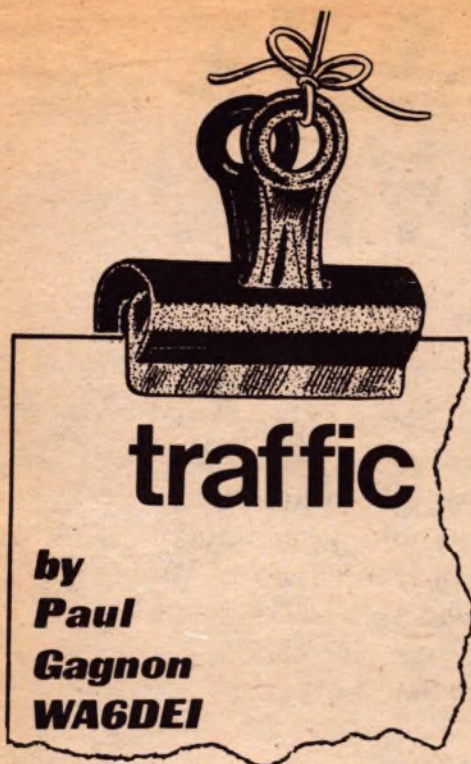
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Many nets are operating daily and/or weekly schedules. Many pieces of traffic are passed every week.

There are those who regularly check into these nets that do not accept messages when they are called upon. There are others who never even check in because they are afraid they will be asked to handle a message. Part of the problem is they do not know proper format. (We talked about this in last month's column). The other problem is in knowing what to do with a message after they get it.

Emergency Net

Ed Kelly, VP9GE, has been appointed coordinator of the Caribbean #1 Zone Emergency Net.

The net circles Florida, Mexico, Central America, the West Indies and Bermuda. In a station to station check by all amateurs in the Caribbean Emergency Network, it was proved a 100 percent success. It was the first time that any one station had managed to control each of the dozen or so on the net.

In previous tests, one or two stations have had to relay messages, along the chain because of interference or technical problems.

Ed said, "It seems that because of our remote location, we were able to hear everyone without exception. This is something no one else in the net has been able to do.

"Quite often you don't know anything about the person when you first make contact, beyond their call sign and first name. But, identification comes as a shock sometimes, when you get a QSL from them saying, Doctor, Judge, even King or Sultan. King Hasein of Jordan is a well known ham in amateur circles, as is more than one Middle East ruler. So are people like Senator Barry Goldwater, who joins in with the thousands of world-wide enthusiasts as some relief from politics. There is no better place for him than on the Amateur Radio air, where politics and religious discussions are completely taboo. Verbal caution is a necessity since messages between operators must be strictly outside the bounds of personal or professional gain. Any exchange which could otherwise be communicated by commercial means is not allowed."

Ed is also interested in "slow scan" TV and contacted an Italian ham, 4000 miles away for visual contact.

(From "Voice" YLISSB)
Page 34

DELIVERING THE MESSAGE

Delivery of a message can take one of several methods.

Telephone delivery is the most important and frequent. In an emergency a long distance call can even be made.

Mail is the second most important and frequent method and delivery in person is also possible.

The message must be delivered courteously, whichever method is used, in order to preserve the good impression of the amateur communications service. If you are short and impolite, the service performed by all stations getting the message to you is naught. When you deliver a message it gives you an excellent chance to explain amateur radio to the people. Take a little time and make a friend for Amateur Radio.

You may find post office directories, the callbook, telephone directories, city maps, street guides, and zip code directories may be an aid to unscrambling an address so delivery can be made. There are sure some head-scratchers that come up. I can recall trying to deliver a message to a Floyd Mills with an incorrect phone number. After much head-scratching it turned out to be a Floyd M. Eels. (Sometimes you have to break down the code characters). But it is worth a little time on your part to make an honest attempt at delivery. Edward Brichta, W6RSY in Palo Alto, Calif., has a wall completely full of telephone directories for every major city on the west coast. He is great at figuring out the garbled addresses. Give it a little extra effort. Someone will appreciate it.

When delivery is by mail, type it neatly, preferably on an ARRL Radiogram form. These have a brief explanation of what amateur traffic handling is and they provide a place to put your call and how you can be

reached if they wish to send a return message.

If you do not use the ARRL forms, put a short explanation as to what it is you are sending them and that it was handled by Amateur Radio. It is better to mail a message than have it float around the nets for a few days waiting an outlet. If you are the closest station to the addressee, volunteer to mail it even if it isn't in your calling area. The postage won't break you and it will save it being mailed by the station bringing it to the net. This was probably a liaison station with a lot of traffic and they always get stuck with some to mail anyway.

Another problem arises when mailing the "ARL" numbered texts. Can you imagine the confusion you would cause if you called up an addressee and delivered the message "ARL Fifty Eight" and hung up! They have no idea in the world that the ARL text means unless you break it down for them. This applies to mailing also. Remember that the ARL text is for the convenience of the operators and break it down to read (in this case) "Wishing you a very Merry Christmas and a Happy New Year".

MESSAGE SERVICING

Occasionally you will receive a message that you find you are unable to deliver for some reason. You should advise the originating station indicated in the preamble of the message of the difficulty in delivering it. One of the biggest errors made frequently on the phone nets is a station coming back to the station he got a message from and telling him he couldn't deliver. The liaison station does not know anything about the message. He just sent it exactly as he received it.

You should advise the originating station by message that the addressee has moved or that his name was garbled and you request

he send the name again by return message. Remember, only the originating station can QTA or cancel a message. It is his message. You are only relaying it for him. If it is undeliverable, let him know and perhaps ask him if you can QTA the message if delivery is not possible.

Remember that service messages take time. Give it your best shot at trying to figure it out before servicing. As Bill Skarstadt, VE2DR, says in an article entitled "Corrupt Traffic"; "We amateurs look pretty stupid if a message takes, say, two weeks to get delivered when the original message stated that a "letter will follow". "

QSL

Remember, if you have any information on your net that you wish to disseminate or comments on the article, address your letters to WA6DEI, 1791 Hedon Circle, Camarillo, Calif. 93010.

Bill, W7GHT, sent along a copy of his Idaho-Montana Net (IMN) bulletin. The net meets at 0230Z on 3582. You fellows in Idaho and Montana check in and support this fine CW net. For information contact Bill at 212 Prarie Ave., Craigmont, Idaho, 83-523.

One of the oldest and best nets in the west is the Mission Trail Net. This SSB net meets each day at 1900 PST on 3928 KHz. They have check-ins from most areas of California and as far north as Alaska. The monthly paper, the "Blazer" has a roll call listing of over 100 so they have pretty good coverage. They also have regular liaison with the Southern California CW Net and the Daytime National Traffic System so they can clear all the traffic you originate quickly. For information on membership in the Mission Trail Net drop a line to the Secretary, Bill Long, K6EVQ, PO Box 151, Buellton, Calif. 93427.

RACES

FORT WORTH RACES/ Repeater Operation

by Ruth Chance, WA5VJW

The Ft. Worth (Tarrant County) office of Civil Defense has established a RACES Skywarn Network, in cooperation with the National Weather Service.

The purpose of this net is to have trained weather observers strategically located throughout Tarrant County to provide severe weather observations particularly in those areas where cloud formations are obscured by radar ground clutter. Members of this net are amateurs licensed to operate on the two meter band, who belong to the RACES organization and who have attended a special eight hour school sponsored by Civil Defense and the National Weather Service.

When the National Weather Service issues a severe weather warning, they energize a special tone alert on the Civil Defense frequency of 47.66 MHz and issue the weather information. The same tone also activates the Ft. Worth 146.34/.94 repeater, which in turn broadcasts the severe weather information. This alerts all RACES Skywarn members of a pending alert.

If conditions warrant, as determined by the weather bureau and/or the Civil Defense office, a RACES Skywarn Net is activated. During the net, only Skywarn station identification calls are used in lieu of amateur calls. Skywarn members then check in from their various locations and report the weather conditions at their station. Reports are made to the net control station only when, a funnel cloud or tornadoes are spotted, extreme turbulence in the clouds are observed, when hail is 1/2 inch or larger in diameter, when winds are in excess of 50 mph, or when rain is in excess of two inches per hour.

The Skywarn Net has three types of alerts. A "Green" alert is when severe weather conditions exist. This type alert allows

the frequency to be used for normal amateur operations with RACES Skywarn traffic taking priority. A "Yellow" alert is called when a tornado watch is in effect and tornadoes are expected. This alert allows the repeater frequency to be used for amateur traffic as a call channel only, with stations making contact then moving off frequency, with RACES Skywarn traffic taking priority. A "Red" alert is announced when a tornado is on the ground. Under "Red" conditions, the frequency may only be used by RACES Skywarn members, and no amateur traffic is allowed.

Net control stations for the RACES Skywarn operation must also attend a special eight hour school on proper net operations and information to be accepted and passed on to the National Weather Service.

It has been established, after 2 years of operation, that this is a very effective weather warning service to the amateur and to the National Weather Service. It has been recognized as an outstanding accomplishment by the National Weather Service in Washington D.C. It is not uncommon for the Weather Service to request that a net be opened for the purpose of reporting special information that they need throughout the area, such as iceing, rainfall amounts, barometric pressure, etc.

(Texas CW Traffic Net "Bulletin")

NORTHERN OHIO REPEATERS:

Cleveland Metro: 01/61, 04/64 (Akron), 16/76, 22/82, 25/85, 28/88; Toledo: 01/61, 19/79, 34/94; Ashtabula: 16/76, Erie PA: 34/94; Beaver Falls PA: 25/85; Youngstown: 31/91; Warren: 28/88; 146.52 is rapidly taking over as the primary simplex frequency with 146.46 next.

BE A NEWS REPORTER! Yes, you too can be a reporter and no special qualifications are required for this part-time job. Just send your news to Worldradio" 2509 Donner Way, Sacramento, CA 95818.

RTTY in emergency

by Bob Slagle, K4GR, SCM Virginia

RTTY can be of great value in passing high volume traffic in times of emergency. By putting the outgoing messages on tape before transmission, they can be run through at a continuous 60 WPM to the receiving station, thus saving tremendously on the air time, or higher volume of traffic per hour.

To do this, though, requires RTTY capability on the air when needed. Lack of this was a lesson learned in this year's SET.

All RTTY stations are cordially invited to join the VRN on 3625 daily at 2000 local but the main point of this article is to make your RTTY mode available during real or simulated emergencies when your area or other states or countries need communications back up.

(Auto-Call)

SPRINGFIELD AREA REPEATER

by Vince Gambino, WB4QJO

A new repeater is on the air in the Springfield, VA area. WR4AFG, an open repeater, operates on 146.34/146.94. It is a narrow band input/output repeater operated during the hours of 0500 and 2300 daily. That is when the machine is not otherwise sick, down or otherwise not up to par. The output power is an awesome 60 watts ERP. The repeater has a two minute timer which turns the transmitter off after the repeater has been up for two (2) whole minutes. The transmitter must drop for approximately four (4) seconds to reset. For the .94 simplexers, there is a lockout receiver to prevent interference to 146.94 simplex operators. If there is a signal on .94 anywhere within the repeater coverage area (and then some) the repeater cannot be activated.

(Auto-Call)

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2N6080	2.50	"	"	2 for 4.00
2N6083	7.00	"	"	2 for 12.00
2N6084	15.00	"	"	2 for 27.00



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These transistors may be Motorola, Solitran, RCA, U.A., etc.....
These parts are in limited Qty.

IN914/IN4148 100 for \$7.50 or 1000 for \$50.00

Microwave Diodes	Motorola	MV1804 C	\$5.00@
MV1808	\$4.00	MV2103	\$.75
MV1862D	"	MV2105	"
MV1863B	"	MMD6050	2.00
MV1864B	"	MMD7001	"
MV1868D	"	MM72	1.00
MV2101	.75	MPN3202	7.50

GHz Type GC20035 \$7.50
T.I. Type VA900 \$10.00

Varian

VAB800	\$5.00	VAS31	\$5.00
VAB801	"	VSD511	"
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Microwave Ass.

MA421B \$4.50@ 2 pcs.
MA421B - (matched pairs, 2 sets) \$10.00 Each

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2E26	New	\$4.50	6146A	New	\$4.50
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Misc. Parts:

Andrew Type	2262	\$10.00 Each	Qty. 2 pcs.
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Collins Mechanical Filters

Type	TU-441-16KC	\$7.50
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High Voltage Caps. 330 Volts at 350 mFd. \$2.00 Each.
Approx. Size: 1 1/2" x 7/8"

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Misc. IC's Motorola Voltage Regulators

ICC	8038	\$4.50	MC7805CP	\$1.85
LM	566	2.50	MC7806CP	"
Intell	1103	3.00	MC7812CP	"
MC	1438R	4.00	MC7815CP	"
			MC7818CP	"
			MC7824CP	"
NE555V	\$1.25@		MC7908CP	\$2.75
MFC6034A	.50@		MC7915CP	"
MC1723C	.75@ or		MC7912CP	"
	10 for \$5.00		LM309K	\$1.75

1000 PIV
2.5 Amp. Diodes
10 for \$2.50
100 for \$15.00

Motorola Bridges Used
MDA 952-1 \$2.00
MDA 962-1 3.00

Motorola Bridges (New)

MDA920-4	\$1.55	MDA960-3	\$2.50
" 942A-2	2.20	" 962-1	2.75
" 942A-4	2.90	" 962-2	2.95
" 942-4	2.80	" 980-1	2.40
" 942-5	3.15	" 980-2	2.60
" 952-1	2.45	" 990-1	3.00
" 952-2	2.65	" 962-4	4.00
" 960-1	1.95	" 1591-3	3.30


Misc. Equipment.

G. R. 874-VEL Variable Air Capacitor \$25.00
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by Nick Hauck, K6QPE

The lack of sun spot activity has forced most of us to stroll by the shack and look longingly at all that slow-scan gear and hope for better days.

There are some who are filling their time with a facet of slow-scan that really puts them into a unique class. They are watching daily weather satellite pictures that really are slow-scan. Would you believe 200 seconds to present a picture? One of the early ones receiving Wx pictures was not an amateur radio and did not use amateur gear. True he used a receiver capable of proper reception but facsimile was the mode. He constructed his own unit, and it works.

Satellites have been put up 22,000 feet and almost daily more are going up. a recent satellite that will be in a stationary orbit is NASA's newest Synchronous Meteorological Satellite. This is the first satellite

placed in stationary orbit. Keeping a constant watch from a distance of 22,300 miles it provides a continual watch on varying weather conditions covering 1/3 of the world. Slow scanners as well as NASA can be in constant reception which is different than Tssa 8, ATS-1 and NOAA-2 satellites. Those satellites are orbiting on a pre-determined schedule and reception must be timed to the orbital pass. I haven't been able to find out the name given to NASA's newest "baby", so if you know, please drop me a line.

Articles soon to appear by Ralph Taggart, WB8DQT, and Bob Schloeman, WA7MOV, will outline the steps necessary to adapt present monitors for receiving APT Wx satellite pictures. This new abbreviation, APT, stands for automatic-picture-transmission. It doesn't resemble conventional SSTV standards as we know them but don't let this frighten you away from this fascinating APT mode. A video adapter modified with a DPDT switch allows normal SSTV mode or activates the video adapter circuit. As I mentioned before, pressure is on ROBOT to incorporate all modifications on a special order ROBOT Wx-APT station monitor. The only real hammer n' nail nitty gritty work is required for the Helix antenna installation. From the CDE AR33 rotor mounted horizontally to the Helix probe, this is strictly a home-brew project.

The APT transmissions are horizontally polarized, hence, mounting in this position. Almost any 2 meter FM receiver will work for wx satellite work but high gain and low noise is of prime importance with such a low powered satellite and with the distance

involved. Some are using the Heath powered Scanner and others the Vanguard. The satellites are using FM in the 137 MHz portion. ESSA 8 is popular as it makes about 3 passes a day over a given longitude and latitude. ATS-1 and 3 are over the equator in synchronous orbits and are there all the time. Some have indicated an antenna such as I have just described is not really necessary but actual reception has proved horizontally polarization is the best.

In the secluded Himalayan royal kingdom of Bhutan, comes word of a new King. He is only 18 years old and in a gesture of royal generosity, handed out money to all his small kingdom. Jigme Singhi Wangchuck, is now the youngest ruling monarch and a good candidate for Amateur Radio. Daniel P. Moynihan, our ambassador to India, was present for his ascension to the throne, and seems to be the logical person to introduce amateur radio to a country locked-in high in the Himalayas between India and Tibet. Perhaps a high frequency transceiver could be presented from the amateurs of America followed by a complete slow scan TV station. Bhutan QSL cards would certainly be a welcome sight in any DX'ers shack. Would you dare ask the King to put all his XYL's on video?

"Project Aladdin", Atmospheric Layering and Density Distribution of Ions and Neurons took place sometime late in June, for all to see. It produced an aurora-like effect and was visible to the naked eye. One of its purposes is to measure high altitude winds. Dr. Russell Philbrick of the Cambridge Research Labs, hopes to study upper atmosphere conditions 50 to 85 miles

up. Remember, we all had a question concerning the ionosphere somewhere in our FCC radio test. This project may give light to why and how radio RF radiation is affected and new ways found to better control sun spot conditions

Although these experiments are only 50-80 miles high, the US Air Force and over 100 researchers were involved in obtaining information that will assist in upper atmosphere knowledge. This was the most extensive study in this field ever conducted.

To conclude my column this month, I want to thank Theodore J. Cohen PhD., W4UMF for his letter concerning the SSTV Column. For those of you who read my article last month, I said an Eastern Company advertises... "they were responsible for putting high voltage on the moon". I went on to say, "anyone want to prove that statement". Dr. Cohen said I was poking fun at this company and asked that I give my readers an objective view of the company... "that put high voltage on the moon." I quote from the first page of the current issue of the Radio Amateur Handbook, and my thanks to the ARRL.

"When something occurs at one point in space because something else happened at another point, with no visible means by which the "cause" can be related to the "effect", we say the two events are connected by a field."

This force is a potential energy. We all know a field under controlled conditions sets up another field... an electric field. Now, who "first" put high voltage on the moon?

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May 28, 1974

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Watch for the HCV-3KB Slow Scan TV Keyboard coming soon. Write for information on reserving yours now.

Also the new improved HCV-1B SSTV Camera and the HCV-2A SSTV Monitor will again be available in the near future. Write James Thomas, WB4HCV, for full information at:

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Field Day

Send your Field Day pictures to "Worldradio". What problems did you encounter? How did you solve them? How did it relate to an actual emergency situation? Page 36

Ham Stores

You may sell this paper in your store. Your customers will appreciate it. For details write: Worldradio, 2509 Donner Way, Sacramento, CA 95818

FCC official clears the air

By Eunice G. Bernon, K8ONA

There's been suspense in the air, and on the air, for months. Ham radio operators around the country have been speculating about a possible revision of the entire Amateur Radio Service structure.

Now an FCC official has ended the wait. Richard Everett, assistant chief, Amateur and Citizens Radio Division, was interviewed by this writer during a two-day convention in Cleveland, Ohio. Everett, a former supervisory attorney for the division is a member of the staff which writes the amateur's rules and is second in command to the chief, A. Prose Walker.

The interview follows:

Q: What about an increase in the classifications of amateur radio licenses from the prevailing five?

A: In response to some 65 petitions over the last eight years, we are considering the creation of a no-code amateur radio service.

Because of international regulations, such a class could only be put on frequencies above 144 mc's where the various countries and administrations have options to delete code requirements. There is sentiment at staff level to create such a no-code amateur.

With increased interest in the VHF portion of the spectrum, we're looking at the possibility of a two-tiered type of Amateur Service where, first, we'd take the usual type of activity, in the historical sense; basically, on lowband frequencies, up to 29 MHz. There, you'd find the Novice, General, Advanced and Extra Class, much as today.

Then a simultaneous tier to deal with frequencies in the UHF-VHF region, starting with the "Communicator" class, a no-code class, having frequency privileges above the two-meter band.

Next, move up with a 5 wpm code, similar to Technician Class.

Then, with a more technical examination, have a higher class above that.

Operator licenses in each of these two tiers could be held by any person, but you would get one or the other, or both.

The extra class would be at the top of each ladder structure. Existing licensees would have "grandfather" privileges and, where qualified, would get licenses in both classes. This would allow people to get licenses and advance in areas where they have interests. One could go up both ladders, or only one.

A ruling on this could come out in two to six months. But, there will certainly be a proposal for a code-free examination.

With this new tiered approach, you'd be required to hold licenses in both parts in order to operate the VHF and lowband frequencies.

Q: Will ham radio examinations soon be given by Civil Service employees rather than FCC examiners?

A: Such a pilot program will begin July 1 in five district offices, including Detroit, which serves Ohioans. Examinations, including the Commercials, will be conducted where the Civil Service conducts its own examinations, opening up 600 locations versus the existing 60. That will mean less travel, more availability. Applicants will be shown what portions they've passed, for which credit will be given.

Q: Why were increases in our license fees, due May 1, suddenly canceled?

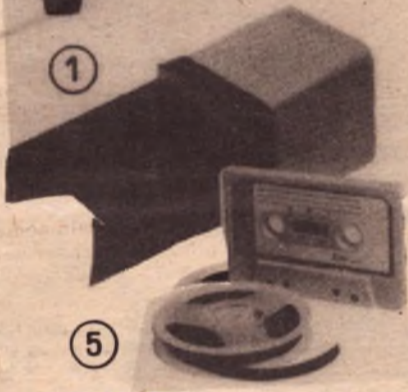
A: The Supreme Court indicated that the fee structure, involving cable TV, had legal problems, so the FCC canceled out the whole prospective fee schedule until they could determine what areas might need revising. The FCC will soon come out with further notice of proposed rules dealing with fees in general.

Q: What about the anti-interference bill, H. R. 3516, which has been forgotten since the late Congressman Teague introduced it?

A: Congressional committees are studying proposals. During the last fiscal year there were some 40,000 television interference complaints, with amateur radio operators really involved in a very small portion.

These investigated complaints were normally the fault of entertainment equipment such as TV, hi-fi and electric organs. This is a problem that manufacturers of enter- (please turn to page 27)

ROBOT



Slow Scan TV Equipment Line.

① MODEL 70A SSTV MONITOR

Displays amateur standard pictures from any SSTV audio source: station receiver, tape, camera. Six inch (diagonal) display.

Front panel controls for easy station operation. Connectors for receiver, transmitter, microphone, tape, waveform monitor. LED tuning indicator. All solid state except cathode ray tube.

\$295

② MODEL 80A SSTV CAMERA

Generates amateur standard SSTV pictures and fast scan video for viewfinders. Ample sensitivity in ordinary room light. Controls for contrast, brightness, vidicon beam, SSTV signal level, black/white video reversal and 1/4, 1/2, full frame selection.

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③ MODEL 61 VIEWFINDER

Displays Model 80A or 80 Camera's fast-scan video on six inch (diagonal) display to simplify setting camera focus and field of view before and during transmission. All solid state except cathode ray tube; cabling to camera fast-scan output included.

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④ LENSES

Lens	Focal Length mm	Min. f stops (All 22 max)	Min. Focus (in inches)	Price
A	12.5	1.9	10	\$ 59
B	25	1.9	24	\$ 29
E	25	1.4	6	\$ 65
F	50	1.9	42	\$ 55
G	150	3.2	96	\$ 89
H	20-80	2.5	60	\$220

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Two piece detachable hood. Fits monitor bezel to block outside light.

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maritime mobile

by Bill Yost, WA6PIU

FRED HARRIS, WA6IES

by Phil Leonard, K6MTN

Fred is interested in sailing. His interest began when he was twelve years old. He saved money from his paper route to buy a small boat. As the years passed he met many other people who were interested in sailing and Fred made many contacts.

He has raced many times in the San Diego to Acapulco race. This is a fifteen hundred mile handicapped race. He has handled the long range communications via ham radio on these races. Most of these ships were 80 feet long. When Fred sailed on small ships he was the navigator. He will be in the next race. It will be on

an 80 footer named the Miramar owned by Scripps.

Fred is also interested in photography. He enters international competitions. Last year he won two bronze medals and one silver medal. He built a dark room where he does his own developing.

Fred is interested in international relations on a person-to-person basis. In conjunction with the state department each year a citizen of a foreign country will spend a few days at his home.

These visitors are mostly graduate students. They have come from such countries as: Hungary, Afghanistan, Ethiopia, Viet Nam and Russia. Fred believes that these visitors are especially beneficial to his children. They are able to learn that people are just people regardless of where they come from.

Last summer two Russians spent several days with Fred and his family. These two Russians teach English in Russia. They didn't try to spread a lot of propaganda. This was an educational experience for the children and a pleasant visit for Fred and his wife.

Fred is an interesting and informed person to talk to.

(From "Squelch Tales")

The above shows the kind of interesting people involved in the maritime world.

LETTERS

A few old note-containing wine bottles with various inscriptions directed towards our column have finally washed ashore.

From Armand Tanny, WA6NMY:

"... I would like to know a bit more about amateur installation on sailboats. I would appreciate any references you could give me. I have an FT-101.

Amateur maritime mobile operation gives the amateur radio service a very good reason for being. Keep up the nice work."

On a sailboat, by the nature of its design, you are equipped with a small antenna farm inherent in the stays and shrouds supporting the mast. By playing around with an antenna tuner coupled to these wires very good results can be obtained by working them against a saltwater ground. Other alternatives include trap and loaded verticals, sloping dipoles, and the horizontally polarized cat whisker antenna.

I plan to devote an entire column to antennas in the future which should be more helpful.

Your FT-101 is an excellent MM rig. Try to mount it in a dry location in the cabin. Salt spray does mean things to metal. The P.C. boards are fairly well protected by varnish but the chassis will give you problems unless it is sprayed often with WD-40. Keep your 12 volt leads as short as possible. It's also a good idea to have the auxiliary running during any lengthy QSO. By all means have at least two batteries - one used solely for starting the engine.

Any further advice by our readers would be appreciated.

From Bill Cooney, W8LM:

"First, I think Worldradio is the best contribution to overall Amateur Radio I have ever seen. (and that covers over 60 years)

I have a question I would like to see covered in the Maritime Mobile Section.

From time to time I take a cruise on large and small cruise ships from one to several weeks, and I have never been able to obtain permission to operate my little ham rig on board ship. Am always refused permission by their head office.

Will you please solicit information from your readers on how they have or can obtain owner permission to operate on board

ship, and then write an article on it. I am sure many hams have had the same trouble as I have and would like to take their rigs with them, on a cruise."

There is an old saying that goes "if you don't want a negative answer, don't ask the question". I'm not advocating that you sneak out on deck during the night for a quick QSO, but I think your approach should be modified. Most people, especially head office, don't understand Amateur Radio. My approach would be to directly contact the shipboard radio operator. There's a good chance that he is also a ham. Next thing you know, you may be operating from his shack coupled into a fine long wire system. You can probably get some advice by contacting some MM stations you hear on the air.

Any readers with similar problems should contact this column. There's no reason why a ham should not be able to operate aboard ship - it's a great experience.

The pioneers of Amateur Radio have distinguished themselves by opening up the bands now in daily use for broadcasting and have thus made a memorable contribution towards technical progress and the development of mass communications. You have been called upon, in times of disaster such as floods, earthquakes, fires, hurricanes and epidemics to play a humanitarian role in mobilizing help and saving lives. Yours is, above all, a fascinating educational activity by reason of its universality which fosters friendship, goodwill and greater understanding among peoples all over the world.

U Thant,
Secretary General, United Nations

Amateur Radio is a communication service, but it is also a spirit. Amateur Radio has led to new friends in distant or strange places. These friendships vault political, social and economic barriers, and they are as fraternal, warm and sincere as any I have made in my lifetime. Yes, Amateur Radio is a spirit - indeed, it is almost a way of life.

William "Bill" Halligan, Sr., W9AC

INTERFERENCE

This is requesting your assistance in encouraging amateurs to write the EIA (and to have their neighbors write the EIA) in matters related to radio-frequency interference.

As you no doubt know, FCC shows 90 percent of all television interference cases require treatment of the receiver, rather than the transmitting equipment. Further, the only cure for audio interference is treatment of the audio device experiencing interference. In short, it seems clear it's the manufacturer's responsibility to correct design deficiencies in home-entertainment that lead to interference problems.

Amateurs have attempted to resolve interference problems on an individual basis. The amateur spends much time (and money) in clearing up RFI problems experienced by his neighbors... problems that, in almost all cases, should be resolved by equipment manufacturers. The time has come, however, for manufacturers to recognize neither amateurs or consumers will tolerate the present situation. We must serve notice on manufacturers that we expect them to 'clean up their house'.

How do we do this? In the long run it will take legislation similar to HR 3516, which is now in the Congress. It may take some time, however, for this legislation to become law. In the meantime, amateurs and consumers should be encouraged to write to equipment manufacturers and the EIA, giving details of interference experienced, and making known the manufacturer is expected to take action.

How about asking your fellow amateurs to write the EIA when problems are experienced? Better, have them drop me an SASE and I will send them forms which makes it very easy for the amateur and

his neighbors to report interference to the EIA. It wouldn't hurt to send a Xerox copy to any interference report to the ARRL and the FCC.

I firmly believe if the amateur community and the consumer pull together on the interference matter, and insist manufacturers accept responsibility for clearing up problems which result from design deficiencies, it will benefit both amateurs and consumers by allowing the full benefits of Amateur Radio to be realized in an atmosphere free of contention over alleged interference.

Thanks for your help in this matter.

Ted Cohen, W4UMF
8603 Conover Place
Alexandria, VA 22308

what to do

by Eunice Bernon, K8ONA

When Ralph Nader spoke recently at Cleveland State University, he vigorously replied to my question, "How may we effectively promote passage and implementation of bills which have been dangling in congressional sessions for years?"

Nader said, "Congressmen have one weakness: They are afraid of losing their jobs. Bombard them with letters. It takes a massive letter-writing campaign."

Now is the time to do just that if we are to resolve the infamous bugaboo of interference.

Amateur radio operators, as well as owners of entertainment equipment (television, Hi-Fi, radio) lost a proponent with the recent death of U.S. Rep. Charles M. Teague of California.

Teague had introduced a bill, H.R. 3516, to amend the Communications Act of 1934.

It would have given the Federal Communications Commission authority to require manufacturers of television and radio receivers to meet certain technical standards for filtering out interference from any amateur station or Citizens Service station operating on its assigned frequency.

It must be noted that there are many radiating devices capable of causing interference outside of those associated with radio transmission. They include electronic toys, shavers, mixers, diathermy machines, automobile ignition and all sorts of devices using electrical motors. Even television receivers radiate radio frequency energy.

What about public reaction to entertainment equipment interference? All too frequently it is attributed to the innocent FCC-licensed ham radio operator whose transmitting and receiving equipment is properly engineered. The knowing ham is self-policing, and he's aware of interference sources.

The Communications Act of 1934 was adopted when interference problems were small. With the explosive growth in number and types of devices capable of causing interference, the day has indeed arrived when consumers should have assurance that such devices are properly designed at the time of manufacture.

Congressional bills have been introduced for years. F.W. Mahon House office editor, just advised me that Teague's bill is not scheduled for hearing.

Weary of interference problems? Write your congressman. Deluge U.S. Rep. Torbert H. McDonald, chairman, Communications and Power Sub-Committee, Room 2125, Rayburn Building, Washington, D.C. 20515. Send letters. Lots of letters.

Pioneers

The Society of Wireless Pioneers is a unique organization of wireless-radio operators from nearly every section of the world.

It bands together the professional "brass-pounders" who have manned stations aboard ships as well as shoreside stations. They have operated private and government CW circuits and facilities all over the world. They include commercial and military operators from every type of installation where CW or RT is or have been used.

The Society was formed in 1968 to perpetuate the memory, heritage and traditions of all pioneer and veteran wireless telegraphers. It acquaints the public with the exploits and deeds of many heroic wirelessmen who have proven their valor and worth in times of emergencies and disasters.

To promote fraternalism and comradeship, the Society has encouraged the formation of Chapters.

There are thousands of amateur radio operators who were at some time in their working lives gainfully employed as radio-telegraph operators and who are now eligible for life membership in this Society. Regrettably, many of these operators are not aware of the Society or their eligibility to become members.

If anyone is interested, they can obtain additional information direct from Society headquarters, Box 530, Santa Rosa, CA 95402.

The Society has a Newsletter which carries the title... "Sparks". It is issued every quarter, in addition to their Yearbook Directory, "Ports O' Call".

The Worldradio News, July 1974

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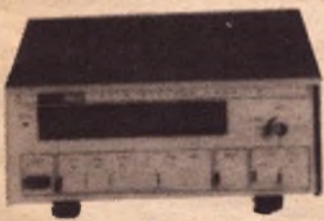
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clubs

"Why have a club?"

"Why should I hold a position in the club? This is just a hobby, I am too busy, let George do it, I pay my dues let someone else do the work. The club is run by a clique anyway." All these comments and many others have been heard at times.

The preamble to our club constitution reads: "We the undersigned, wishing to secure for ourselves the pleasures and benefits of the association of persons commonly interested in Amateur Radio, do hereby constitute ourselves the Tulare County Amateur Radio Club, Inc., and do enact this constitution as our governing law. It shall be our purpose to facilitate the exchange of information and general cooperation between members, to promote radio knowledge, fraternalism and individual operating efficiency, and to so conduct club programs and activities as to advance the general interest and welfare of Amateur Radio in the general community."

In addition to the obvious as listed in the preamble above, it is a well known fact that many issues on a national scale can most effectively be handled by large groups, ie: a club.

Now that we are involved in Amateur Radio, do we feel that we are entitled to any and all rewards it has to offer. Do we remember the help we received when we were struggling to get our license and get on the air. Sure this is a hobby, but how nice it is to share our experiences and knowledge in helping an up-and-coming ham.

A position of responsibility in a club can only intellectually enrich us. We gain far more by being active in a club. It is a proven fact the most active members of a club are also the busiest people in everyday life and the most dependable.

A great man once said "Think not what my radio club can do for me, but what I can do for my radio club". This would be ideal if every ham felt that way. But alas, we will always have the workers and the drones.

It is nomination time again and we need officers that are willing to give a little of their time and talents to the clubs and themselves. If you are among the members that have held positions in the club, rest assured your efforts have been appreciated. If you are willing to take on another office, please let it be known. If you have not had the opportunity to enjoy the thrill and excitement of doing yourself and others a fine service, let it be known. All growth depends on activity. There is no development, physically or intellectually, without effort - and effort means work. Work is not a curse - it is a prerogative of intelligence, the only means to manhood and the measure of civilization. Your club needs your support actively.

("Gridleak" Tulare County (Calif.) RC)

BIG HAM SHACK IN THE SKY

by Clarke Townley, WB8HPZ

Have you ever thought of what happens to all that ham gear and beautiful junk box after you have gone to the big ham shack in the sky?

If your XYL is like mine, she has no idea of what all that stuff is and what it is worth. I must confess that I have kept it

that way on purpose . . . she still thinks that big tower with its tribander and eleven element 2 meter beam is what has kept the old B & W working so good all these years and I can't wait to get color TV. That 100 foot tower is just what is needed for color.

In all seriousness, I would suggest that you give some thought to the subject. Hardly a month goes by that we don't hear of some widow who unloaded a complete (Collins station, or Drake, or Heath, or what have you) for \$100. or so, having no idea of its true value. Why not take a complete inventory of your station with costs or estimates of value, in the case of homebrew equipment, and make arrangements with a fellow ham (preferably one who you know will out-live you) to help your widow dispose of it.

That is one way.

I would like to throw out an idea that I will be presenting to the club to take on as a project: there would be a committee formed to act as advisory to the executor of the estate to help in appraising equipment and assist in disposing of same. If you wished the club to function in your behalf, you would merely register with this committee and when the time comes they would do the job for you. I think this procedure has certain merit over the other alternatives.

While you should have an up to date inventory for insurance purposes, many times this would become quickly out-dated, and if your executor depended on this for evaluation of your gear, it might cost your widow considerable of the green.

("Bulletin" Detroit ARA)

Hams And Pilots Piloting and Yakking

HAPPY FLYERS

by Hart Postlethwaite, WB6CQW

PURPOSE

The happy Flyers were organized to fulfill an unusual set of needs. First and foremost was to assure a pool of qualified hams and pilots by regular scheduled fly-in activities.

Secondly to encourage proficiency in aeronautical ham communications techniques by experimenting with various means of temporary installations to determine quality, range and usability.

Thirdly, by fulfilling our first two purposes to be able to provide an emergency airborne communications system independent of normal communications systems (which could fail during a serious disaster).

Fourth, to have an available pool of volunteer pilots willing to donate their time and talents to worthwhile projects requiring airborne transportation and/or communications. And finally to unite those hams and/or pilots who share these mutual interests, for the recreational pleasures available and the benefits of group participation

HISTORY

The Happy Flyers were born of a QSO between Bill Cryer, W6RCC, Janie Postlethwaite, WB6ODQ, and Ben Autrey, K6LHR. Janie, (a pilot already) had co-erced her OM (me) Hart, WB6CQW into becoming a student pilot. They met for lunch at Salinas (Hart's solo cross country trip). At that lunch the need for a group with the above purposes was discussed and the first charter fly-in was scheduled for Stockton August 27, 1972. It was attended by 18 hams, pilots, and interested friends. Since then I've been acting Squadron Commander and Janie acting Secretary. Fly-in activities have included trips to Columbia, Ussebela (sky-diving exhibition), Brownsville (adult Olympics and pot luck picnic), Livermore - Dinner, Lodi (invitational picnic with the Radio Amateur Mobile Society), Lake Tahoe overnight, Bay Area Poker Party (five airports to pick up playing cards - destination Monterey for lunch and prizes), Red Top Restaurant (and fish display) and Los Banos (walk lunch).

Numerous individuals are now Happy Flyers and pilots, who had never flown in private aircraft before. Mike Flaherty, WA6UBW, was Janie's first non-pilot passenger (he was so informed via ham radio when Janie was on short final). He is now a licensed private pilot and a Happy Flyer. Other new licensees include Doug Macheel, K6HLE, Vic Borgnis, WB6EVH, and Claude Goldsmith, WB6UOO.

New student pilots include Dennis Everhart, WB6GWR, Emilia Williams, and Dee Colacicco. Re-activated dormant pilots include Dick Smith, WB6WPZ, Jim Williams, K6HIO, and John Benson, K6TKF.

MEMBERSHIP

Our membership is open to anyone wishing to participate in the stated purposes of the organization. To be eligible you need only attend one squadron function. At present there are no dues or fees. A plan is under consideration for accepting a \$2 or \$3 donation per year for those wishing to receive a newsletter. Postage is now 10¢ per copy plus the printing (and we mail out about 100). Expense of past mailouts have been borne by Janie and Hart. One issue was financed by the donations received at the Poker Party. Special name tags are available and Claude James, K6IAQ, is in charge of that department.

FLIGHT COST SHARING

Airplane costs are usually shared equally by all occupants of the plane for normal flights. Special requested flights with volunteer pilots are by arrangement with the pilot. He may donate his services only, such as a flight to a Hamfest, Convention, or CARC - California Amateur Relay Council - meeting. He may also wish to share equally on a fishing trip to Baha or some other fun thing. The squadron might even finance a mercy flight if deemed necessary.

FLIGHT LEADERS

Each Squadron Mission is led by a Flight Leader, (who either volunteered or was drafted). He will wear a Flight Leader badge for his mission and will be responsible for all its aspects. He will pass his badge to the next Flight Leader at the final meal. Former Flight Leaders include Ben K6LHR, Clem Quinton, K6TMH, Skip Jackson, WB6WCZ, Dick Smith, WB6WPZ, Jim, K6HIO, and Doug, K6HLE and Claude, WB6UOO, Hart, WB6CQW and Janie, WB6ODQ, Bill Cryer, W6RCC, Pete Gonos, K6GZN. Our thanks to each for their time, effort and expense.

FLY-IN ACTIVITIES

Fly-ins are generally planned for the third Sunday every even month. Invitationals and specials may be planned extra during good flying months. Our June fly-in was an overnight flight to Carson City, Nevada on June 8 and 9. Flight Leader was Jerry Johnson, W6OPM and host in Carson City was Deputy Sheriff Bil Alexander (former WB6SKA). August Flight Leader is Claude James, K6IAQ. Due to the Christmas season and its related parties and activities, he plans to have the December fly-in on the first Sunday at Hill County and has reserved the banquet room at the Flying Lady restaurant. If the weather turns bad we plan to drive our cars and go anyway. This will be our annual business meeting.

Anyone with interesting ideas for a fly-in, be sure to share them with us. Also, if you are planning an unusual trip and want companion planes or passengers, or pilots, speak up. I flew some Masons to Baha in May.

PUBLIC SERVICE

With an eye towards public service and disaster work our technical group is working on plans for an emergency 2 meter airborne repeater.

The receiver would be placed in one plane and the transmitter in a second plane. They would be linked together via 220 or UHF. We could then run high power in the event of a serious wide-spread disaster. The planes could stay aloft for five to eight hours and provide better ground to ground communications in rough terrain than any known

ASSEMBLY RULES COMMITTEE - CALIFORNIA LEGISLATURE

Resolution

By the Honorable Leroy F. Greene
Third Assembly District

Relative To Amateur Radio Week

Whereas, The amateur radio operators of California have used their equipment and their skills to provide communications for the citizens of this state in the aftermath of earthquakes, floods, and other times of need; and

Whereas, The amateur radio operators of California continue to use their equipment and their skills in a manner that is both a public service and benefit to the citizens of this state; and

Whereas, The national organization of radio amateurs, the American Radio Relay League, has scheduled a "Field Day" on June 22 to 23, 1974, which is an annual exercise emphasizing the operation of a radio under emergency conditions independent of commercial electrical power, which improves the ability of amateur radio operators to perform their public service in time of need; and

Whereas, Daily communication with radio amateurs of other nations enhances international good will; and

Whereas, The amateur radio operators of California continue to be a valuable public resource; now, therefore, be it

Resolved by the Assembly Rules Committee That the week of June 17 to June 23, 1974, be established as Amateur Radio Week; and be it further

Resolved, That the Chief Clerk of the Assembly transmit a suitably prepared copy of this resolution to the American Radio Relay League.

Resolution No. 298

Approved by the Assembly Rules Committee

By
John L. Burton
Chairman

Subscribed this 13th day of June, 1974

Bob Moretti
Speaker of the Assembly

(Editors Note: The above was the work of Gary Stilwell, W6NJU)

system in remote areas. By flying over a particular area - no obstruction could deter hand-held to hand-held communications. We also have planes equipped with low band gear.

We provided air coverage for WR6ACS (Amateur Communications System for their SET (Simulated Emergency Test) sponsored by the Marin County Civil Defense in May. It was a simulated dam bursting complete with actual evacuation of people, transporting and feeding at disaster centers. We need this training in traffic, procedure, following orders, and reliably completing assignments.

Projects like this with proper ham involvement help our cause with the general public and the FCC.

ATTN: CLUB OFFICERS

"Worldradio" would appreciate being on the mailing list to receive your club bulletin. Please send it to "Clubs", The Worldradio News, 2509 Donner Way, Sacramento, CA 95818.

We would also like to print stories of what your club has done. Such articles would help to inspire activities for other clubs.

Also, you are invited to inquire about the special price on "Worldradio" subscriptions if purchased through your club. Here is a chance to fatten the treasury. We also have something of interest for you if you wish to use subscriptions as a door prize.

IMRA International Mission Radio Association

Wester Mary, WA5VBM



Pat Healy, WA4VWJ

of work and served his apprenticeship after getting out of the Marines. Pat founded "Healy House Interiors" and continued in this business until he was forced to discontinue because of his health. "Healy House" is still in operation, but the Healy's have not been associated with it for several years.

Pat and Shirley have been married for 32 years. They have 3 daughters and a son (the oldest of which is 30 years and the youngest, 15), and 6 grandchildren. One grandson, Peter John has shown some interest in Amateur Radio and Pat is encouraging him, hopefully to have a Junior Operator soon.

Pat Healy is 5 ft 7 inches tall. He has hazel eyes and "salt-and-pepper" gray hair (in his younger days it was red), and he has Multiple Sclerosis (M.S.), a chronic progressive disease of the central nervous system. M.S. was initially diagnosed at the Veteran's Administration Hospital in Miami, in 1959 and Pat gradually gave in to this progressive incurable disease... first walking with two canes, then a walker and finally after a bad fall in 1962, Pat agreed to use a wheel chair. He now has only peripheral feeling in the right hand, but maintains his independence by using a motorized wheel chair. He is an inspiration to all who meet him... in his determination to help others in any way he can and especially in his patience with himself. It isn't easy for a young father of a family to be told he will be bedridden in three or four years. Fortunately this prognosis has not proved true. Pat has been battling M.S. for 15 years and he is still not bedridden.

Pat first became interested in Amateur Radio when his brother-in-law, Tom Kelley, K1HKZ, was visiting the Healy's in 1958. Tom had brought his 2-meter rig with him and it proved extremely useful when the hurricane season blew across Florida that year.

Pat Healy didn't know about all the commercially published "how to" books written especially for "hams-to-be." He went to the public library and studied all he could about radio and electronics and taught himself CW. His studies were interrupted by this illness, but Pat was finally licensed in 1962 and received the call sign WA4VWJ.

Father John Lomasney, XE3LK, told Pat Healy about the IMRA and this type of operation suited him very much. As soon as possible, he was up to his neck in missionary work. He was one of the most faithful monitor stations when IMRA was monitoring on the hour; he was one of the Charter Net Control Stations when IMRA

She rushed downstairs to the phone, dialed 911, and soon Joe was in competent hands. This time Joe recovered, but he will always have little coordination problems, headaches and other effects of his prolonged exposure to the current.

Naturally, this little story is fictitious. It really didn't happen. But---could it have happened in your shack? Look around you. Do you have a single switch that kills everything in your shack? Does anybody else know where it is and what it does? Will the room light stay on if you turn off all your equipment?

The object of this article is to point out the need for a master emergency switch in your shack. We won't re-open the subject of exposed voltage points and careless safety habits - this has been covered many times in many other articles.

The switch we are about to describe is intended to help someone get you off the current as fast as possible, regardless of how you managed to get yourself wrapped up in your equipment.

The basic idea is to have one master switch in a convenient location near the door of the shack, prominently labelled as an emergency switch. It should be easily seen, easy to operate, and should cut off everything in the shack except the general room lighting.

broke into "prime time" and began the 1900 GMT Traffic Session. He served as President of IMRA, 1969-70, and clarified many of the obscurities in the IMRA Constitution. Pat renovated the IMRA brochures and had them printed in both English and Spanish, and literally had IMRA on the move. Pat was always awake to the many possibilities of Amateur Radio. His ideas were so fertile and his projects so vast that he could have used an army of dedicated people.

Although he is totally disabled now, Pat can still hold the mike for a short time. He spends most of his time recording technical material via cassette recorder for other people and he is very busy helping others to get their licenses. In 1970, Pat and Shirley made the offer of the use of their home, of Pat's equipment and know-how, and technical books and audio-visual equipment... to any missionary who might want to study for an amateur license. Several missionaries made use of the offer and have gone on to take their exams successfully.

Pat's station at WA4VWJ is the Drake T4XB and R4B with the Drake Console. He has the Drake L4B Linear and a Telex tower supports his quad at 60 feet. He has accumulated this station gradually, beginning with much more modest equipment. But by trading and buying wisely, Pat has built his station up to what it is.

In recognition of Pat's work in Amateur Radio, the Broward County Amateur Radio Club elected Pat "Ham of the Year" in 1969. A title of which he is justly deserving.

IMRA newsnotes

PLAN TO ATTEND IMRA CONVENTION 1974. It will be in Weston, Massachusetts (Boston), on August 2, 3, 4, 1974. That will be Friday, Saturday, and Sunday, the 1st week-end of August. Hosting the Convention will be Father Dan Linehan, W1HWK. He will be assisted by Syl Connolly, W1MD, who is President of IMRA, and Fr. Gil-Leduc, K1EMQ, one of the founders of IMRA. Overall cost will be \$25.00 per person for the week-end. Accommodations will be at Weston College and those not staying overnight at the college will receive an adjustment in rates. For reservations or information write to Father Dan Linehan, Weston Observatory, Weston, Mass, 02193.

IMRA April Net Report:

Check-ins	Traffic	Sessions	Time
1192	454	35	51 hours

Now don't start thinking of relays, circuit breakers, dropout links and other industrial type safety gear. Let's start with a basic, simple switch. For instance, for an average shack, as a bare minimum, you can pick up some No. 14 Romex cable (be sure it has a third ground conductor in it) and a couple of electrical boxes, covers and fittings at any of the larger hardware stores, Sears, Wards, etc.

Paint the box with the switch red and hang it on the wall near the door of the shack, or just outside of the door. Plug the cord into the wall plug where you normally have your octopus plug. Transfer all your equipment plugs to the new receptacle box. Put a sign on the wall near the switch to let people know what it's for.

Be sure to carry your ground through all your equipment. What! You don't yet have grounded outlets in your shack? C'mon, gang, for safety's sake, if you don't yet have three-wire grounded outlets in your shack, get 'em installed. In a modern home it's usually a matter of replacing the existing two-wire receptacles with grounded-type receptacles. The third prong will be automatically grounded when you screw the new receptacles tightly to the box.

From here you can get more elaborate. If your gear requires a much heavier load (over 1000 watts) have your electrician install a breaker box or safety switch, with

W5FR, Otho Lindsey, has developed a "less complicated" method of neutralization of "un-matched" finals for the Drake "TR" series and Swan 360 and 500 series. Any missionaries interested in having a copy can contact WA5VBM.

K8HBH, Walt Huelsebusch, had the unpleasant experience of watching the tornado which hit the west side of Cincinnati on April 3, came right at his house. Fortunately for Walt and his XYL, Helen, the tornado veered to the right when it was about a quarter of a mile from their house, but they spent some uneasy hours sheltered in the basement of their home.

WA2CQV, Sister Margaret Mongovan, is on furlough in Rochester, N.Y., from her mission in Santiago, Chile. There are some major problems in getting her home station back on the air and to compound matters, Sister Margaret is now on the sick-list.

WA0SGJ, Sr. Alverna is now working mobile. She finally got her rig into the car. Where there is a will, there is a way. Sister Alverna nominated Ward Jensen, W0-TLE, for the "Specific Events Award" at the Dayton Hamvention. Ward won the award, so Sister Alverna went to Dayton for the presentation.

WA7TXV, Earl Gosnell, formerly of Dexter, Oregon, has a new bride, Donna, and has re-located in Beaverton, Oregon (adjacent to Portland Ore.). His rig is a WHW-16 running 90 watts CW on the lower end of 80, 40, and 15 meters, so he can't check into the Net, but he can be reached on the NTS (National Traffic System) CW.

SR. Mary Louis Hughes (WN8ZTA) is now stationed in St. Petersburg, Fla., where she is a reporter-traveler for "The Florida Catholic."

K0LCB, Dave Bland, who is executive director of the Association of Saints Church Amateurs, informs us that the Directory of ASCA members is now available, along with the Official News Bulletin. All Saints Church members should register, Care of: Department of Broadcasting, P.O. Box 1059, Independence, MO 64051.

Father Barnabas Eib, formerly the chief operator of T15BE, passed his code test and will have his general ticket as soon as the paper work is completed. His Novice call sign was WN2MJE... so we will see if he gets WA2MJE or WB2MJE.

Father Leopold Gleissner (YN4LGS) also passed his General exam and will be on the Net from Stateside as soon as his ticket arrives from Gettysburg.

concealed wiring (for appearance). If you like gadgets you can work out push-button arrangements, photocell arrangements, acoustic switch arrangements, or body capacity relays. But, whatever you install, be sure it is prominently seen, easily operated and absolutely fail safe!

(From "Bulletin" Detroit Amateur Radio Association)

ARRL OFFICIAL BULLETINS

13 June 1974 - FCC has issued a Notice of Proposed Rulemaking, Docket 20073, embodying the ARRL request for deletion of Section 97.89 (c) of the rules prohibiting the linking of more than two repeater stations. The text of the ARRL petition, RM-2349, appears on page 85 of QST for May 1974. Deadline for filing comments is September 18, 1974. The complete text of the FCC notice scheduled to appear in August QST.

The new edition of the ARRL Repeater Directory, detailing close to 1000 United States and Canadian repeaters, is now ready for distribution. To receive your copy unfolded by first class mail, send an addressed envelope approximately 7 by 10 inches with 30 cents U.S. postage. This membership service is available without charge from ARRL, 225 Main Street, Newington, Connecticut 06111.

safety

Herbert Lipson, W8FBH

"Susie! Come turn me off!" Joe Ham was screaming at his wife.

"He ran to the shack and was Joe up against the wall with his hand buried in the innards of his newly constructed linear amplifier.

"Where's the switch?" she screamed back at him.

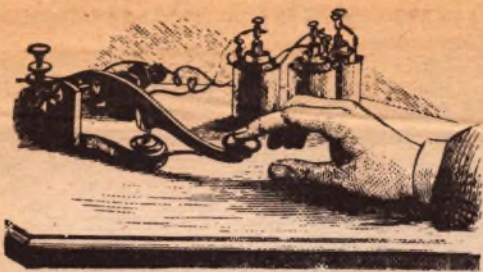
"He forced the words through his tight lips, Black panel... second switch..."

"Which one, Joe? There are so many black panels and so many switches not marked!"

"Pull plug... next room... behind bookcase..." Joe's voice was getting weaker.

"Joe! Joe! I can't move the bookcase!" Susie was becoming hysterical. She grabbed the cord and pulled with all her strength.

There was a flash of fire behind the bookcase, and all the equipment in the shack, as well as the lights in the shack and hallway went off. She stumbled back into the shack and peered through the semi-darkness. Joe was slumped on the floor, breathing heavily.



Two Hundred Meters and Down

by Clinton B. DeSoto

courtesy of ARRL

(First published in 1936, "Two Hundred Meters and Down" is reprinted here, in serial form, so we may have a better knowledge of the vast and great history of Amateur Radio. This presentation is in honor of those who went before us and through determination and hard work, gave us what we have today.)

Continued from last month's Worldradio NEWS)

Part 1 - Pioneers
Chapter Eight...
War!

"The amateurs have come across in the case of the Army... I have turned out a whole lot of operators for the Air Service and have become pretty well acquainted with the type of human it takes to make a first-class radio operator. . . . The very first sort of a student we looked for is an ex-amateur. He seems to have had all the experience and all we have to do is acquaint him with a few special facts and he is ready for his Army job. If we can't get an amateur or a commercial radio operator, then we try to convert a Morse (wire) operator, but it's a pretty hard job. After the Morse man, we take electrical engineers, and from them on, but a man without previous experience is almost hopeless as far as my experience has shown. Of course we can make an operator of him in fifteen or sixteen weeks; whereas, the other way an amateur is fitted in a few as one hundred hours. They have surely done their bit and I am mighty proud I was one."

Concerning the performance of American radio operators in the Allied cause, Commandatore Marconi, who was in charge of signalling for the Italian Army, said:

"America is fortunate in having perfected its organization in the amateur field. . . American wireless men are exceptionally well qualified to take an active part in important signalling work. Much valuable material will be found in the amateur ranks, as those young men are accustomed to transmission on short wavelengths. A great deal of our communication is carried on with low power and wavelengths in the neighborhood of 200 meters - the exact type of communication to which they are most accustomed."

At the conclusion of the war, the Secretary of Commerce said:

"The officers in charge of the wireless operations of our armies in France command highly the skill, ingenuity and versatility of the licensed amateur radio operators who volunteered in large numbers for military service and served in dangerous and responsible positions."

The experience of Tuska was not unique. Dozens of the more competent amateurs were taken directly from private life and given commissions on the strength of their amateur proficiency.

There was Lieut. Commander A. Hoyt Taylor, at the Naval Air Base, Hampton Roads, Va., who achieved fame as a pre-war amateur through his work at the University of North Dakota, 9YN.

Lieutenant John C. Cooper, Jr., U.S.N., Naval Communications Office, Washington D.C., was a member of the A.R.R.L. Board of Direction and District Manager at Jacksonville, Fla.

Ensign M. B. West, U.S.N., Officer-in-Charge at the Great Lakes (Ill.) Radio School, was one of the best-known pre-war amateurs through his station 8AEZ, at Lima, Ohio.

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Captain (later Major) Edwin H. Armstrong, famous inventor of the Armstrong regenerative circuit, which was used by every belligerent in the war, president of the Radio Club of America, was placed in charge of the Signal Corps' Radio Laboratory at Paris, France. There he invented the superheterodyne receiver, now the almost-universal circuit for radio reception.

Altogether, the records show at least fifty amateurs who were placed in positions of responsibility directly as a result of their amateur experience. They formed the nucleus of and largely developed the most efficient wireless signal corps possessed by any of the combatant nations. Self-trained and self-organized, they played a heroically important part in the winning of the war. From the standpoint of national defense alone, if for no other reason, these thousands of amateurs proved that the opportunity for existence which had been allowed them by the Radio Act of 1912 was justified, in contrast to the restrictive spirit displayed abroad at about the same time in the tendency to restrict radio to limited military and naval uses. The short-sightedness of this restrictive policy becomes manifest in that amateurs were of the greatest utility in just those naval and military uses.

The years of amateur development did not reach their end when the need for their utilization arrived, however. Tremendous strides forward in the development of radio were made in the war years. The terrific demands upon the existing amateur technique resulted not only in the refinement of old methods but in the development of new. The intense competition between opposing forces as well as the strenuous demands constantly being made by those in authority made such development inevitable. Primarily, it concerned itself with branching out into such original directions as using vacuum tubes for transmission - a new thought that had not previously occurred to radio engineers; after all, it is not often that a target serves equally well as a cannon - and cascading them in high-gain amplifiers, for receiving purposes.

Eventually, after one year and seven months, it was all over. November 11, 1918 - Armistice . . . peace. But not for amateur radio.

Part 2 - Recognition and Accomplishment
Chapter Nine...
Back On The Air

Concurrently with the signing of the Armistice, Representative Alexander of Missouri, author of numerous pre-war radio bills, introduced what was the strongest attempt made up to that time to give the Secretary of the Navy control of all radio in the United States. Hearings were held by the House Committee on Merchant Marine and Fisheries. Amateur radio rushed into the fray. At a meeting at the Engineers' Club in New York City on November 30, 1918, the old Board of Direction of the A.R.R.L. authorized Hiram Percy Maxim to attend the hearing on these bills, H.R. 13159 and S. 5038. This he did, presenting a detailed and highly effective brief in opposition. A number of local clubs had representatives in attendance as well - Charles H. Stewart, representing the Wireless Association of Pennsylvania and others; Francis Hamilton, of the Hoosier Radio Club; Mr. Densham, of the South Jersey Radio Association; the Baltimore Radio Association; and thirteen-year-old Joseph Heinrich of Washington, who made a fervent plea for the defeat of the bill.

Meanwhile, inspired by a "blue card" appeal sent by the A.R.R.L. to "Any member of the family of:" every amateur licensed at the outset of the war, pleading for assistance in this time of emergency, thousands of letters of protest from voters reached congressional sanctums. Where amateurs themselves were still in the service, members of their families wrote letters in their behalf. Many a shaky plea

came from mothers whose sons had been killed in the war, asking for other mothers' sons the preservation of that which theirs could never more enjoy. It was the most effective gesture amateur radio had ever undertaken, and a powerful example of the united strength that could be brought to bear by courageous, concerted leadership. Simultaneously, Representatives Greene and Edmonds lent their vocal support on the floor and in the locker rooms; their opposition to military control of radio was staunch. The net result of all this effort was that the bill was not even reported out of committee.

Now that was an extraordinary thing. The Alexander Bill was a strong bill, ably sponsored and backed; from the psychological standpoint the situation was ripe for turning radio over to Navy control. Shrewd political observers had gauged its chances of passing as excellent. Yet it was defeated, not on the floor, but in Committee; and almost entirely as a result of the opposition of amateur radio. Why? Let us look a little deeper. Here in 1918, was another 1912, where amateur radio lost so much; but in 1918 interest in amateur radio had dwindled, many of its devotees had been killed in the war, others had taken up other interests, the strength of numbers no longer prevailed, and amateurs were not even allowed on the air. Yet in 1912 amateur radio lost; in 1918 it won. The reason lay in the strong centralized national organization that had been built up in the intervening time - organization which would fight the battle that could not be fought individually. Where, in 1912, lack of organization had meant only a reduction in privileges, because then brute force stepped in and played a part, in 1918, with the brute force dissipated, lack of organization would have meant oblivion. But the organization had been developed, and, although pressed for time and facilities, it functioned, successfully.

In February, 1919, the A.R.R.L. Board met again and listened to a report by General Manager Herbert on the affairs of the League, which had been held in abeyance since the last pre-war meeting, April 21, 1917. This report stated that all memberships had lapsed, and that there was but \$33 in the treasury. It ended by recommending that, if the League were reorganized, a paid secretary be employed and that QST would be purchased and operated by the League.

On the first of March the Board met again, and voted to reorganize the League. It also voted to purchase QST from its owner, Clarence D. Tuska. Since the purchase price of QST, including several months' unpaid printing bills, was about \$4700, and the League had only \$33 in the treasury, the actual method of purchase seemed a bit obscure. A committee was appointed to devise a financing plan, and the Board adjourned until March 29th. The first action taken at this meeting was to draw up a new constitution. A new slate of officers was then elected, including Hiram Percy Maxim, president; R. H. G. Mathews, vice-president; C. R. Runyon, Jr., treasurer; Clarence D. Tuska, secretary; and J. O. Smith, traffic manager. The last-named office was a new one created under the new constitution.

It was immediately decided to advise as many former League members as could be reached of the reorganization plans. Orders were given to the secretary to print up a miniature four page issue of QST and send it out. To defray the cost of publication, approximately a hundred dollars, the eleven men present - Victor Camp, H. L. Stanley, J. O. Smith, W. F. Browne, A. A. Herbert, K. B. Warner, R. H. G. Mathews, C. D. Tuska, H. P. Maxim, A. F. Clough, and H. E. Nichols - dug down into their pockets and in a few minutes had made up the fund.

When they met again, on the 16th, applications were beginning to come in. It was

voted to resume regular publication of QST, and Lieutenant Kenneth B. Warner, formerly 9JT of Cairo, Ill., was elected paid secretary of the League, replacing C. D. Tuska, who stated that he would be rendered ineligible by reason of commercial connections, since he was entering the radio manufacturing business.

Meanwhile the amateurs of the country, mostly now released from the service, were straining at the leash, fretting at the five months of enforced inactivity following the Armistice. On April 12, 1919, the Navy Department, in whose hands had been placed the control of all radio communication for the duration of the war emergency, announced that, effective that day, the ban on amateur receiving would be lifted; but that the restriction on transmitting would continue in force until the President officially announced that a state of peace existed.

The instant this announcement was made public, thousands of amateurs throughout the nation rushed frantically up to long-deserted attics or down to musty basements where the old apparatus lay, intact under its seals, in cobwebby, dust-covered decay. Hastily it was brushed off; tenderly idola-trous fingers carried the individual units to old resting places; tremblingly, bell wire was stripped of its insulation and connections wired in place. The towering antenna of old, dismantled in 1917, was mourned for a bit, in silence; and then work started on a new network of wiring, to be strung gingerly aloft from tree or roof or mast. Hungering, codesick ears, sad in the nostalgia of two long weary silent years, absorbed in ecstatic reunion the roaring threnody of the commercial and government stations.

There was still other work to be done, however. In early May the A.R.R.L. board again met to consider the plan proposed by the finance committee. Briefly, this plan was to borrow \$7500 from former League members, issuing in return certificates of indebtedness payable in two years with interest at 5 per cent per annum. The proposal was approved. The purchase of QST was consummated. Secretary Warner was instructed to lay plans immediately for the first issue of the magazine.

Before the month ended, the first post-war issue of QST - dated June, 1919 - was out, printed with money loaned for the purpose by the printer himself, and the A.R.R.L. bond issue was advertised to the members. It was stated that, if the League were to continue, \$7500 must be subscribed by the membership. No security could be offered the League had no assets. Yet there was hardly a man of all the old members of the League who did not do his bit, some with five dollars, some with five hundred, but all in the same true amateur spirit. The bond issue was almost completely subscribed, and the League went on.

Amateur radio without the right to transmit was a sorry body at best. Amateurs fumed, swore, and turned to the building of long-wave receivers for diversion. The Great Lakes Naval Station started the transmission of drill messages, in both plain language and coded, for reception by amateurs. But waiting grew increasingly irksome. The pages of QST were filled with discussions of the fascinating new possibility of vacuum-tube or continuous-wave, transmission, an outgrowth of war experience. The Thordarson Company was offering a prize to the first A.R.R.L. member to transmit 1500 miles on spark.

It was patently the A.R.R.L.'s first and most important job to get the ban on transmitting lifted. Months had passed since the termination of hostilities but transmitting was still prohibited. The League sent protests, appeals and entreaties to Washington, but month dragged after weary month with no results.

(Continued in next month's issue of "Worldradio News" Worldradio News, July 1919)

CONVENTION

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CIRCLE ACCOMODATION DESIRED

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SINGLE	\$18	\$22
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**ARRL SOUTHWESTERN DIVISION
 CONVENTION NOV. 1-3, 1974**

RESERVATION ASSURED IF RECEIVED BY OCT 15

Feedback

I suggest you have a section on amateur emergency activities to include contributed ideas and articles on quick set-up antennas, portable power sources, lists of items each "emergency-capable" ham should have. (i. e. power plants - fuel - batteries - rigs - etc). Solid state equipment uses less power, this should be emphasized, back pack rigs - one and two man teams which can go anywhere a man can walk, run, or climb. This is Amateur Radio's "License" to exist! Larry "Ly" Harvey, K6PY

I enjoy reading Worldradio News and feel the paper has played a useful part in focusing attention on the public service aspects of our hobby.. Larry LeKashman, W8AB/2

A truly valuable contribution to communication amongst the hams of the world. It succeeds at promoting a forum for all hams. ..Bob Mayo, WB2VUB

This newspaper is without a doubt the most enjoyable, interesting and informative amateur publication I have read during my 15 years as a licensed ham. I enjoy the personal touch. Congratulations on an outstanding job. The ham fraternity needs Worldradio. As Worldradio grows I can't help but feel a sense of pride in the fact that I was listed in the first list of participants... MSgt. Bruce Cushman K1DYA

I enjoy the paper immensely and am inspired to try for my General class exam. Now I see that I can do more than just add to the noise pollution... Kathryn Hare, ex-novice.

I enjoy your efforts very much. Worldradio is very informative and interesting... Robert Kreutzer, W8GYR

An outstanding contribution... Rufus McCracken, W4JYK/KH6

I find it quite interesting... Harold Wolfe, W3JYJ

Fine publication... Louis LaBonte, K6KDU

Really enjoy reading Worldradio... Tom Monroe, W6GGR

Worldradio is FB... Alfred Pacheco, KH6-IAA

You have the right idea... Ken Binger, W0LBS

You have a great publication... Jay Carr, W6FAY

I'm very impressed... Ed Marler, WB6CVA

I thoroughly enjoy it... Walter Fiscus, Jr., WA4JCS

We'd like to hear from you. Please write us a letter -- a letter of intelligence, sobriety, wisdom, humor, or anger as you'd like. We want letters that speak specifically about what the paper is good for, and suggestions on how it could be better. Debate our writers. Tell us what we should have covered... but didn't.

We depend on the feedback from you. Tell us what you are thinking -- about opinions expressed in the articles, your experiences, observations, or anything you feel like soap-boxing about. Through the pages of Worldradio, you can carry on a conversation with other concerned and involved amateurs.

It is our goal to be a clearing house for that precious commodity -- information. With your participation, we can produce meaningful content.

We believe your article will inspire others into a greater utilization of the vast potential of Amateur Radio. We hope to hear from you.

Armond, WB6AUH, Editor, Worldradio Page 44



Communicators

Worldradio Subscriber Roll furnished to further your acquaintance with others of mutual interests.

(Continued from last month's issue)

Harry Dannals, W2TUK, Dix Hills, NY
 David Talley, W2PF, New York, NY
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(Continued in next month's issue)

The Worldradio News



an international newspaper
third year of publication

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The Worldradio News is two-way communication. Send in Amateur Radio information and news. Share your knowledge with your fellow amateur and "Worldradio" reader. We are most interested in your comments and suggestions. We would appreciate being placed on the mailing lists of amateur club bulletins.

Article contributions and advertising inquiries are invited.

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Armond Noble, WB6AUH
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"Worldradio" furnishes a Swan 270 Cygnet transceiver (220v), in carrying case, for loan to medical personnel, relief agency staff, etc., going overseas on short-term volunteer assignments.

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1/12 page	15.99	15.29	14.32	13.35
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1/24 page	9.59	9.17	8.59	8.01
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One that makes the world small

BYRD LAUDS RADIO AMATEURS FOR HELP IN MESSAGE RELAYS

Los Angeles, Nov. 29(AP) - A congratulatory message sent by Commander Richard E. Byrd just before the start of his flight over the South Pole, was read today at the convention of the Pacific Division of the American Radio Relay League.

The message, received by B. E. Sandham Los Angeles amateur short wave radio operator, read:

"Greetings from Little America to the radio amateurs of the Pacific division. Am glad for this opportunity to acknowledge the big debt our North and South Pole expeditions owe to the amateur radio operators.

"I wish to thank them for their helpfulness and to express my admiration of the high sense of honor they show in handling messages.

"It is radio that has made this expedition possible.

"Cordial good wishes in which all of Little America join."

"Richard Byrd"

(The New York Times, November 30, 1929)

YUK

Al Ikstadt, K6DYS, was at the end of the runway and asked for an instrument take-off. The man in the tower asked him for the spelling of his last name. Al said, "Common spelling." He waited on the end of the runway until the weather cleared!

("Squelch Tales")



Teletype fans-Read RTTY Journal, now in 15th year. Exclusively RTTY - Technical-Operation -DX-VHF-etc. Sample 30 cents-.00 a year. RTTY Journal, P.O. Box 837, Royal Oak, Michigan 48068

AUTO-CALL keeps up with the latest ham info from Washington, D.C. Subscriptions \$1.00 a year, sample copies 25 cents. Address: AUTO-CALL, 2012 Rockingham, McLean, Virginia 22101.

MEDICAL: Any licensed amateur radio operator in the medical or paramedical field should join MARCO (Medical Radio Council). Contact: Stan Carp, M.D., K1EEG, 4 Main St., Saugus, MA 01906 (617) 333-1234.

The SOCIETY OF WIRELESS PIONEERS invites all professional operators, active or retired to join the world's largest organization of its kind. Active nets. Write Box 530, Santa Rosa, CA, 95402 for details.

WONDER WHEEL. A copyrighted Mathematical tool for OHM's Law. Send \$1. cash and stamp to K4AQT, J. T. Beck, 3810 Leila Ave., Tampa, FL 33616 USA

Editing a Club Paper? Need some help? Amateur Radio News Service would like to hear from you. For info., write: Rosemary Willis, Sec'y, 9276 Borden Ave., Sun Valley, CA 91352

Canadian surplus electronic catalogs. Bargains galore. Send \$1. ETCO-WR, Box 141, Montreal "A", H3C 2V2

CW OPS. RAZOR SHARP 30HZ RECEIVER SELECTIVITY puts QRM out of the picture. Works with any receiver or transceiver, including yours! You paid hundreds of dollars for your transceiver; why not give it the "ultimate" in selectivity? See large ad elsewhere this issue. AUTEK RESEARCH.

NOSTALGIA--with the Radio Collector's Guide, facts on 4,000 radios 1921-1932. Only \$3.95... you can't lose on our ten day guarantee. Vintage Radio, Box 2045, Palos Verdes Peninsula, CA 90274

Picture QSL cards made from your photo of yourself, shack, etc. 250 - \$8.50; 500 - \$16. Full color from slide \$35. Samples free. Picturecards, Box 5471, Amarillo, TX 79107

TUBES- Write TUBES INTERNATIONAL, Box 152E, Atlanta, GA. 30333, for a \$\$\$\$ saving quote on your Ham Tube Needs.

For sale or trade -- QSTs from 1916 and QOs from 1945 and also callbooks. Handbooks and old catalogs, books and old radio receivers wanted. Erv Rasmussen, 164 Lowell, Redwood City, CA 94062

WANTED FOR CASH\$\$\$\$-airborne radio equip., headsets, microphones, Xmitters, antennas, receivers, ADF, Tacan, Commercial or Military made by Collins, Benlix, RCA, Wilcox, etc. Call ROBERT BANETT, 616 S. Holmby, Los Angeles, CA 90024

\$\$\$CASH for Electronic Tubes-receiving, power, etc, what have you that is interesting? R S ELECTRONICS, 616 S. Holmby Ave., Los Angeles, CA 90024 (213) 279-1275

Need Parts? We carry parts for R-388-390-390A-391-392-51S1-51J4-1051--Nems Clarke-Racal-Pack sets-PRC-25-41-47-62-70-71-73-74-77. We also buy these sets in any condition. If you need a part, check with us. If we don't have it, we will get it. Also we want to buy all aircraft communications: all ground communications; all plug-in modules. Any condition, bent, broken, okay. We have the following units for trade on aircraft or ground radio:R-388-390-390A-392-51S1-51J4-1051-Nems-Clarke Racals. Urgently need ARC-102-618-T-ARC-51 right now. D and R Electronics, R.D. #1, Box 56, Milton, PA 17847. Phone 1 (717) 742-4604 after 6 p. m.

TOWERS, stress calculations, design, registered civil engineer, Jesse Ball, W6BFO 7112 Deveron, Canoga Park, CA 213-340-4411.

WANTED for boys' club. Technical Books, Magazines, and Courses. E. Ezekiel, 43/2 Shaviv, Herzlia 46-221, Israel.

"PSYCHIC ROULETTE" Who's playing with the unseen world? All should know... Write for fantastic offer! METHODS, Box 1263W, Mountain View, CA 94042

COMET KOHOUTEK SOUVENIR PHOTO-GRAPH- An actual 8" x 10" photo taken thru a powerful telescope. Send \$1 to SKYFLIX, P.O. Box 463W, St. Joseph, Michigan 49085.

COLLECT world postage stamps commemorating tele-communications topics. 25¢ brings mint selections on approval plus booklet "Collect Topicals and Have Fun". Alkanstamps, Box 3494, Scottsdale, AZ 85257

SELL: Lafayette HA-460 6-meter AM transceiver, good condition with AC & DC cords, and microphone \$65. Frank Cassen, W6PZU, 3909 Reche Rd. Fallbrook, CA 714-728-8003

ANTIQU: HQ-120, Original condition, works normally. Trade for 2-Mtr FM or \$120. QST 1941/1970 virtually complete trade for 2-Mtr FM. WØBNF, Box 105, Kearney, Nebr. 68847

\$400 CASH for KWM2. Need filters for 7553 equipment. New HR2B swap for 7551 or FTDX-100. WØBNF, Box 105, Kearney, Nebr. 68847

Brand new never used electronic desk calculator \$169 value, swap for 2 Mtr FM or other ham gear. WØBNF, Box 105, Kearney, Nebr. 68847

SWAN 270B W/DC Module all perfect will trade for Atlas 180 or Drake R4A, T4X, AZ/MS for Atlas 180 and matching AC/PS. WØBNF, Box 105, Kearney, Nebr. 68847

REARRANGING SHACK: For Sale: SWAN 350/PWR supply: factory checked and serviced. Factory matched pair finals. Mint operating condition. C. L. Meistroff, W4TFA, 7410 Chamberlayne Ave., Richmond, VA 23227, 1-804-266-3274; After 5 p. m.

WANTED: Hy-Gain Reel Tape Portable Dipole, Model 18 Td and Memorex- matic 500B Keyer. R. Boyd, 16923 Hillcrest St. N. Edward's, CA 93523

Finest QSL cards plain or raised lettering over 200 stock cuts to choose from. Fast service, samples and catalog. Send \$.35 Ritz Print Shop, 5810 Detroit Ave., Cleveland, OH 44102

WILL BUY, SELL OR TRADE crystals for Regency HR2B: Have 10/70, 16/76, 28/88, 16 transmit, 46/46, 52/52, 58/58, 94/94, 147.54/54. Need 04/64, 37/97, 04 xmt. WA6CPP, Box 10, Wallace, Calif. 95254. 408-476-4858

USED MYLAR TAPE- 1800' on 7" reels. Good condition. Money back if not satisfied. 10 for \$8.50, postpaid. Alliance, 4041 Central, Kansas City, Mo., 64111

80/40 Meter Cliff Dweller, PL-172. Wanted 3-500Z Hy-gain 400 Rotator and remote coaxial switch. Rod, W7YBX, 5632 47 SW, Seattle, WA 98136

TECH MANUALS for Govt surplus gear, \$6.50 each -- R-220/URR, R-389/URR, URM-25D, TS-382D/U, ALR-5, BC-348-JNQ; following manuals \$8.50 each: R-388/URR, 51J4, FR-114/U, USM-50; following manuals \$10.00 each: SSR-11, 12, 13, R-390A/URR, USM-82, USM-24, RBA, UPM-45JRR-35. Thousands more available. Send 50¢ (coin) for large list. W3-IHD, 7218 Roanne Drive, Washington, DC 20021

WANTED: Collins 354A Mod. kit for 51J-3. Also CW filter for Kit., M. R. Neary, W7-KFV, Rte 2, New Plymouth, ID 83655

HAND TOOLS, special ham-experimenter discount. Letter brings mailings. Artisan Tool Company, Box 36, Glenmont, NY 12077

MORSE TELEGRAPH CLUB, INC: Desire new members, present & former Morse (land line) oprs. also radio operators to join international club. \$3.00 yearly. Chapters in 55 major cities. Two annual meetings. APR 27 has Morse hookup internationally. Get Dots & Dashes publication quarterly, all for \$3.00, send check for 1974 to A. J. Long, Grand Sec'y Treas. M. T. C., 520 W. Schwartz, Salem, IL 62881

ANTIQU and old test equipment, illustrated bid sheet sent for \$1.00 to cover printing and postage. Walt's Emporium Dept W, PO Box 19406, Dallas, TX 75219

WANTED: Your discarded and old telegraph keys-bugs, battery operated radios to 1930, National Radio SW7, etc. Description and price please. Walt's Emporium, Dept W, P.O. Box 19406, Dallas, TX 75219

WANTED- Tubes: 1Z2, 2BP1. Gears, Kleinschmidt TD 60 speed; also Mite 75 wpm, and Teletype 74912, new or used. Trade cash or unused 74913, others. Send SASE for list of RTTY parts, gears, supplies, tools, manuals, toroids, TYPE-TRONICS, Box 8873, Ft. Lauderdale, FL 33310

WANTED - A.M. Gear for collection; good cond. low priced (no heavy items); Gonset, Elmac, Johnson, etc. W6ZI, 595 Midway, Novato, CA 94947

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WANTED: Equipment (Receiver-Transmitter or Transceiver) for Newport Jr. High School Amateur Radio Club. To be used in conjunction with Spanish, French, Geography, and Social Studies classes. Contact Robert F. Redmond, Principal, or Bob Thames, WA3VQP at (301) 942-3163 or call WA3VQP at home, (301) 460-5093

METRIC SYSTEM EXPLAINED. 500 physical measurements converted. Booklet \$2.00. H. Morgan, 883 - A Diana, Akron Ohio 44307

TUBES: 4-400A \$30., 811's \$2., 6AG7's 25¢, Miller #69109-H coil forms \$1.00 all plus postage, W6BLZ, 528 Colima St. La Jolla, CA 92037

We are in dire need of equipment. All donations TAX DEDUCTABLE. W. Tresper Clarke High School Amateur Radio Club; Edgewood Drive; Westbury, New York 11590

BE PREPARED FOR EMERGENCIES with the SST T-1 Random Wire Antenna Tuner. Also great for field day, camping trips, and home operation. Tunes a random wire for all band operation. \$18.95 postpaid. 1 year guarantee. See large ad this issue. SST Electronics, Box 1, Lawndale, CA 90260

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WANTED: Heath SB-102 with AC power supply, instruction manual. Also a 35 mm or twin lens reflex camera & case. Please give exact condition of ham gear or camera and firm price in first letter. K4KJK, PO Box 4061, Charlotte, NC 28204

Engraved Badges 1-1/4 x 3 any color. Two lines - \$1.25 pp. K2JD, Drawer G, Pittsford, NY 14534

WANTED IMMEDIATELY: Gonset 76 v.p.s. good working cond., reas. price; trans. pd by me. W6ZJ, 595 Midway, Novato, CA 94947

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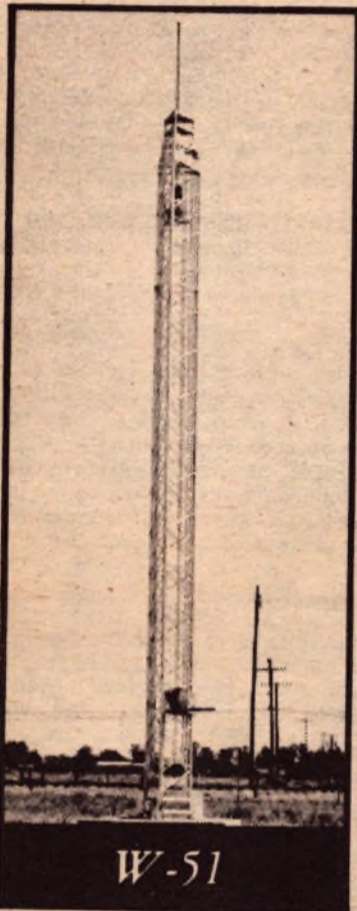
EICO new 723 TX kit \$60. Hallicrafter new S-140 receiver kit \$85., Hallicrafter S-102, S-106 receivers, 2-6 Meters \$40. each. Hallicrafter CRX4, 30-50 MHz receiver \$40., Hallicrafter SX-130 receiver \$135 Hallicrafter SX-100 receiver \$160. J-5A Signal Corps WW II Keys \$5.95. McElroy Morse code U.S. Army Signal Corps code training unit with 10 J-37 keys, portable case \$125. Signal Corps Morse code signal lamp \$25., new. All above very clean. Want Leica M 4, Focomat enlarger, other Leica cameras & accessories. Ben Fisher, 235 Adams Street, Brooklyn, NY 11201

Amateurs interested in low power operation are invited to join the QRP Amateur Radio Club International. For further information, please write to Elliott Blaize, W5TVW, Corresponding Secretary, QRP ARC, 417 Ridgewood Ave., Metairie, LA 70001

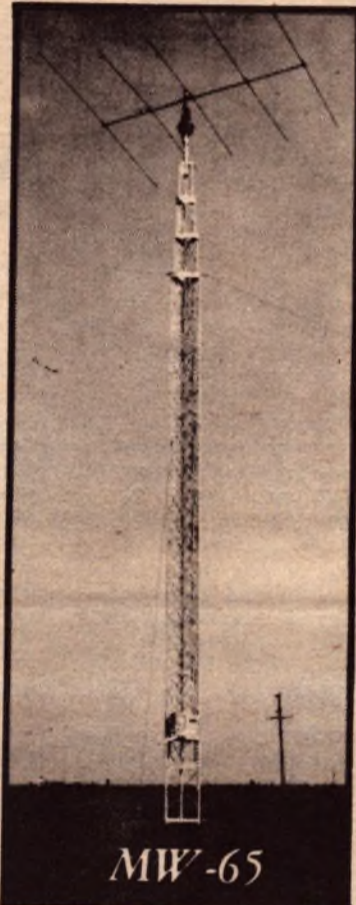
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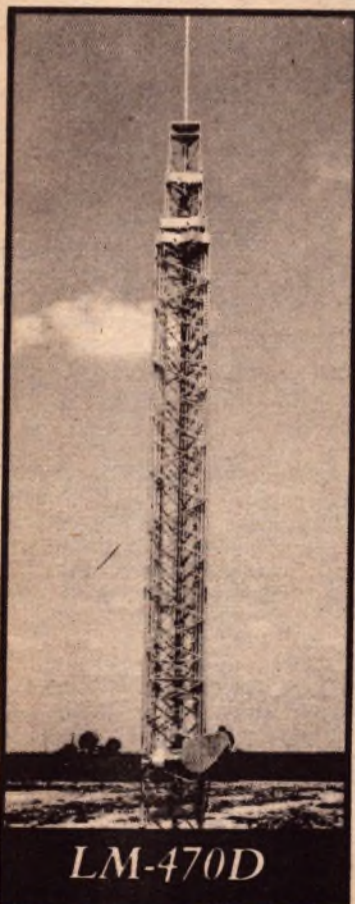
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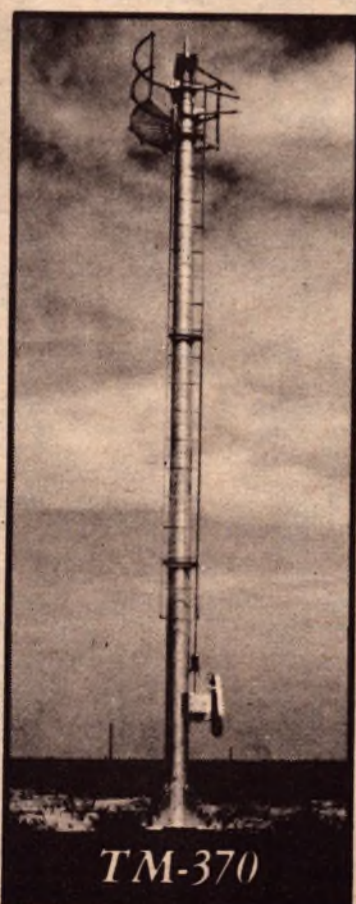
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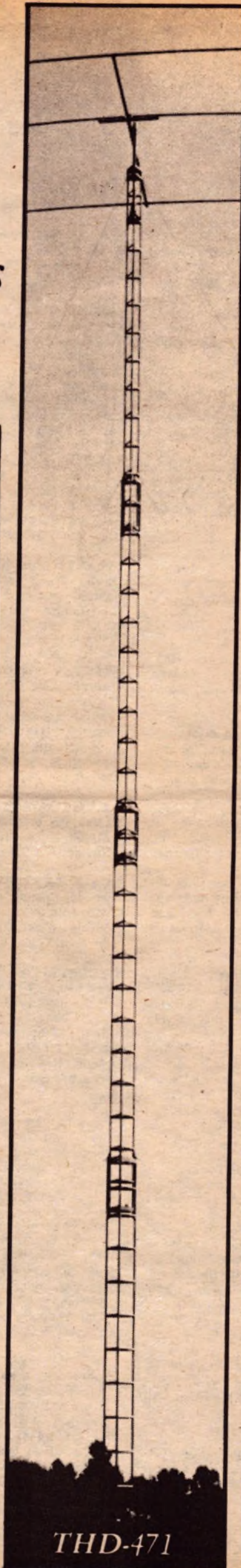
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On a recent visit to the Goddard Amateur Radio Club, Skylab Astronaut - Dr. Owen Garriot, W5LFL, - was presented with the original artwork for the WS3SKY QSL card by club president Hugh Turnbull, W3ABC. Others participating (l. -r.) Wade Stonesifer, W5D, Juan Jaramillo, HC1JJ, (President of the Quito, Ecuador Radio Club) David Jaramillo, WA3MJV, Ted Jaramillo, WA3FUM, and Robley Sawyer, WA3PTO. HC1JJ is at the Goddard Flight Center during his tour of the United States.

FCC ARRL

(continued from page one)

He pointed out other services also likely to ask for increases and conflicts would have to be resolved at a higher level. He presented some interesting propagation data, much computer analysis, being used to meet the amateur need for more space.

Movement was reported in catching up on license processing backlog. Concern was expressed about net operations and deliberate interference caused in some areas, with the possibility of regulations limiting frequency and time privileges and activity. Mention was made of possible expansion of present amateur voice classes, with little enthusiasm shown; however, the "formula" for selecting the present division boundaries was illustrated, and space allocated based on the number of licensees in each class, with a multiplier factor for the higher classes. It was indicated requested repeater changes would be made in the works".

It was suggested that the League could be given more assistance in FCC decisions if they were to comment on each petition and other sources at the time it is filed, as well as on major ones. The Commission is considering establishment of an advisory committee in the field of amateur radio, but is only in the very early stages.

As a point of news was the announcement that a pilot project will commence in an attempt to provide more widespread availability of amateur (and other) license examinations. In five districts (Detroit, Chicago, Seattle, Anchorage, Honolulu) panels of the Civil Service Commission will conduct amateur examinations within the next year. A new form will be provided for application, which will permit the applicant to indicate his choice of city; the Commission will set the date and time. The tapes will be used for the code examination, with the sending recorded and graded by an engineer. There is a plan to provide -- in the experimental stage -- a certification of passing a portion of the exam in case of failure to meet all requirements, so that only the deficient elements would need to be taken a second time.

Study material for examination is going through substantial revision. No longer available in Worldradio News, July 1974.

will the Commission issue extensive lists of example questions; rather a syllabus to indicate the scope of each exam will be published. This may show up before year-end, and could of course affect the ARRL License Manual content drastically.

The Field Operating Bureau stated amateurs are most cooperative in cases of complaints of interference to others. In a recent year FCC had 42,000 complaints of interference; 38,000 of those were to "home entertainment" equipment, of which 34,000 were manufacturing deficiencies in the receiving or hi-fi gear. Of the remaining four thousand, 3,600 were from CB, and only 400 from amateur transmitters. (See related item "Interference" on page 38.)

BOOK REVIEW

(continued from page 23)

The book reads like a roll-call of the well known and hospitable hams. It's a story of amateurs reaching out the hand of friendship.

We think it's terrific. There isn't much published about Amateur Radio, unfortunately.

This book was privately printed by Darleen and her husband Joe Magen, HC2OM. We recommend it. You would give it to a non-amateur and they would come away, after reading it, thinking that hams were the greatest people on the face of the earth. Here's a chance to see pictures of many of the hams you've heard on the air. Darleen writes about them in such a manner that you will feel that you know them too.

The book costs about one cent for every hundred miles that she travelled. To read about the hams of the world send \$5.50, (postage paid anywhere in the world) to Jack Waldner (Darleen's father) 4129 E. White Ave., Fresno, CA 93702 USA.

Amateur Radio means a lot to Darleen and her husband, Joe. That's how they met. They attended the Dayton Convention a few months ago. The year before they attended the International DX Convention in Fresno. Joe won the main door prize that year - a Kenwood TS-900. (how lucky can you get!)

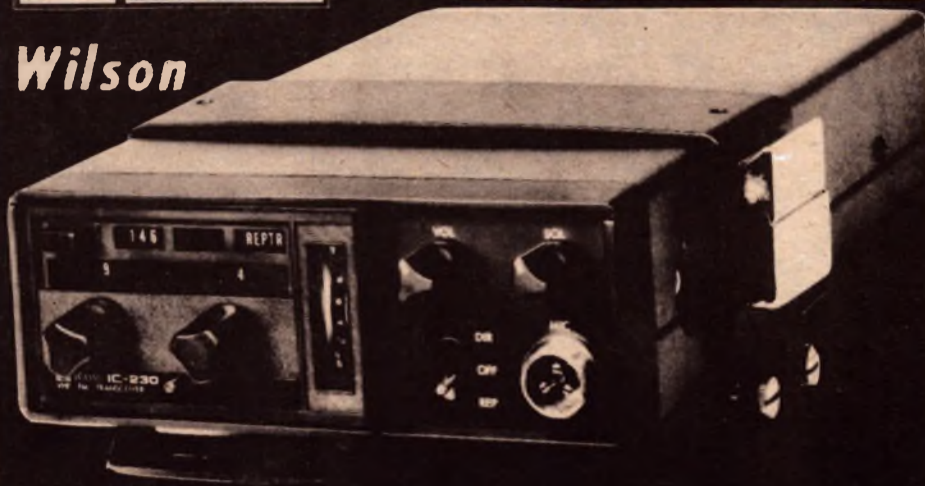
This reviewer and his wife stood up for Darleen and Joe when they were married. Possibly we're a little biased but we think they are terrific people. You'll enjoy this book, it tells about a lot of nice people, the amateurs of the world.

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03	8.8	12.5	13.9	17.8	18.6
04	12.8	12.9	12.3	17.4	18.6
05	14.6	13.5	11.2	17.7	18.0
06	12.6	13.2	10.4	16.3	16.6
07	10.9	12.1	9.1	15.3	14.7
08	9.5	11.1	7.9	14.8	13.9
09	8.7	10.4	8.5	13.9	12.5
10	8.7	10.0	11.1	12.5	11.8
11	9.6	10.3	10.7	11.3	11.7
12	11.0	11.4	11.3	10.7	11.8
13	12.7	12.9	14.9	11.1	11.9
14	14.2	14.5	17.2	12.3	12.4
15	15.1	15.6	17.8	13.7	12.6
16	15.5	15.4	17.2	12.9	12.5
17	15.6	15.3	17.3	12.4	11.6
18	15.9	15.6	18.9	12.6	10.9
19	16.2	16.1	20.7	13.7	11.4
20	15.5	16.5	21.9	15.5	13.4

21	14.0	16.2	22.4	17.0	15.9
22	13.0	15.2	18.3	17.5	18.0
23	12.2	14.2	15.8	17.3	19.3
24	11.4	13.3	14.7	16.6	20.0



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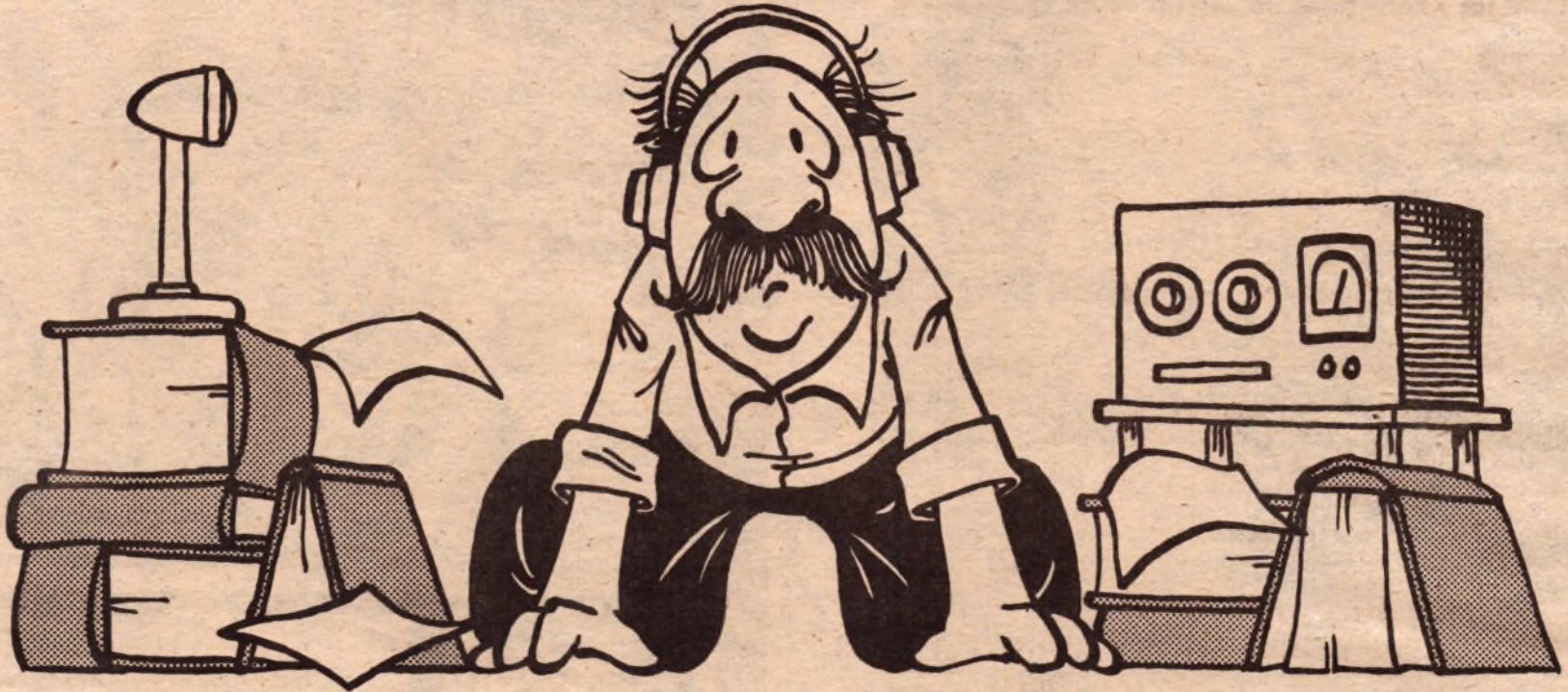
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