

World Radio

Year 13, Issue 9

March 1984 • 85¢

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ARRL Forum

Norm Brooks, K6FO

The American Radio Relay League (ARRL) showed great presence at SAROC, 13-15 January 1984. They had an exhibition booth and provided two places on the program. Twelve Directors and staffers were present. Bill Stevens, W6ZR, Pacific Division Director acted as host and Master of Ceremonies, since Nevada is in his division. The room held a standing-room-only audience — well over 350.

Stevens introduced all of the ARRL people without using notes. His ability to remember names and faces is remarkable. The ARRL representatives had no prepared messages or speeches. After introductions, Stevens asked for questions from the audience.

VEC

It was no surprise that the membership wanted to know about the Volunteer Examining Coordinator (VEC) program. Why was it taking so long to get going?

Dave Sumner, K1ZZ, General Manager of the League, explained that the ARRL will not proceed until the reimbursement plan is in place. A Notice for Proposed Rule Making (NPRM) is expected from the FCC in February, and then the rules must be written by the FCC. This will take three to four months. Because of the considerable financial burden involved, the ARRL will not act until the financial details are cleared up.

On the positive side, 3,000 volunteers have stepped forward — these are people qualified to give the exams. This will help keep start-up time to a minimum. The response from volunteers is very encouraging.

Adrienne Sherwood, WA6YEO, asked for more information about reimbursement of the expenses of the volunteer examiners. The ARRL's intent is to minimize the administrative expenses incurred at the local level (e.g., postage). The ARRL will provide the basic materials for publicity. They will provide cassettes to aid in giving the exams. At



Mary Lewis, W7QGT, Northwest Division Director, at ARRL booth, SAROC, 13-15 January 1984. (Photos by Norm Brooks, K6FO)

this time, they do *NOT* plan direct reimbursement of volunteer examiners' out-of-pocket expenses such as mileage, car rentals, meals or overnight lodging.

One amateur asked if other amateurs or clubs are going to take over if there is a delay by the ARRL. Carl Smith, W0BWJ, president of ARRL, assured him the ARRL is prepared to move just as soon as the reimbursement proposals are put in place. This will be by mid-year, and certainly by the end of 1984.

Smith said there is a lot of misinformation going around on one national VEC or 13 different VEC's (for the 13 call areas). Alaska is most logical for a club to handle, and similar circumstances might exist in the Pacific and Caribbean — because of the geography. (See "FCC Forum".)

It is entirely feasible that Alaska may get going before the League does; this is perfectly OK. The Alaska club meets all (please turn to page 3)

FCC Forum

Norm Brooks, K6FO

"We have deregulated Amateur Radio so much that it is hard to find anything more to deregulate." This was the message from John Johnston, W3BE, Chief, Personal Radio Bureau of the FCC. He said he would welcome input from any amateur who has an idea for additional deregulation.

At the SAROC convention in Las Vegas, Nevada, 14 January 1984, Johnston gave a "year-end report" on FCC activities in 1983.

No-code

Johnston was happy to report that no-code was put to bed — hopefully for at least 12 years. He and his staff had previously cautioned the Commissioners of the feelings of the amateur community — and the Commission found out for themselves.

The Commission announced that their decision to drop no-code was based on many points.

1) The 5 wpm requirement did not seem an undue burden on license applicants — proved by a gain of over 21,000 amateurs last year.

2) The Morse code requirement was not an insurmountable barrier for even severely handicapped individuals. The FCC has made an effort to accommodate these individuals, and assures that the



John Johnston, W3BE, Chief, Personal Radio Bureau of the FCC, spoke candidly on several topics at the FCC Forum, at SAROC, Las Vegas, Nevada.

same accommodations will be included in the amateur volunteer examiner program.

3) There is still a substantial use of Morse code in everyday communications. Many still consider the code a *fundamental* (please turn to page 6)

New Dayton award

The Dayton Hamvention is adding another award this year. The award will be given for technical excellence. It will go to an individual making a significant contribution to Amateur Radio in the technical field.

The coveted Amateur of the Year and Special Achievement Awards have long been a fixture of the Hamvention. The Award for Technical Excellence will round out the awards and allow recogni-

tion of those keeping Amateur Radio on the forefront of the state of the art, and will foster interest in technical achievement.

Anyone wishing to nominate a candidate for any of the awards, please mail to: Awards Committee, Dayton Hamvention, Box 44, Dayton, OH 45401. The nomination should provide as much information as possible about the individual emphasizing the accomplishments justifying the award. Closing date for the nominations is 01 April 1984. □

Listen to TRN for info on the law

Like it or not, you may find that hostile new laws will determine the extent to which you can configure and enjoy your Amateur Radio station. For example, local governments may place severe restrictions on your antennas or operations. Furthermore, malicious interference and obscenity may deprive you of the pleasure of operating your station. These are just some of the issues that relate to your future enjoyment of Amateur Radio that will be discussed by legal experts on the 08 March 1984 North American Teleconference Radio Net (TRN), presented by the Honeywell ARC's.

The featured speakers will be attorneys:

Chris Imlay, N3AKD, ARRL Council; Jim O'Connell, W9WU; Joe Merdler, N6AHU; and Bob Benson, Q.C., VE2VW. These amateurs represent the finest legal talent involved with Amateur Radio issues. And TRN will bring this concentrated legal expertise and information together for amateurs across North America through over 180 "gateway" stations, mostly VHF repeaters, all linked together for the net. The vast majority of radio amateurs are within range of one of these gateway stations, whether at their home stations or via their mobile or hand-held radios.

Many amateurs will have the opportunity to direct questions to the speakers on

the TRN. Thus, there will be the opportunity for amateurs to explore with legal experts such questions as cable TV leakage, prosecution for "pirate" TV antennas, the 10-meter amplifier ban, FCC backing of amateur frequency coordinators, requirements for "simpatches", etc., in addition to the issues described above.

So, to hear Amateur Radio's finest legal talent discuss the legal issues that will shape and define the nature and scope of Amateur Radio to come, tune into TRN at 7:30 p.m. CST on Thursday, 08 March, (that's 0130Z next day). Note that local nets may begin earlier. For a list of stations providing a gateway into TRN check the Compuserve "Hamnet" X10

Database or write the net manager W0TN at 4749 Diane Dr., Minnetonka, MN 55343. (SASE please.)

Also, mark your calendar for Thursday, 14 June 1984, 7:30 p.m. CDT (0030Z) when TRN in cooperation with CRRL will present international antenna expert Dr. John Belrose, VE2CV.

When AMSAT/OSCAR-10 is available for uplinking during the net, the TRN is also expected to be available hemisphere-wide on downlink frequency 145.957 MHz.

Scanner radio owners may also enjoy tuning into TRN to learn about the topic and the fascinating world of Amateur Radio. □



Worldradio

is published monthly by
Worldradio, Inc.
Offices at 2120 28th Street
Sacramento, CA 95818 USA
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March 1984 Vol. 13, No. 9

Worldradio (USPS 947000) is an international conversation. You are invited to take part. Our newspaper is written by its readers.

Our goal is to be a valuable resource of ideas and experiences beneficial to the Amateur Radio community. We publicize and support the efforts of those who bring the flame of vitality into this avocation.

Our readers are participants — an alliance of active radio amateurs who are concerned with reality, who use radio as a communications tool. We ask your cooperation in helping us develop the skill, quality and full potential of Amateur Radio.

We are positively-oriented. We print all the news of this great activity, and particularly desire an input of stories dealing with the dramatic, the personal and humanitarian uses of Amateur Radio.

Worldradio needs your help to reflect the invaluable service of Amateur Radio.

Through Worldradio you can make contact with other individuals who share your interests.

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Hams come through with Grenada info

Mark Fowler, Chairman
FCC
1919 M St. NW
Washington, D.C. 20554

Dear Mr. Fowler:

My wife, Merrilyn Carson, and I are the parents of Gary Carson, a student at St. George's University School of Medicine. We had spoken with our son in Grenada by telephone on the night of 24 October 1983, while he was at the home of Mrs. Kari Willcox, where he had been staying during the 24-hour shoot-to-kill curfew imposed by the people who had recently overthrown the government of Grenada. Our son expressed his urgent desire to leave the island and his inability to do so by any means.

After U.S. military forces began the rescue mission, we were no longer able to communicate with anyone on the island. We anxiously called the U.S. Air Force base in Charleston, South Carolina, every two hours around the clock, seeking word of the successful evacuation of our son.

When only a handful of students were unaccounted for, we frantically sought information from the State Department and the medical school. The information received from those sources lacked credibility because it conflicted with itself and each other and with the information given by the school and the State Department to relatives of Mrs. Willcox.

Lacking faith in the above sources, we sought help from the offices of Congressman Robert Matsui and Senator Peter Wilson. They referred us back to the State Department.

Finally, we sought help from Senator Lloyd Bentsen's office and were referred to John Harrison, [N5BHU], a ham radio operator living in Austin, Texas. Harrison told us that the nature of his license was such that he was prohibited from relaying information about our son's circumstances to any third parties (i.e., his parents).

Harrison did, however, refer us to another ham operator by the name of Herb Schoenbohm [KV4FZ] of St. Croix, Virgin Islands. Within 18 hours after our first contact with Schoenbohm, we received word from him that he had learned

through his ham radio contacts on Grenada that our son had been seen at Point Salines, together with some companions. We knew, at last, that we had information that we could rely upon and that our son was safe. That information later proved to be entirely correct.

Enclosed is a message that was relayed through the medical school to the wire services the same day we were getting word from Schoenbohm of our son's safety and his intention to be evacuated to the United States. If it had not been for the help of these ham radio operators, the relatives of our son and his companions would have had many more hours of uncertainty and anxiety.

Amateur Radio operators truly deserve gratitude and credit from all of us for the services they perform in crisis situations.

Very truly yours,
JOHN P. CARSON
MERRILLYN M. CARSON

Note on 'Caution'

John Minke, N6JM

In reference to "Caution" on page 14, January 1984 Worldradio, some important facts have not been presented. True, any voltage introduced into the house wiring by a home generator would be transformed into very high voltage on the power lines, obviously due to the pole transformers. The hazard presented here is the fact that any linecrews out working on the lines could be subject to shock, thinking the lines were de-energized.

Most likely, the above situation will never occur as not only will your own main disconnect switch still be closed, but so will your neighbors' switches. Unless you have a very large emergency generator, it will come to a screeching halt with your whole neighborhood loaded on it. If it didn't stall, then the output breaker on your generator would trip due to the overload.

Another hazard present is that if you were to plug your generator into your house wiring, you would need a male plug on the output of your generator and this is a definite no-no.

K6IR elected to BOD

The membership of the Radio Club of America, America's first Radio Communications Society — founded in 1909, has elected Kenneth M. Miller, K6IR, to its Board of Directors.

Miller is a life-time member of the ARRL and is on the League's DXCC Honor Roll. He is also a Life Member of the Society of Wireless Pioneers and the Amateur Satellite Corporation. He is active on each of the high frequency amateur bands, and was first licensed in 1940.

Miller is President, Chief Executive Officer and a Director of the Penril Corp., headquartered in Rockville, Maryland with over 1,000 employees, and is also a Director of electronics manufacturer Scope Incorporated of Reston, Virginia, and a Director of the Palmer National Bank of Washington, D.C.

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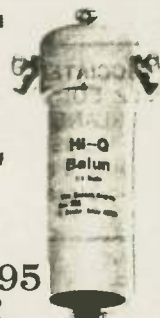
160-Meter Operators Gathering

During the 1984 Dayton Hamvention, there will be a 160-Meter Operators Gathering at Stouffer's Dayton Plaza Hotel in Dayton, on 27-28 April. Slide presentations have been promised by: Bob Walsh, WA8MOA/HZ1AB/VK9ZR/VK0JS; Wally Eckles, W8LRL/P41E; and Barry Boothe, W9UCW/HK0BKK/HK0COP.

For further details, contact Joyce WB9NUL and Barry Boothe, W9UCW, 705 May Ct., Channahon, IL 60410; or Arch Doty, K8CFU, 347 Jackson Rd., Fletcher, NC 28732.

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W. Dale Clift, WA3NLO, Assistant to the ARRL Manager, at SAROC, 13-15 January, in Las Vegas, Nevada, presented a slide show.



ARRL officials at SAROC, 13-15 January, in Las Vegas, Nevada. From left to right: Dave Sumner, K1ZZ; Carl Smith W0BWJ, ARRL President; and Paul Grauer, W0FIR, Midwest Division Director.



Bill Stevens, W6ZM, Pacific Division Director, was the host and emcee of the ARRL Forum at SAROC '84.

ARRL

(continued from page 1)

the FCC criteria. The League is not going to block the Alaska club from being certified by the FCC. When the League is ready to go, and if Alaska wants to then defer to the League, that will be OK too.

Stevens reminded the audience that the League is not a profit-making organization. "Your dues are used to run the League for you," he said. "If the League took on the VEC program before reimbursement was forthcoming, it would be financing a plan to bring in new amateurs who may or may not join the League."

Illegal operations

The next question had to do with "illegal operations." The general complaint was that in Southern California,

licenses have been voided, yet rules are being violated and the obscene language continues to go on.

Jay Holladay, W6EJJ, ARRL Southwestern Division Director, assured the questioners that the FCC is aware of all this, and is taking steps. Their activities cannot be made public.

Chris Imlay, N3AKD, Legal Counsel for ARRL, added that there are several remedies available to the FCC. They must make on-the-air recordings to prove their case. Gathering this information is a big job, requiring a lot of manpower that the FCC doesn't have.

The intent of the Communications Act of 1982 was to permit amateurs to assist in gathering this information. Amateurs would be trained to give the FCC this monitoring assistance.

U.S. attorneys have far too much else to worry about, Imlay went on. Compared to bank robbery, for example, it is difficult to get U.S. attorneys to call our

problems more than "de minimus".

What is needed is the identity (hopefully) of the jammer or rule violator. Log the times he is on. Send your reports to the FCC engineer in charge. He can order a communication van to come over and monitor. But don't expect overnight results. There was a series of license revocations brought about in this way. We may have to do it again.

Jay Holladay added — we need a significant number of complaints with details on paper. Turn them in — you'll get action from the FCC. Holladay hopes that the volunteer monitoring program, when put in place, will help.

1984 Olympics

How will Amateur Radio operators be involved in the 1984 Olympics in Los Angeles?

Jay Holladay answered that up to a few weeks ago, it was expected to have Amateur Radio stations at the three Olympic villages, and that personal mes- (please turn to page 27)

Scholarship fund honoring K7UGA

The ARRL Foundation has established an annual \$5,000 scholarship endowment fund honoring Senator Barry Goldwater, K7UGA. The scholarship will be awarded to a licensed Amateur Radio operator who is enrolled in college-level study of electronics, communications engineering or a related field.

Anyone wishing to contribute to or get more information about the ARRL Foundation can write to the ARRL Foundation, 225 Main St., Newington, CT 06111.

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Tributes to W4KFC

On Saturday, 26 November, we were newly arrived at the Greensboro Hamfest. While we busily prowled the flea market tables — all the while keeping an eye out for seldom-seen friends, the loud-speaker jarred the building with the usually-ignored announcements. Then, a different voice began, precluded by an ominous "Ladies & Gentlemen" . . . "It is with deep regret that we announce the sudden death of Vic Clark, W4KFC, President of ARRL."

For a moment, the armory was absolutely quiet; everyone was motionless, as if caught within a time warp. First, the sub-audible whispers, then graduating back to the comfortable din and clatter of normal decibels. "Heart attack." Those oozing black words that had brought a to-hell-and-back upheaval into our own personal lives for a few years.

He's dead. And I never knew him. And I felt cheated. The head with the dark-rimmed glasses a little above the other heads on the civic center floor. Too far away to meet him. The friendly smile and kind eyes, and capable fingers on the keyer, looking at me from the page of the *Repeater Journal*.

"I just wrote him a letter, inviting him to the Charlotte Hamfest," I murmured aloud to Phil Wicker.

When we came home that evening, The Letter was lying on the table . . . from Vic Clark . . . written the day he died. The words were so cordial, so kind, so complimentary. But I'll never get to ask the questions. I'll never get to see exactly how to touch the keyer. I'll never experience the wisdom passed from wizard to greenhorn. That unique vacancy left will not be filled because he is gone . . . and I never knew him. — *Mary Weddle, WC4T; —Mecklenburg ARS, Charlotte, NC*

As many of you are aware, Victor C.

Clark, W4KFC — the ARRL President — passed away suddenly on Friday, 25 November. Vic, as he was known to hams around the world, suffered a massive heart attack. He was hospitalized at the time, having suffered chest pains. Up until the time of his death, Vic vigorously pursued his ARRL duties despite a history of heart problems.

Before becoming ARRL President, Vic served the ARRL in many capacities. He was SCM in Arizona in the late '30s, and again in Virginia in the early '50s. Vic was Assistant Director and Director for the Roanoke Division. While he was ARRL Vice President, he also served as IARU Region 2 President. He was a key figure at the WARC-79 in Geneva, where several new bands were secured for us. Vic has been chairman of the ARRL Long-Range Planning Committee. As a result of these and other activities, he will have considerable impact on the ARRL and Amateur Radio for years to come. This will be Vic's legacy to us.

At this time, I feel compelled to share some of my personal recollections of this man with my fellow HARC members. I first became aware of Vic in the early '60s. He was a top scorer in many radio contests. I contacted him over the course of many ARRL Communications Department parties and sweepstakes contests. I admired his operating talent and endeavored to be as good as he. I'm sure Vic, likewise, set the operating standard for other contesters. Vic was never too rushed to say "thank you" for a contest contact. He was that kind of guy.

My next encounter with Vic came some dozen years later when he was ARRL Vice President. I had been inactive on the HF bands during those intervening years. When I set up my first "big" HF station, I found I also had big RFI problems. *QST* had printed a request for letters about RFI experiences. I wrote a multi-page letter to the RFI Task Force relating my

experiences. In return, I received a lengthy personal letter from Vic. He had read my letter and responded, thanking me for my input and offering sympathy for my situation and his personal help if I should require it. Vic was that kind of guy.

I finally got to meet my Amateur Radio hero at the ARRL National Convention in Cedar Rapids a couple of years ago. I was on the flea market floor when I spotted the ARRL President. I got up my courage and went over and introduced myself. I inquired about Katashi Nose, KH6IJ, a well-known radio contester who was recovering from a stroke. Obviously anticipating such a question, Vic produced photos from his coat pocket. He'd taken pictures of KH6IJ and his station during a recent visit to Hawaii.

I told Vic what a pleasure it had been to listen to KH6IJ operate contests and how I tried to emulate his style. Vic admitted that he, too, had paused during contests to listen to KH6IJ operate. We agreed that this was probably the best contest operator we had ever heard. Before we parted, Vic thanked me for the opportunity to meet me and speak of his friend. I felt Vic was sincerely grateful. That is also the kind of guy Vic was.

I recall what may have been my last radio contact with Vic. We encountered each other one New Year's Eve while operating Straight Key Night. In this CW operating event, all participants vote for the best fist. When SKN results were published in *QST*, I looked to see if I got any fist votes. I wasn't listed, but W4KFC was. Using an antique key, Vic placed second in the voting. That key is silent now. I shall miss him. He touched my life and my hobby.

Those who wish to remember Vic may contribute to a memorial fund established by the ARRL Foundation. — *Mike Belinger, K0UAA; Heart of America RC, Kansas City, MO* □

Club for blind and disabled hams, SWLs

Bill Craig, G6JJ

The aim of the RAIBC (Radio Amateur Invalid and Blind Club) is to enable blind and disabled SWL and licensed amateurs to pool their knowledge and experience and, with the assistance of representatives and supporters, enjoy the hobby of Amateur Radio. The club was founded in 1954.

At the AGM held at the end of August, the secretary reported that during the past year, three transceivers and 17 receivers had been added to the considerable number already on loan to members; 217 new members and 36 new representatives had joined, bringing the total to almost 900 full members and over 300 representatives and supporters. The issuance of 40 Class "A" and 55 Class "B" transmitting licenses to members during the year is an indication of the efforts made by members themselves and the help given by representatives.

In thanking the committee, representatives and supporters for their continuing help, the chairman — Bill Craig, G6JJ — paid special tribute to the secretary, Frances Woolley, G3LWY, and congratulated her on being elected an Honorary Vice President of the Radio Society of Great Britain in recognition of her work on behalf of the RAIBC.

In addition to producing the club's newsletter *Radial*, which ran to 100 pages last year, Frances also has much to do with organizing the supply and distribution of equipment. *Radial* is sent to over 160 members on cassette, and technical and code practice tapes have helped many members to obtain their licenses.

Inquiries or offers of help should be made to the Hon. Secretary, Frances Woolley, G3LWY, 9 Rannoch Court, Adelaide Road, Surbiton, Surrey, ENGLAND KT6 4TE. □

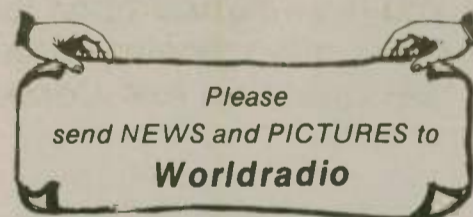
One QRM solution

Gary Legel, N6TO

Have you ever been told that your SSB signals are excessively broad, or that your CW signals have clicks? Or, conversely, have you in all sincerity announced to another amateur that he had either of these problems? Well, let the tumult and the shouting die. Here is the answer to the majority of those supposed transmit signal deficiencies.

Turn the receiver noise blanker off! Observe that the broad, noisy SSB signals clean right up and clicks on CW signals disappear. The inherent action of the modern generation of noise blankers will, in the presence of strong signals,

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FCC

(continued from page 1)

mental communications skill.

4) Morse code is still useful in civil and military emergencies. The requirement for proficiency in Morse code will assure a pool of trained operators for such emergencies.

5) There was an outpouring of amateur responses to the no-code docket. The amateurs' overwhelming sentiments were that Morse code made Amateur Radio what it is today.

The sincerity of strong sentiments and volume of comments were a critical factor in the Commission's decision. The no-code issue is dead. (Applause)

Phone band expansion

Johnston reported that 50 kHz was added to the 20-meter phone band last May. There are other HF band phone expansions being proposed, and the Commission will issue a NPRM (Notice for Proposed Rule Making) later this year.

Novice exams

The Novice examination procedure has been speeded up. The amateur volunteer examiner now gives the applicant the 5 wpm code test first. If he or she passes that, the examiner then gives the applicant 20 questions — one question picked from 20 groups of questions supplied by the FCC. If the applicant passes this

phase, the examiner marks the Form 610 and mails it in. The license is then issued from Gettysburg, Pennsylvania.

He asked for comments from volunteer examiners in the audience. How did it go? One said he had a forms problem, but it was "cockpit trouble." Another said it went OK, and his applicant is now waiting four weeks for his license. Another reported his applicant's license came back in 19 days — which is some kind of record for the FCC.

Johnston reported there are indications that amateur volunteer examiners are actually *tougher* than FCC examiners.

The VEC program

The FCC has decided there should be a Voluntary Examining Coordinator (VEC) in each of the 13 U.S. call areas (1 through 0, plus HI, AK and Caribbean). It now looks like the Anchorage Radio Club of Anchorage, Alaska will be the first one approved. They have the membership and the resources to cover the entire AK call area.

Most inquiries about VEC's are from clubs. Usually, they are interested only in giving exams at hamfests or club meetings, and they feel that being the VEC for the entire call area is too much. In these cases, the FCC puts the clubs in touch with each other, with the objective that possibly they may be able to get together and form a group that *can* handle the entire call area.

The Goldwater Bill, which permits a reimbursement of examination expenses, is now law. It will be decided later how the money will be distributed.

It was expected by the FCC that the VEC system would be in and working by now. In the meantime, the FCC is giving examinations for Technician through Extra on a greatly reduced basis.

The FCC had put out a call for examination questions from all of us. They are coming in more slowly than anticipated. So far, only questions for Elements 2 and 3 have been released. The FCC still needs more questions for the Advanced and Extra elements. Get busy and send in your questions. They can be either multiple choice or essay answers.

Rule books

The FCC published an orange book of Rules and Regulations in July 1983, to help reduce questions from the field on "what does this rule mean?" The ARRL brought out a similar FCC rule book in April 1983. It has a blue cover. It has a lot of information on interpretation of the amateur regulations. The ARRL is upgrading it right now and will soon be coming out with the newly revised version.

Johnston said he likes Dick Bash's orange-covered loose-leaf notebook on the FCC Rules and Regulations. It sells for about \$10. The feature he likes is that

replacement pages with updated rules are sent automatically to the buyer every two months.

10-year licenses

Licenses are being renewed with 10-year terms now. If you let your license lapse, the grace period is two years on the station (the call sign) and five years on the operator. Thus, if you let your renewal go beyond two years but less than five, you won't have to take the exam again, but you'll get a new call sign.

A proposal to change the 10-meter repeater subband was terminated without action. The FCC was persuaded that any change would create an adverse hardship on amateur satellite operations.

In 1983, the FCC put an end to the uncertainty about business messages being handled on Amateur Radio. Since the statement was published, the FCC doesn't get as many inquiries as before.

Power rules

Also in 1983, amateur transmitter power rules were finally resolved. Over the years, the FCC has asked the amateur community how to measure amateur station power. It believed the methods being used were archaic and not applicable to modern operating methods, making the old rules impossible to enforce today.

On 21 August 1983, the rules were



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changed to 1500 watts PEP output, regardless of modulation method used. You are not required to have equipment to measure power. You must simply comply. For AM phone operators, (there are still a few around), the old rules are "grandfathered" to 1990.

RACES

In World War II, Amateur Radio was shut down. The military took the amateur frequencies, some of the amateurs' equipment, and even some of the amateurs. RACES grew out of this.

The Department of Defense feels it is important to be able to reactivate RACES on short notice *with equipment in place*. Thus, in wartime, they want RACES to use the existing amateur 2-meter repeater network.

If you have an antenna over 200 feet high, or if you live near an airport, it used to be necessary to modify your license. Under the new rules, antenna airport clearance is separate from the amateur license. Use FCC Form 854 for this.

Space

The FCC has given radio amateurs the authority to retransmit communications from another service. A waiver was granted for amateurs to retransmit audio and video from the space shuttle. It is expected this will continue throughout the space shuttle program. These retransmissions, however, are not to be used by another service.

The FCC recognizes that Amateur Radio operators have an interest in space, and feel a sense of participation in it. Amateurs have set up networks to pass shuttle information. This is not intended to be open for broadcasting.

Frequencies

The AM broadcast band will be extended from 1605 to 1705 kHz. Radiolocation users that were in this portion of the band are expected to move to 1900-2000 kHz. These changes will be effective 01 July 1989, and will be held off until the last possible moment.

The 220-225 MHz band was shared by amateurs with government radiolocation services. The new WARC allocations call for "amateur, fixed and mobile." Johnston said that no assignments in "fixed and mobile" will be made in the near future. There is an FCC group working on this.

The 1215-1240 GHz frequencies will be withdrawn from the 1.2 GHz amateur band as a result of 1979 WARC.

Questions and answers

Following John's prepared remarks, he opened the forum for questions and answers.

Q: "Can a Technician Class amateur's voice come out legally on 10 meters as a result of crossband linking?"

A: Johnston answered that a 2 to 10-meter repeater is legal. If a Technician is on 2 meters, his voice may come out on 10 meters if an operator of General Class or higher is in control. A 2 to 10-meter remote base, however, would not comply.

Q: "A rule says that a repeater may not transmit on two or more frequencies on the same band. Linking seems to violate that rule."

A: Johnston answered that the rule was put in to give everyone a chance to use the band. Linking is OK if you do not have output in the same band, *in the same location*.

Q: "What are the rules on private phone patches?"

A: There are no official rules — just a lot of questions. First, there must be a control operator at the station. For a

while, the ARRL stopped accepting ads for private phone patch equipment. Then they resumed and were going to send the FCC a petition for rule making on the subject. So far, they have not done so."

Q: "How do you define 'broadcasting.'"

A: "Sending information to the public," John answered. The rules are now set up to make one-way transmissions from an Amateur Radio station OK. Examples: bulletins, code practice,

Westlink news. Anything of interest to amateurs.

Q: "Why should we follow the band plan in sparsely settled areas, where there are few repeaters?"

A: "Band plans have developed a wonderful repeater system, and we recommend you stay with the band plan everywhere. The FCC is not in the frequency coordinating business. It is best the amateurs do it. The only band plans that have come to the FCC's

attention are those proposed by the ARRL.

"From time to time, a war develops, where a group attempts to work simplex on a repeater frequency. The only way FCC would solve such a dispute is to go with the band plan everywhere. To do anything else would not be good amateur practice."

Johnston spoke to a "packed house" of about 300 amateurs who were openly appreciative of his candidness. □

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Factory equipped for 2 meter operation, the FT-726R is a three-band unit capable of operation on 10 meters, 6 meters, and/or two segments of the 70 cm band (430-440 or 440-450 MHz), using optional modules. The appropriate repeater shift is automatically programmed for each module. Other bands pending.

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Powered by an 8-bit Central Processing Unit, the ten-channel memory of the FT-726R stores both frequency and mode, with pushbutton transfer capability to either of two VFO registers. The synthesized VFO tunes in 20 Hz steps on SSB/CW, with selectable steps on FM. Scanning of the band or memories is provided.

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The optional SU-726 module provides a second, parallel IF strip, thereby allowing full duplex crossband satellite work. Either the transmit or receive frequency may be varied during transmission, for quick zero-beat on another station or for tracking Doppler shift.

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The termination of the "no-code" license proposal was by unanimous vote of the five FCC Commissioners at their December 14, 1983 meeting.

Presenting the staff position, Private Radio Bureau Chief Robert Foosner stated their conclusion that the code requirement was not restricting the growth of the Amateur Radio Service, that it requires a minimal amount of study to pass the slow speed test, and that it was not a barrier to the handicapped. He said "In conclusion, I strongly recommend that we maintain the code requirement, we endorse the Service as it is, and we bury the concept of 'no-code.'"

During his presentation, Foosner reported that approximately 5,000 comments on the proposal were received and that there was a 20-to-1 ratio against deleting the code requirement.

In addition to the presence at the meeting of incumbent Commissioners Dawson, Quello and Rivera, Chairman Mark Fowler introduced the new Presidential Commissioner appointee, Dennis Patrick, who was attending his first Commission meeting.

Dennis Patrick was sworn in December 1983, as a member of the FCC, to fill the seat vacated by the resignation of Commissioner Anne Jones. Thus, his term will end at the same time Commissioner Jones' term would have ended if she had stayed her full five-year term — 30 June 1985.

The five-year terms of the Commissioners are staggered so that on 30 June of each year, a term is ending. Each Commissioner is appointed by the president, subject to the approval of the Congress. No more than three of the appointees may be of the same political party.

Commissioner Patrick will be subject to Congressional approval when it is back in session. He was recently a Special Assistant to the Administrator of the National Telecommunications and Information Administration.

Questionable amateur call sign letter combinations will not be assigned by FCC automatically by computer, nor will requests for any specific letter combinations not provided for in the rules be granted. This is essentially the answer I received to a question I asked FCC's Private Radio Bureau Licensing Division Chief.

Recently, the Commission decided it could not afford to take the time to be an arbiter of good taste in the case of broadcast station call signs. This came after a broadcast station licensee wanted to change its four-letter call to end in SEX, according to the 12/15/83 W5YI Report. FCC's Broadcast Service rules permit a call letter choice for broadcast station licensees.

The Licensing Division Chief, in effect, said his priorities, budget and workload would not allow him the man-hours to handle amateur call sign requests nor to change the present computer amateur call assignment program. He added that, in spite of the rule limitations, he receives an average of two requests per week from Congressmen for assignment of selected amateur station call signs to their constituents, in exception to the rule!

All of the Group A amateur calls for Alaska have been assigned, reports FCC in their Public Notice listing the last call assigned in each District and each Group as of 01 December 1983. Examples of Group A Alaskan calls recently assigned to Extra Class licensees are AL7X, KL7X, NL7X and WL7X. The note goes on with: "Any request for a Group A call sign will now be assigned a Group B format." An example of an Alaskan Group B call would be AL7GG.

On 08 December 1983, the FCC released its Report and Order, implementing into its rules (Part 2) the effect of the World Administrative Radio Conference, Geneva, 1979, on the use of radio frequencies by U.S. stations. The complete FCC document totals 292 pages, 133 of which depict the allocation table, and 98 contain the footnotes to the table!

I will HIGHLIGHT the possible changes which could affect the amateur bands below 1000 MHz.

1900-2000 kHz: Rule-making proposing sharing with oil exploration devices/systems is to be expected. 18.068-18.168 and 24.89-24.99 MHz: Exclusive amateur operation will be available no later than 07/01/89, with possible earlier sharing similar to the present use of the 10 MHz band. 220-225 MHz: There are rumors that land mobile services will seek use of the band. 902-928 MHz: This band will be available to amateur stations on a secondary basis, may be shared with other services, and any interference from industrial scientific and medical (ISM) devices must be tolerated.

As in previous years, a temporary agreement was arranged for amateur third-party communications between Korean and U.S. amateur stations during the past Christmas-New Year holiday season.

The FCC began issuing 10-year amateur licenses on 15 December 1983. Although the change from five- to 10-

Amateur Radio call signs

Amateur Radio operators often ask the FCC what call signs have been assigned lately. This list shows the last call sign in each group to be assigned for each district, as of 01 December 1983.

For more information about call sign assignment in the Amateur Radio Service, see Section 97.51 of FCC Rules, or write to the FCC, Consumer Assistance Branch, Gettysburg, PA 17325.

Radio District	Group A Am. Extra	Group B Advanced	Group C Tech./Gen.	Group D Novice
0	ND00	KD0LW	N0FDW	KA0RQU
1	KT1W	KB1LD	N1CXO	KA1LAP
2	ND2V	KD2EC	N2ERD	KA2TQC
3	KR3T	KC3LI	N3DSK	KA3LVD
4	WX4F	KI4DD	N4JOM	KB4HTE
5	NN5I	KE5JU	N5GPQ	KA5SLE
6	NW6Q	KF6VG	N6JRK	KB6CYV
7	NF7G	KD7RN	N7FWC	KA7ROI
8	NG8N	KD8NX	N8FKY	KA8TKC
9	KZ9E	KD9FT	N9EHK	KA9QVO
N. Mariana Is.	AH0D	AH0AB	KH0AF	WH0AAG
Guam	AH2T	AH2AW	KH2BJ	WH2ADY
Johnston Is.	AH3A	AH3AC	KH3AB	WH3AAC
Midway Is.		AH4AA	KH4AD	WH4AAF
Hawaii	WH6P	AH6FE	NH6AF	WH6AYF
Kure Is.			KH7AA	
American Samoa	AH8B	AH8AB	KH8AC	WH8AAO
Wake Wilkes Peale		AH9AA	KH9AB	WH9AAA
Alaska	**	AL7FM	KL7TF	WL7BBT
Virgin Is.	KP2J	KP2AT	NP2BA	WP2ADP
Puerto Rico	WP4C	KP4HN	NP4HI	WP4DFC

**All of the Group A call signs for Alaska have been assigned. Any request for a Group A call sign will now be assigned a Group B format.

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year terms was authorized on 06 October, actual issuance "... was delayed so that necessary changes could be made in licensing programs.

"The Commission emphasizes that the 10-year license term is not a blanket extension of existing station and operator licenses. An amateur license that specifies less than a 10-year term will show a 10-year term on the face of the license when it is either modified or renewed. There will be a two-year grace period for expired 10-year station and operator licenses."

One northern Virginia licensee's renewal application was mailed to the FCC's Gettysburg, Pennsylvania processing facility on 18 December, the 10-year renewal was issued the 23rd, and the license was received by mail two or three days after Christmas!

A California cable TV company must pay a \$6,000 fine for not maintaining signal leakage within the proscribed standard and for not correcting its interference to Amateur Radio communications. The company "... asked for a waiver of the rules, which would allow it to continue its interference to Amateur Radio Stations."

The FCC noted that the company's "... liability is not based on its use of any frequency, nor must the cable company stop using certain frequencies in order to comply with the rules." Regarding the interference to amateur stations, the FCC said that the company "... had been informed of its interference with hams as early as December 1981." Furthermore, the company "... had failed to recognize that cable systems are not meant to share spectrum, but use closed coaxial cable delivery systems, which are not intended to radiate frequencies over the air (emphasis added)." The foregoing was excerpted from the December 8, 1983 ARRL Letter.

During 1984, the FCC will give amateur operator license examinations at 25 Field Office locations and at 32 other locations in the states, Guam and Puerto Rico. The Field Office exams are by appointment only on the following dates: 02/06 through 02/10, apply by 01/15; 05/07 through 05/11, apply by 04/15; 08/06 through 08/19, apply by 07/15; 11/05 through 11/09, apply by 10/15. At the 32 locations away from the Field Offices, exams are given once or twice a year, and the time and place can be obtained from the nearest Field Office. An appointment must be made at the office administering the exam at least 30 days before the beginning of the month in which the exam will be given. See January 1984 QST, pages 59-61, for Field Office locations, phone numbers, etc.

Another operator of an unlicensed FM broadcast station has been fined \$750 and put on 18 months probation. The operator, Victor G. Alcorn of Sayville, New York, pleaded "... guilty to the four-count criminal indictment filed against him. He faced possible penalties of four years in prison and a \$40,000 fine." (From the W5YI Report, 12/15/83).

"Amateur Reprimanded" is the title of an FCC 12/21/83 news release describing an attempt to get a higher class listing in a Callbook.

"On 14 December 1983, the FCC formally reprimanded Amateur Radio operator Raymond C. Bower, WA1NMC, of Bath, Maine, for mailing an altered copy of his amateur license document to

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the Radio Amateur Callbook in an attempt to cause the Callbook to list him as an Extra Class licensee when he was actually entitled only to General Class operator privileges."

In its official reprimand, the Commission stated that this was a misuse of a Commission license and did not comport with the high standard of conduct expected in the Amateur Radio Service." □

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NEZCHEQ 83

NEZCHEQ 83, the second biennial meeting of the NEZCHEQ group (New Zealand County Hunters Eyeball QSO) occurred in Shelton, Washington at the home of Tom Weston, KB7MJ. The near perfect weather was enjoyed by the nearly 50 participants, 17 of whom made the trip from New Zealand. In addition, New Zealand award hunters from Oklahoma and California were well represented, not to mention Washington state — the site of the get-together. Special guests included Don MacKay, ZL3RW, president of the NZART (New Zealand Amateur Radio Transmitters Association) and Jim Meachen, ZL2BHF, board member of the NZART. From the United States, we were pleased that Mary Lewis, W7QGP, and Gib Gibson, W7JIE — Northwest Division Director and Vice Director — were able to drop by.

The weekend of 02-04 September was spent in working ZL on all bands, as well as engaging in some great conversation between radio friends who got to meet, many for the first time. The dimension of meeting someone with whom you have often spoken is great. The food was

plentiful, including an authentic Indian salmon barbecue that delighted all. The ZL crew was often responsible for the short supply of 807's, but we braved the plight regardless. Saturday afternoon's snipe hunt for the benefit of the ZL's was a rousing success, with many new varieties of the elusive creature being captured. Sunday's final banquet provided the opportunity to be a bit more serious.

Special awards were made, including a tribute to Jay Kepus, W7KBC, for his many years of keeping interest alive in county hunting in New Zealand. Flo Reitzel, KU7F, and "Hack" Nordeen, K7OUV, also were acknowledged for attaining the highest award in New Zealand county hunting — the 224 award, for having worked two different stations in each of the 112 New Zealand counties.

The Kiwis left Shelton and headed all over North America to further spread their well-known brand of happiness and good spirit, and see some of the sights at the same time. The next NEZCHEQ is scheduled for Houston, Texas over Labor Day weekend 1985. — *Information collected by John Brown, W7CKZ, and Jim Smith, KA7APJ* □



BACK ROW (left to right): John Rasmussen, ZL1AGA; Alan Meek, ZL2BKM/C; Ian McPherson, ZL3TAA; Garreth Bradshaw, ZL3VP; Jenney Greene, XYL of ZL2BCE; Mary Lewis, W7QGP; Don MacKay, ZL3RW; Gib Gibson, W7JIE; Dorothy Rasmussen, XYL of ZL1AGA; Ted Meek, ZL2BMY; Trevor Crosby, son of ZL3CC; Craig Crawford, ZL3TLB; Jim Smith, KA7APJ; and Bing Crosby, ZL3CC. FRONT ROW (left to right): Peter Meek, ZL2AAP; Jim Meachen, ZL2BHF; Denise Crawford, XYL of ZL3TLB; Stephanie Meek, ZL2BJE; Jean Crosby, XYL of ZL3CC; and Rod Greene, ZL2BCE. (Photo by John Brown, W7CKZ)

Duck-carver runs net

"Mac in the bay window" is the way everybody refers to R. Glenn Maxwell, K4TAM, who spends his days in his favorite chair positioned in the bay window of his home in Asheville, North Carolina. His days are far from idle, however, even though he retired 12 years ago due to severe arthritis. He now spends most of his time carving wooden ducks.

"As long as I keep my hands moving, I can do it," Mac said. He burns in the veins on each feather. "I believe I counted one time and there were over 500 feathers on one duck."

While working on his ducks, Mac keeps in touch with the outside world through Amateur Radio.

"I sit here and if anybody wants anything or comes through town and needs directions, I help them out," Mac said.

"I got my call 22 years ago. A friend of mine from Toccoa, Georgia — John Ayers, W4KFZ — got me interested. John and I were old Army buddies, and we needed to be able to talk to each other. So we got into it."

Eleanor Maldaner, WD4AWH, informs us that Mac runs a Good Morning Net at 9:00 a.m. on 146.16/76 in Asheville, Monday through Friday. The purpose is to find out if all is well with everyone who checks in.

"We have many who are retired and live

alone in this area, plus a lot of tourists," writes Eleanor. "It is a very enjoyable net, and those who care to make a comment can do so. We get as many as 40 check-ins (on an average) and sometimes up to 50. Those who aren't well get encouragement."

"We issued 'Bay Window Net' certificates to all who have checked in 10 times or more (about 80 hams). Also, in the last eight months, we have had 5,000 check-ins. We issue a special certificate to every 1000th check-in. The certificates, envelopes, stamps, etc. were contributed by a few very kind and generous hams. Mac and I did the work."

— *Information from The Asheville Citizen Times, and from Eleanor Maldaner, WD4AWH* □

Iowa notes

- 3915 Sunday Gabfest, 10:00 a.m.
 - 3970 Iowa 75-Meter Net, 12:30 and 5:30 p.m.
 - 3713 Iowa Code Net, 7:00 p.m. M-W-F
 - 3973 Breakfast Club meets every day from 4:00 a.m. to 8:00 a.m.
 - 3560 Iowa Tall Corn Net, 6:30 and 10:00 p.m. daily (fast CW speed)
 - 147.15/75 NIFM Emergency Net, 9:00 p.m., Sundays
 - 146.16/76 North Iowa ARC Emergency Net, 6:30 p.m., Mondays
- *North Iowa ARC, Mason City, IA* □

Motorcycle Net update

Gary McDuffie, AG0N

A little more than a year has passed since we started the motorcycle net in November of 1982, and a lot of RF has passed through the coax in that time.

As of January 1984, we have over 330 amateurs who are motorcyclists on the list, about 250 of whom have checked in at some time or other. We have had very good participation on the net and lots of

good technical discussions.

All bikers are welcomed on the net. We have street, road and dirt riders, and some who do it all. If you know a ham that is a biker, tell him or her about the net. Have them drop me an SASE for more information, or just check in with us on 3.967 at 0300Z. We meet each Thursday night (local day). There is even a small group in the eastern part of the United States that meets at 0200Z so that they don't have to stay up so late.

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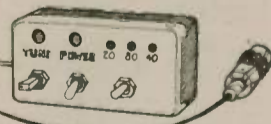
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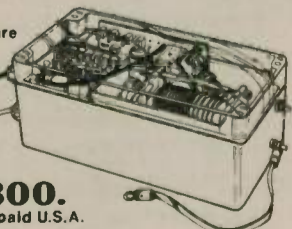
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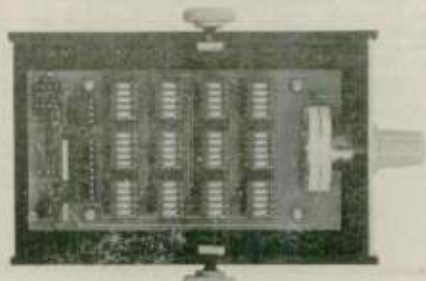




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He's no hero, claims amateur

Steve McCallum, K4URX
Bob Campbell, N4IMI

Pure luck and the alertness of Amateur Radio operators saved the life of a Miami, Florida boatman found floating in the sea off Bimini on 07 November.

A thin cry for help out of the pre-dawn blackness of the sea off North Rock Light caught the ear of Ken Kull, N4HHN, aboard the 45 ft. steel ketch, *Heavy Meddle*. He had just stopped the engine and dropped anchor. Traveling in company with John Calvert of the 32 ft. sloop *Delight*, they had agreed to wait until dawn to start across the Gulf Stream back to home port of Marathon.

Calvert, on *Delight*, also heard the cries for help. Together in the dinghy from Kull's boat, the two men cautiously searched toward the sounds of distress. They came upon a man adrift, injured and exhausted, and they pulled him aboard the dinghy and took him aboard Kull's vessel.

Kull's wife, Linda — a registered nurse, said the man appeared to have head and back injuries and was suffering from exposure. They learned from him only that the 26 ft. powerboat he was traveling aboard was holed when it hit a log, and the man's companion left to swim ashore. Meanwhile, the holed vessel sank.

Calls for assistance on the marine VHF band brought no response. But Kull, a radio amateur since the age of 14, fired up his ham transceiver. His "MAYDAY" distress call was immediately answered by an amateur in California — Roy McFall, WA6GGB.

Roy was operating on the "Waterways Net," on a frequency of 7.268 MHz, and by coincidence was talking with an amateur in Florida. Other Florida amateurs listening on this frequency, popular among cruising sailors, also heard the distress message and apparently several of them called the U.S. Coast Guard. As a result, Coast Guard helicopter 1424 was on its way to the scene shortly.

Kull's first call by Amateur Radio went out at approximately 5:10 a.m. The helicopter arrived about 7:00 a.m., followed shortly by another helicopter and the fixed wing search aircraft Coast Guard 2112.

A Coast Guard corpsman was lowered to the deck of *Heavy Meddle*, immediately administered intravenous medication and decided the victim had to be hospitalized in Miami.

The other aircraft continued searching for the victim's companion. At one point, the Coast Guard radio operator in the

Miami Rescue Coordination Center came up on the amateur frequency and asked Kull to keep track of the other helicopter as Coast Guard VHF contacts were becoming unreliable due to distance.

While Kull worked on the radio, another amateur on board — Al Hocking, W0KJQ — handled operations on deck during the many up-and-down lifts of equipment and personnel.

Kull decries any heroics on his part, saying he just did what had to be done, and he pointed out that the operation was, in effect, a group rescue operation. It encompassed all his family and friends aboard the two vessels, the airmen, the Coast Guard Rescue Center — and, he added, many, many radio amateurs who stood by keeping the radio frequencies clear, ready to do whatever he or she might be called upon to do at any time.

— *Key West Citizen, FL*

W7PHO duplicates Marconi feat

Peter Onnigian, W6QEU

Bill Bennett, W7PHO, visited the Marconi Museum in St. John's, Newfoundland recently. Guglielmo Marconi, as you may recall, established the first CW contact across the Atlantic Ocean by using a kite-hoisted vertical antenna in 1901. Bill says the box kite in the museum is about 6 feet long and 2 feet square.

Bill, however, did it the easy way by using his car's vertical antenna. He worked three European and two state-side stations in quick succession — before QRT — due to high winds, on the very spot where Marconi conducted his experiments.

Contact with a king

Lenore Jensen, W6NAZ

Of all the wide news coverage gained from Owen Garriott's historic "ham in space" activities, probably the most intriguing to the public was the December 3rd contact (0611 GMT) by King Hussein, JY1, with W5LFL in the STS-9.

Dave Bell, W6AQ, had been in Yugoslavia finishing filming on his upcoming feature, *Nadia* (about a young Olympic athlete), and had flown to Jordan to gain additional videotape "footage" for ARRL's *Amateur Radio's Newest Frontier*, which is being updated and lengthened for public viewing about the successful space/ham mission.

There, he joined his colleague, Duane Dahlberg, WB6WMA, Chief Engineer for Dave Bell Associates.

Coincidentally, Owen Garriott was or-

biting the Earth and contacting amateurs, and the king was anxious to make contact. Pete O'Dell, KB1N, Public Information Officer for ARRL, was in Houston at the time and was able to alert Dr. Garriott.

Using first his directional beam and then his omni-directional Ringo Ranger, JY1 made an excellent QSO with good signals.

Duane suggested to the king's staff that the conversation be recorded. This was later transmitted via telephone to Pete in Houston. The media picked it up and it became front-page news.

Added to the countless interviews in our country with amateurs who tried or actually did QSO STS-9, the mission provided marvelous interest in Amateur Radio — and many thanks to ARRL's excellent preparation in news releases. □

DX in the Galapagos

Galapagos Islands
22 December 1983

Dear Friends,

We have concluded our operation as W6KG/HC8. We made some 6,000 QSOs with amateurs in 120 countries. We were on the air 11 days working all bands, phone and CW. We were probably the first station from there on 30 meters, and, for a long time, there has been very little CW operation from there. In fact, in effect, we had the whole country to ourselves because there is very little operation by the few amateurs there.

Upon our arrival there, we met Bud Divine, HC8GI, and are very sorry to report that three days later he became a Silent Key. He had been the most active

amateur on the Galapagos Islands for many years, and he will be greatly missed by amateur friends throughout the world. Our station was located a few hundred feet from Bud's.

The Galapagos (Spanish word for tortoise) is located in the Pacific Ocean, 600 miles from the parent country of Ecuador, and is a separate DXCC country.

Charles Darwin formulated many of his ideas on evolution from the wildlife here. This is a National Park and all of the fauna, flora and wildlife are protected by law. None of the animals or birds are afraid of humans. We saw a pair of giant, 100-year-old tortoises making love. Many humans would like to enjoy this at 100 years old.

Next stop Peru, with call of 4T4WCY.
LLOYD COLVIN, W6KG
IRIS COLVIN, W6QL □

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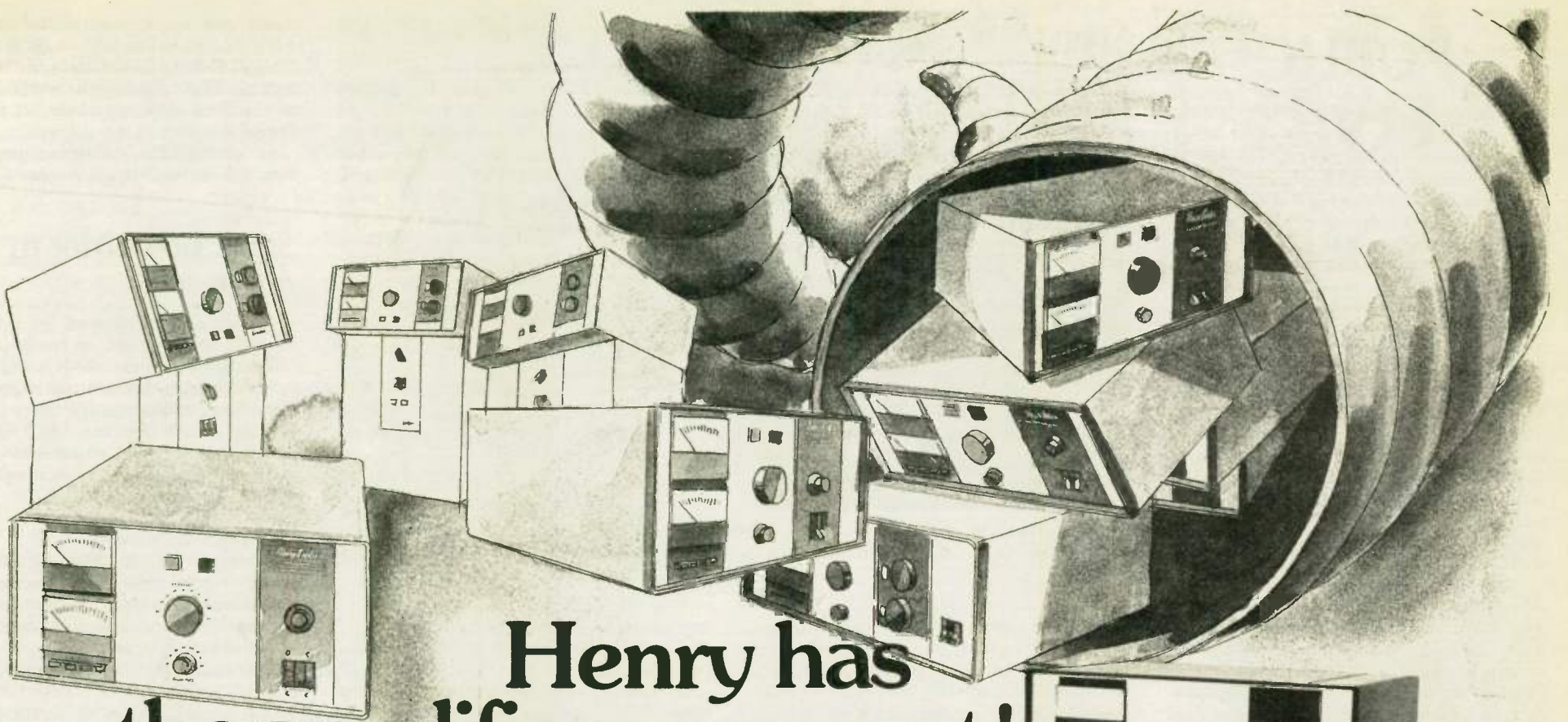
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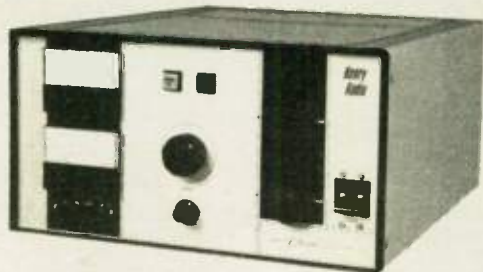
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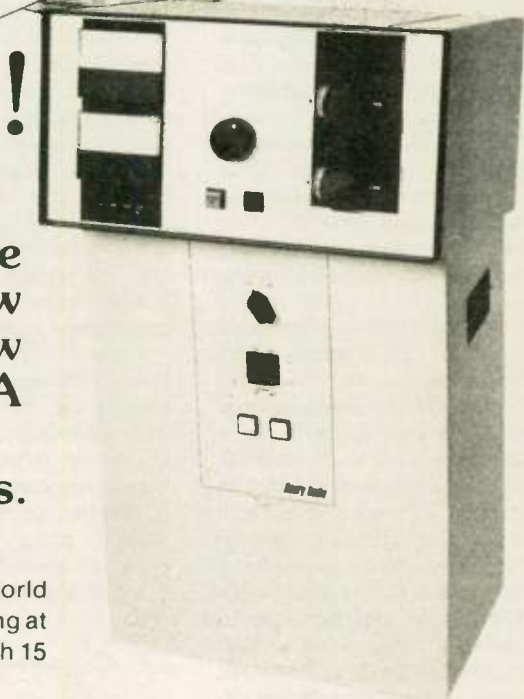
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2004-A is identical to the 2002A except that it is set up for the 430 to 450 MHz band. This amplifier will use a ½ wave strip line and offer all of the same specifications as the 2002A. This will replace our limited production 2004.

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PUBLIC SERVICE

Indiana county utilizes hams

St. Joseph County amateurs were heavily involved in a community-wide medical disaster exercise held 09 November. The exercise involved seven ambulance services, all four of the county's hospitals, four police departments, six volunteer fire departments, civil defense units and St. Joseph County RACES. The exercise had been planned since late September; however, its exact date and time were kept a secret.

Amateur involvement began at 7:06 p.m., when Phil Halasz, N9CWI, monitoring his scanner, heard Memorial Hospital advising the other hospitals that the drill had begun. He put out the announcement on the 147.39 (civil defense) repeater and immediately checking in was Mel Dzialak, WA9GOP (RACES Communication Officer). Within a couple of minutes, Don Smith, W9EPT (RACES Radio Officer) had received the official call from the hospital. Within another few minutes, Rodney Starkweather, N9CMC; Marjorie Goebel, KA9IIU; and Jerome Tannenbaum, W9EY, had begun telephoning other amateurs.

The initial call involved a simulated explosion with about 35 victims at a church in Walkerton (about 25 miles southwest of South Bend). John Stover, N9AMC; WA9GOP; and Robert Hamilton, KA9MRE, responded to that scene, and provided communication for the Paramedic Controller, Triage Officer and Transportation Officer. By 7:23, we received reports of a second scene involving 60 victims in a school about five miles southeast of Mishawaka. Responding to that scene were Tommy Atwood, KA9MRD; Edwin Gonter Jr., W9DGP; Ritchie Williams, KA9DVL; K9DUV; Milford Billhimer, N9CGI; and Tom Hays, N9DVN.

They provided communications for the same positions as above, plus a Supply Officer. In addition to these, W9EY reported to the Red Cross; Lou Horvath, KC9VN, to the Civil Defense Emergency



Lou Macakanja, KA2CHQ, (third from right), talks with Hospital Control to determine the destination of this patient. (Photo courtesy of South Bend Tribune)

Operations Center; W9EPT to St. Joseph Medical Center; and Gene Goebel, WA9YMT, to St. Joseph's Hospital, Mishawaka. KA9IIU and Bob Thompson, K9DMM, stayed home to handle low-band liaison, and Harold Hosler, WA8EPL, in Niles, Michigan was channel guard and Net Control while South Bend hams were enroute to their assignments. N9CWI and Wayne Werts, K9IXU, established Net Controls from Memorial Hospital's Disaster Control room. During the 2½-hour exercise, over 120 pieces of traffic were handled on behalf of the emergency agencies and personnel.

Emergency agencies in St. Joseph County all operate on different frequencies, with the South Bend/Mishawaka Police having the only hand-held repeater operation. All emergency medical communication (except for four paramedic units) is handled on a single simplex frequency, which, in a disaster, would become crowded almost immediately. Thus it was decided about four years ago that during

any disaster, RACES would provide all communication between the scene(s) and the hospitals, the Red Cross, the EOC, and between control personnel at the scene.

Comments following the exercise were mixed but generally good. Concerning the RACES operation, there were some problems. Both scenes stretched the limits of hand-held operation to the civil defense repeater. For this reason, the Walkerton operation was switched to the 145.29 repeater. The other scene could have been switched to a closer repeater and control personnel have agreed that next time, that will be done more quickly.

Another major problem was the intermodulation caused when many police, fire, ambulance and RACES radios are being used simultaneously in a confined area. Substantial RF noise was also created by emergency generators used at both scenes. Although we recognize that these problems can't be eliminated, RACES and other emergency officials are

working on ways to reduce their effects. This marked the fifth such exercise St. Joseph County hams have been involved in since 1980. Among the others were one at the local airport and one at the Notre Dame Basketball Arena, which involved over 200 victims, twice as many ambulances and about 40 amateurs. □

Snow no barrier to amateurs

An ice storm followed by 6 inches of blowing snow closed all roads in eastern Nebraska on Sunday, 27 November.

As the storm passed through Lincoln, Nebraska, members of the Lancaster County ARES (Lincoln ARC) were asked to provide communications between the civil defense office and four-wheel drive vehicles which citizens made available after requests were made on the local media by civil defense.

Acting as a four-wheel cab service, the units — with their ARES navigators — were used to transport doctors and nurses to and from local hospitals over a period of 24 hours (four shift changes). —Reynolds Davis, K0GND, Lancaster Co. EC □

'Honey Sunday'

Twenty members of the Lincoln (Nebraska) ARC provided communications for the annual "Honey Sunday" fund-raising activity on 06 November, sponsored by the Capitol Association for Retarded Citizens.

On Honey Sunday, volunteers from the Boy Scouts — as well as fraternities and sororities from the University of Nebraska — canvass the city, selling jars of honey. Inventory control between the 16 distribution points as well as overall organizational communications was the main objective of the club.

Tim Hopkins, KA0QDX, acted as net control during the five-hour solicitation. —Reynolds Davis, K0GND □

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Amateurs and the big parade

Lenore Jensen, W6NAZ

So that the more than half a million spectators watching the Hollywood Star Christmas Parade would know interesting details of the 100 celebrity cars and floats, 50 Amateur Radio operators devoted a full day and evening — 27 November — to provide excellent communications.

Each block enjoyed a PA system with an announcer to keep the huge crowds informed, entertained and patient. Many families arrived as early as noon for the 6:00 p.m. event, in order to have "front row." Beside each announcer would be a radio operator to relay last-minute changes and instructions via 2-meter hand-holds.

The Los Angeles Police Department (LAPD) received up-to-date information on crowd control with its usual problems. A Command Post station — with Norm Friedman, W6ORD, as NCS — assisted.

As in last year's parade, an ATV station on a Cushman vehicle was run by Jim Williams, WA6PXP, and Bob Busch, KA6RIE, along the route "seeing" traffic and float complications. This service was of enormous help.

"Our fearless leader" was Officer Frank Pettinato, WB6ELR, who also coordinates the LAPD ARES program of hams helping out at unusual occurrences, such as demonstrations, parking lot surveillance in busy periods, etc.

Assisting as roving liaison was Bob Burns, N6ZH, who coordinates ARES with the city of Los Angeles.

Frank gave a briefing followed by John Shaffer, W6GVR, who was to serve as NCS to the hams at announcer points. Careful planning of the various frequencies and alternate channels (in case of interference — and yes, there was some deliberate QRM) was announced. Previous years had provided good lessons in efficiency.

Coming to thank the amateurs for volunteering were Paul Masterson, Chairman of the Board of the Hollywood Chamber of Commerce, and its president — TV personality, Bill Welch.

A fine barbecue was served by members of the Hollywood Rotarians. A second briefing in the afternoon preceded boarding of a two-deck Red Bus provided by station KACE, which delivered the operators — through heavy traffic — to their assigned positions.

Propagation checks were carefully maintained by the NCS as well as by Bob Jensen, W6VGQ, who stood at the starting point, next to TV cameras of KTLA, to tell of last-minute departures from the scheduled line-up of antique autos carrying celebrities (such as Parade Marshall, George Peppard) and floats (such as the block-long collection from Disneyland).

Len Drayton, DEC for the ARES Northwest Los Angeles Section ARRL, was at the Parade Command Post to assist officials.

All hands remained at their positions till after Santa Claus had passed, as the last float and the crowd dispersed. By then it was after 9:00 p.m.

Back-up operator at the base station was Ray Davis, NB6D. The Command Post enjoyed the well-equipped van and its crank-up tower, owned by Paul Schou, KA6ET. Many members of the "Bomb Squad" (Best-of-Mt. Baldy repeater gang) participated.

Several Reserve Officers worked the day as volunteer operators. They included

Line Reserves Al Westersten, NB6K, and Tracy Lusk, WB6CJW; Specialist Reserves Eve Gordon, WA6YQT; John Olip, WB6YQT; Bob Burns, N6ZH; and Norm Friedman, W6ORD. Jacquie Muller, KA6ZFK, and Len Drayton, WA6LAU — as of this writing — are going through rigorous training at the LAPD Police Academy, in what was leisure time, prior to becoming Technical Reserves.

"This was a great rehearsal and demonstration for our upcoming participation in the communications for the Olympics," said Frank. "I'm proud of the 'professional' manner in which the amateurs operated, without complaint of the long hours and the sometimes chilly evening weather. Their 'eyes and ears' were of enormous help to the community, the parade officials and the LAPD!" □

Humbling facts

Some of you may find the following interesting, especially if you are wondering whether you should replace your stacked 20M band openers with that new 18-element long boom band buster because you couldn't break that pile-up into Nevada. Here are some facts I've collected that I read occasionally to keep me humble.

• W2QHH has 7 Band Worked All States, 6 Band Worked All Continents, and confirmed 351 countries. This in itself is very respectable, but he did it with an end-fed Zepp antenna and has never used more than 35 watts in his entire career as a ham!

• This story really kills me. HH2VP won the Single Op. All Band - All World first place trophy in the 1981 ARRL In-

ternational DX Test (CW) with 2.5 megapoints (2878 QSO and 297 mult.). So what? This has been done before, right? Equipment: 200 watt transceiver into a trap vertical on the ground plus a 160M dipole. He did this barefoot and didn't even use headphones!

• Brice Anderson, W9PNE — builder of the "Sucrets Special" (150mW from a 9 volt battery) — is legendary for his exploits with super low power. WAS and 32 DXCC at 280mW output, 37 WAS and 9 DXCC with 100mW output, 27 WAS and 4 DXCC with 50mW output, and finally 11 WAS and 2 DXCC with 25mW output. This is fantastic, right? Well, get this. Bruce has never used anything but plain ole single-wire antennas to accomplish these feats.

It's enough to put a ham to shame. —Arctic ARC, College, AK □

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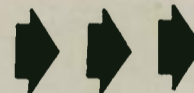
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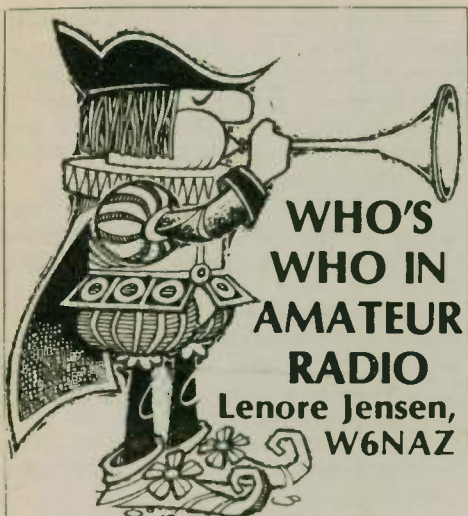
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One of our most admired hams is "Mister K6CPT," sightless Jerry Kunz, W6BVG, who has operated the RACES headquarters station in Los Angeles County for more than 25 years.

Using a Braille slate and stylus, he can copy down what he hears on the air for his log, as rapidly as needed. When a mobile ham reports a problem on a busy Los Angeles crowded freeway, Jerry can reach for his push-button phone to the Sheriff's Radio Room (which then contacts the CHP), and he knows help is on



Jerry Kuntz, W6BVG, at RACES station K6CPT. His Braille slate and stylus is on the desk. (Photo by Bob Jensen, W6VGQ)

the way — pronto!

His efficient, cheery manner does much to keep the 950 RACES members of Los Angeles County enthused about the

well-organized service which stands ready to serve the public in case of disaster — war or natural.

Should the worst happen, RACES is

ready. It is said that if the excellent telephone and microwave systems went out, RACES would be the only link immediately capable of tying together the entire county's services.

Jerry explains that once RACES has been alerted (following FCC rules), word would rapidly spread throughout the membership. Some would go to "their" 17 sheriff sub-stations, some to the 35 emergency stations set up in various city centers throughout the 4,000 square mile county and its huge population. The rest of the members would operate from their own mobile rigs.

On first Mondays, Jerry calls in the gang on 145.30 simplex at mid-day. He records their vital, updated information about their available equipment and gives out bulletins about future events and activities, transcribing it later on an electric typewriter for the RACES volunteer staff. Other nets meet Monday evenings.

Heading the RACES group are Dave Jensen, WA6HXP; Bud Boulton, WA6AAD; and Joe Steiner, NO6N.

Staff members in the well-equipped County Emergency Operations Center on a hilltop are Sgt. Carl Kennedy, WB6TDE, and Sgt. Rudy Lovio, KB6BXE, who are wholeheartedly appreciative of Jerry's work.

Carl says, "I've never known a more



STATION APPEARANCE

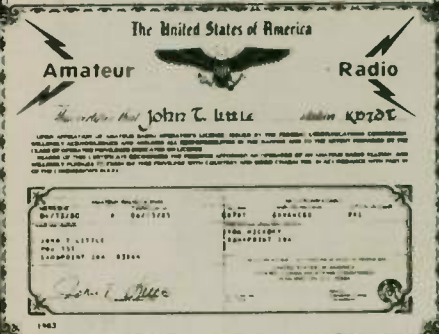
Edward Holmes, KL7HFX — of Wasilla, Alaska — is our Station Appearance winner this month. KL7HFX is a past

president of QCWA's Northern Lights Chapter in Anchorage, Alaska. During the 45 years he's been a ham, Holmes has held the calls of W1NBT (Massachusetts), W1ECY (Maine) and WA6OXG (California).

His equipment, as seen in the picture from left to right, includes: Realistic DX-160 receiver and speaker; Yaesu FRG-7 receiver; Heathkit HW-12 transceiver (on top of FRG-7 receiver); Heathkit HW-32A transceiver; speakers; National NCX500 transceiver; and Yaesu FLDX2000 linear amplifier. (On top of amp is a reel tape recorder.) Antenna is a 10 ft. inverted Vee. □



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dedicated volunteer — he even hates to take vacations, and he's here five days a week from 7A to 5P. Jerry has a tremendous lot of friends."

Rudy adds, "Yes, he's very selfless, a tireless worker and personally very, very likeable."

Jerry's introduction to Amateur Radio happened at the Braille Institute in Los Angeles. He was choosing which of their courses to take when "I got into the radio class taught by the late Glyn Smith, W6SCT, and by the start of 1948, I became W6BVG, so it opened a completely new world to me."

"I started off with an 80-meter CW 'TVI-maker' breadboard rig and had fun, with problems. Then a friend lent me his Gonset Communicator II (remember AM?) and helped me make a tone gadget to indicate when the 'eye' was closed, indicating resonance."

Over the years, various helpful devices have assisted Jerry to keep his transmitters on frequency and properly tuned. "But today," he says, pointing at the splendid station at K6CPT, "we work fixed frequency so I don't have to worry about it." He's very adept at switching between repeaters, the other one being 147.27 MHz and another in the 220 MHz band. His push-button telephone console has a special two-tone chime to let him know when the radio room calls. "That's five buttons over from the left. . . ."

Back in 1957, there was a definite need for the RACES stations to be manned during the daytime. "Hobbling in," he remembers, "after having had leg surgery, I checked in to help. It was my first day; they asked me to take down all the call signs. I was very nervous, trying to keep up with them via my Braille slate and stylus, but somehow I managed."

He managed so well that a year later he was presented a trophy by the late Sheriff Eugene Biscailuz for his first 500 hours of volunteer time. There's no way to count the time he has put in since at K6CPT.

This RACES organization's history is full of public service accomplishment. "First to mind, always, is that 'total disaster area' — glamorous Malibu, home of celebrities, which has suffered so many disasters, from the raging surf pounding homes to fires, landslides or floods on the mountains facing the sea. Our RACES members have always responded with important help."

And the earthquake of '71 is only too well remembered, "when the need for additional communication between hospi-

tals became so apparent." Jerry was "in jail" — the location then of the earlier RACES station.

"I was given a chance to demonstrate my unique ability," he recalls. "The lights went out and I was the only person able to quickly locate a ringing telephone or find the correct buttons to push." The memory makes him laugh.

Incidents of lost children and various search and rescue missions have needed RACES, of course. "One we were proud of," he says, "was the SOS Sundays activity when our RACES mobiles delivered the Dr. Sabin oral vaccine (against polio) to places calling for it during the

massive vaccination project. The gang really did a great job."

Since then, there have been daily good deeds for the gang, all keeping in trim in case "the big one" should hit. And Jerry is very happy to be part of it. His only desire is to be considered a "perfectly ordinary, normal person" and to carry out his goal of helping others in the true ham spirit. He obviously is a positive thinker.

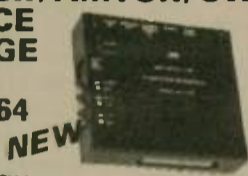
Off-duty, his other hobby is his love of sports, mainly as an exceptionally well-informed fan of the USC Trojan football team and "Dodger Blue." He favors radio over TV broadcasts.

His memory is especially well-developed, as you would imagine. He's good at remembering calls and schedules. And he asks Worldradio to please mention his gratitude to the countless amateurs who have helped him over the years as well as Tom Carten, K1PZU, who voluntarily reads much of this publication, and George Hickin, W4GH, who duplicates and distributes the tapes to blind amateurs.

"I can't express how very much this is appreciated," says Jerry W6BVG. And when he hears this article read, may Jerry know how very much his RACES pals appreciate him. □

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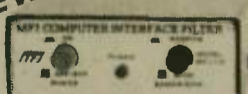
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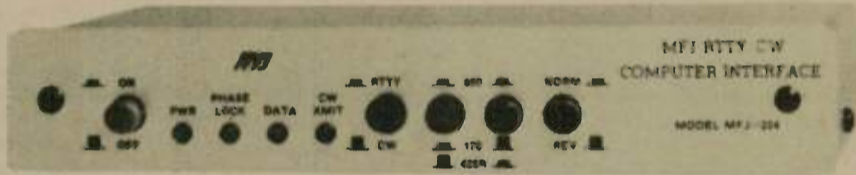
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MFJ-1224 \$ 99 95

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FSK keying output. Plus and minus CW keying.

CW transmit LED. External CW key jack.

Kantronics compatible socket.

Exclusive general purpose socket allows interfacing to nearly any personal computer with most appropriate software. Available TTL lines: RTTY demod out, CW demod out, CW-ID input, +5 VDC, ground. All signal lines are buffered and can be inverted using an internal DIP switch.

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You can also use MFJ-1250 (VIC-20) or MFJ-1251 (C-64), \$49.95 each, RTTY/ASCII/CW software cartridge. Or use Kantronics, AEA and others.

Also copy RTTY with single tone detection.

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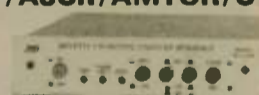
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Use MFJ (see this ad), Kantronics, AEA and most other RTTY/ASCII/AMTOR/CW software.

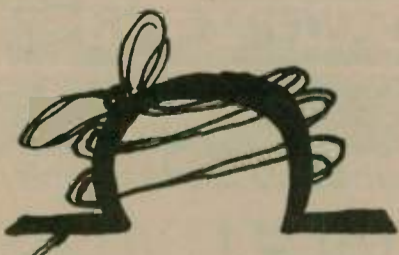
Copies all shifts and all speeds. Twin LED indicators makes tuning easy, positive. Normal/Reverse switch eliminates tuning for inverted RTTY. Speaker out jack. Includes cable to interface MFJ-1224 to VIC-20 or Commodore 64. 4 1/2 x 1 1/4 x 4 1/4 inches. 12-15 VDC or 110 VAC with optional adapter, MFJ-1312, \$9.95.



MFJ-1225 plus MFJ-1250 or MFJ-1251 \$99.95

Ohm-Brew

The winner of the "Ohm-Brew" contest this month is Bill Cook, N3ARM, of Sharon, Pennsylvania. For the answer, turn to page 37.



Send entries to Worldradio, ATTN: Chris Wilson, KA6TAL. Please use a 3" x 5" card for each entry, with name, address and call sign on back. Entries not used will not be acknowledged. □

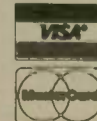
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Focus on Amateur Radio

J.A. "Doc" Gmelin
W6ZRJ

The recent decision by the FCC not to establish a codeless Amateur Radio license came as a welcome note to the largest percentage of the amateur community. The results came after an extensive campaign by many radio amateurs to let the Commission know that we in Amateur Radio want to retain the code requirement, as well as a technical test.

This says something about how we amateurs are able to make our voices known both as individuals and through our various Amateur Radio clubs and organizations. It also shows that amateurs can be fooled, at times, into taking a less than active part in defending Amateur Radio. This seemed to be the case for the ARRL, at least, when the codeless license proposal was first made by members of the FCC staff.

I remember talking to a League Official who said the FCC had already made up its mind to establish a codeless license, and it would be a waste of our time to try and stop the establishment of the new license class. Rather, we amateurs should try to make the new class of license as "palatable" as possible, by asking that the license class be limited to some unused band or with other tight restrictions.

At first, the ARRL Headquarters staff and Directors worked with this philosophy, and indeed, made plans to support such a restricted codeless license. Fortunately, the Directors began to receive so many letters against the codeless license that at last they took a firm stand *against* the entire concept.

After that, the League campaigned strongly against the proposed new license class, which — I'm sure — had

much to do with the final position taken by the FCC.

I was somewhat disappointed with the ARRL's first actions in treating the proposed codeless license, and I complained to my own Director. Later I was told that the Board was really just waiting to see how the amateur community felt about such a proposal.

In my opinion, the first thing the League should have done was send a survey through Director newsletters or in QST to find out the proposal. Then if needed, mount a campaign against the proposal, if this was necessary.

That has been done before, as — for example — the attack on our amateur 220 MHz band a few years ago, when all or part of the band was proposed for a new CB or "hobby class" license. In that case, the amateur community was again successful in countering an attack, but in that case, the League's Board of Directors led the way.

Some years ago, there was another proposal to establish a codeless license and, in fact, change the entire form of the amateur license structure. In that case, the Directors went to the membership via club and special meetings of League members and other amateurs, to tell them about the proposal and learn the opinions of the amateur community regarding the proposal.

The result was that the FCC decided to make no changes in the license structure — at that time. In the present case, the Commission says the proposed codeless license is completely dead.

I know how hard the League worked in the above matters, since my Vice Director and I visited 55 radio clubs in a four-month period, to spread the word and learn the opinions of amateurs in the Pacific Division.

The League can be, and has been, the leader in the handling of proposals such as the codeless license concept in past years, and it did finally become the leader in the recent codeless license matter.

One wonders why such a large percentage of the amateur population is against the concept, when so many

amateurs work no CW at all. In fact, some amateurs are almost proud of the fact that they don't operate on the CW bands, and some are openly in favor of the elimination of all separate CW bands.

Many amateurs who are very much against a codeless amateur license have told me that CW is outmoded and "old-fashioned". But they still want to keep the code requirement.

Some admit that they probably could not even pass a 5 wpm test, but still hold a General or Advanced Class license. One wonders if the real feeling is only to keep others off the amateur bands, and I suspect this is true in many cases.

At one time, there was a requirement that all amateurs must maintain at least some amateur operation in order to renew their amateur licenses.

I remember hearing of some amateurs, who asked their friends who were amateurs to put some contacts in their logbooks to "prove" they had worked some contacts, when indeed they had not.

Amateurs also had to attest to the fact that they could still copy the code at the same speed required to pass their original license test. Of course, many people attested to this, but by their own admission, were probably lying and would not be able to pass the 13 wpm code test.

The requirements of maintaining minimum activity and being able to "pass" the code test were eventually dropped, since they were not really enforceable.

How, then, should we assure that amateurs are active and ready to "serve"

their community, if necessary by CW operation?

Should the FCC require amateurs to operate on the CW bands a certain percentage of time each license period?

Should the FCC re-test everyone for code proficiency at the end of the now 10-year license period to make sure they have maintained the CW speed that so many amateurs have said is necessary to continue a strong Amateur Radio Service?

How could the FCC really check to make sure all amateurs had indeed worked CW as a requirement to renew their license? There is probably no way.

And can we afford to re-test every amateur every 10 years? Probably not, although the new volunteer amateur license testing program might make this possible. But is it really needed? I wonder.

I do know that amateurs come through with necessary emergency communications services when needed, and most amateurs are pretty proficient in operating practices, although the advances in the technical aspects of the radio art have made it difficult for many amateurs to keep up with things in this area.

I, for one, operate on just about every mode and on most bands at one time or another. I find that most amateurs are pretty good on any mode, and that there are "nut" operators (lids) on any band and any mode.

I'm happy to say that the "nuts" are in the minority and that most amateurs are pretty good people. I'm proud to call them my friends. □

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He's sorry to see Dentron go

I wasn't aware that Dentron Radio went out of business until I read your letter in the January '84 issue of *Worldradio* (page 10). I agree — we lost something. They were one of the finest outfits I knew.

Four months after the warranty expired on my GLA1000, I sent it in for repairs. It was fixed and returned to me at no charge, including four new 6LQ6 tubes. I felt I should pay for the tubes, at least, and sent a check for \$35. It was returned.

I hope that following the Golden Rule, which they quote in their literature, was not the cause of their demise.

LEIGH ABELL, W6QDF
San Rafael, California

More on Dentron

In re: "Lost anything?", page 10, January 1984 *Worldradio*

I wish to clarify something that ran earlier, concerning Dentron Radio. Yes, Dentron Radio folded. Dennis Had — the former owner of Dentron — sold out almost three years ago. He is now president of Amp. Supply.

To quote Dennis: "The company was sold almost three years ago, and the 'parties' turned out to be irresponsible people, as they wound up affairs."

My mention of interest in people "losing out" through Dentron is no reflection upon the Dentron most of us have known. What happened after the sale was a winding-down affair, with a series of "mail drops" around Ohio. The end result at this stage is Coilco Electronics, 223 North Michigan Ave., Edgerton, OH 43517.

All those who lost should write me in reference to lost merchandise. I am only acting as middle man for others. I must quote Dennis Had: "I lost a small fortune to them also."

GARY MITCHELL, KH8AC
Box 320
Sunol, CA 94586

'Tuna down' tale

In response to Carl Zelich's inquiry about the use of the word "radio" as a short-order cook's nickname for a tuna fish sandwich on toast (*Worldradio*, December 1983, p. 16), I offer the following explanation.

According to Stuart Flexner's book, *Listening to America* (Simon and Schuster, New York, 1982), the expression "tuna down" was a popular way of referring to a tuna fish sandwich. The first word is obvious, but the second takes some explanation.

The word "down", meaning "toast", first appeared after the introduction of the electric toaster, which included a lever that had to be pushed down to lower a slice of bread into a toaster's slot. To the listener, "tuna down" sounded similar to "tune it down" or, perhaps, "tune 'er

down." From that sound-alike expression came another, "radio", to describe the popular sandwich.

Flexner's book contains many other examples of American vernacular. A "Noah's boy", for example, is a slice of ham in cook's parlance. (Bible readers will recall that Ham was the famous shipbuilder's second son.) However, on the somewhat clouded history of the word "ham", meaning an Amateur Radio operator, Flexner offers no guidance.

HAROLD WINARD, KB2M
Wharton, New Jersey

Disappointed after space mission

The flight of Owen Garriott, W5LFL, is history and one of the most exciting events for hams around the world ever.

For some, just being able to hear a signal from space made the mission a success. Yet for others like myself, using a hand-held, we called and called, hoping our signal would be heard. Then there were those who used high-powered amps and fancy antennas emitting signals with ERP's in the megawatt range. They definitely wanted their signals to be heard.

The most discouraging thing about the W5LFL flight was the special QSO's that were set up on unpublished frequencies and at special times. These QSO's took place with VIP and club stations around the world. It's sad that such an exciting event like this was almost totally limited to those chosen few VIP hams and to those who had the megabucks to buy the gear to run the megawatts.

STEVE BAUER, KC0HF
Wichita, Kansas

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Activities Calendar

18-19 February ARRL DX Competition (CW)
18-19 February YL ISSB QSO Party (SSB)
18-19 February Botswana QSO Party
24-26 February CQ World Wide 160M Contest (SSB)
25-26 February RSGB 7.0 MHz Contest (CW)
25-26 February REF French Contest (SSB)
03-04 March ARRL DX Competition (SSB)
17-18 March Bermuda Contest
17-18 March YL ISSB QSO Party (CW)
24-25 March CQ World Wide WPX Contest (SSB)

DXPO Atlanta

The Southeastern DX Club announces that DXPO Atlanta will be held on the weekend of 3-5 May in 1985. Anyone desiring further information may write to: DXPO Atlanta, 720 Starlight Lane NE, Atlanta, GA 30342.

Pribilof Islands

The Alaska DX Association sent us a copy of their petition to grant DXCC country status to the Pribilof Islands. The submission is based upon Point 2(a) of the Countries List Criteria currently in effect.

The Pribilof Islands are located in the Bering Sea at 57°N 170°W, 260 statute miles offshore of the Alaska mainland. As of this date, no action has been made on the petition.

With all the other so-called DXCC countries on the present list — such as Desecheo Island (KP4), Sable Island (VE1), St. Paul Island (VE1), etc. — why not add Pribilof Island to the list? I'm not sure anyone can really figure out what criteria Newington uses at times. Remember Baldwin's Reef?

South Orkney Islands (VP8)

The Radio Club Argentino sent a DXpedition to the South Orkneys using the special prefix AZ5ZA, with Carlos LU9EIE, on CW, and Arturo LU6ETB, on SSB. The group was to be active until 20 January. If you worked this one, send your cards via LU2A.

Also active from this island group is VP8AOD, who can be found between 14.185 and 14.220 MHz from 0100 UTC, usually on Fridays. The station should be active through May and will be replaced by VP8AOB. QSL cards for VP8AOD go via Steve Wilson, K0JW, P.O. Box 173, Broomfield, CO 80020.

Laccadive Islands (VU7WCY)

Many DXers got themselves a new one with VU7WCY on the air from the Laccadives. This is reported to be the first operation from that location since January 1971. The signals (at least here on the West Coast) were weak, which could be expected as they were only using dipole antennas — and poor conditions to boot.

And there is the DXer who complains about the situation as he didn't work them because he couldn't hear them. They should have had beams and amplifiers. Those of us who have been DX'ing for a number of years will remember that most DX stations were modest and

didn't have big signals. It was up to the DXer to peak up his station so he could hear them. But you don't need that today. All you need do is get on the list and have the ego master list-taker relay the signal report to you.

Anyway, if you didn't work VU7WCY, have faith, as there should be more activity from there in the future.

Sri Lanka (4S7)

Several stations have been active on the bands recently, perhaps as many DXers had their beams pointed in that general direction, hoping to hear VU7WCY during the Laccadives DXpedition.

On 40 meters, 4S7WP had been worked near the low edge of the band, (7.005 MHz), at 1200 and 2400 UTC. This station has also been found up on 20 meters on 14.005 MHz from 1200 UTC.

Other active Sri Lanka stations include 4S7EA, found on 14.214 MHz, or close by from 0100 UTC, 4S7ND on 14.210 MHz around 0200 UTC, 4S7NE on 7.009 MHz at 1300 UTC, 4S7NMR on 14.203 MHz from 0200 UTC, and 4S7RM on 3.799 MHz at 1200 UTC.

Maldiv Islands (8Q7)

Noel Lokuge, 8Q7AV, is very active from Male in the Republic of Maldives. Look for him on 20 meters near 14.203

MHz from 0100 UTC.

Two other stations have also been reported, but these were reports for European activity that include 8Q7AC on 7.050 MHz at 1930 UTC, and 8Q7BX on 28.024 MHz at 0915 UTC — both times no good in North America.

Saudi Arabia (HZ1)

Club station HZ1AB has been reported on several bands, such as 14.184 MHz around 1300 UTC, 7.001 MHz from 1400 UTC, and 3.502 MHz after 0100 UTC. 75-meter buffs might check 3.789 MHz around 1300 UTC, as this station has been reported there also. HZ1AB also works 160 meters. (See 160-meter list-

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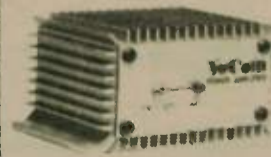
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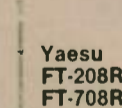
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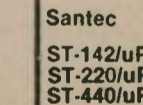
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ings.) QSL cards for HZ1AB should be sent via Leo Fry, K8PYD, 5740 North Meadows Blvd., Columbus, OH 43229. Be sure to include an SASE.

Faroe Islands (OY)

Look for OY8R, who has been coming into the West Coast after 1500 UTC on 14.227 MHz. A station with a similar call, OY1R, has been on 30 meters on 10.101 MHz, working Europeans near 1700 UTC. Also on this band is OY7ML, who has been reported on 10.102 MHz at 1045 UTC.

China (BY)

The three stations in China remain active. The first of the three, BY1PK, has been found on 14.145 MHz from 0200 UTC, often lower in frequency working other Asian stations after 0700 UTC.

BY8AA, the second station to show, has been worked on the lower end of 20 meters, near 14.005 MHz from 0100 UTC. The new station, BY4AA, has been found close by and also on 40 meters near 7.007 MHz after 1200 UTC, usually for a couple of hours.

Kampuchea (XU)

XU1SS continues to show from 1100 UTC on both 40 and 20 meters. Possible frequencies to check are 14.335, 14.195, 14.009, and 7.010 MHz. Those of you fortunate to work this one should send your QSL card via Y. Arisaka, JA1HQG, 1107 Zaimokuza, Kamakura, Kanagawa, JAPAN.

Churu-Meru DXpedition

Asociacion de Radioaficionados de Venezuela announces the Churu-Meru DXpedition to the highest falls in the world, located in the middle of the Venezuelan jungle. It will be the first time any Amateur Radio activity has been from this location.

Churu-Meru — or Angel Falls — is in the heart of the jungle on a tributary of the Caron River. The world's highest waterfall (3,212 feet), the longest single drop is 2,648 feet. They were discovered in 1935 by an American aviator, James Angel.

The DXpedition, signing 4M5ARV/6, will commence operation on 30 March for three days of operation on all bands, on or near the following frequencies:

Band	CW	SSB
80M	3.710 MHz	3.795 MHz
40M	7.010 MHz	7.095 MHz
20M	14.010 MHz	14.195 MHz
15M	21.110 MHz	21.295 MHz
10M	28.110 MHz	28.595 MHz

There will be 2-meter operation, FM, in addition to the above. A special QSL card will be sent to all stations worked by 4M5ARV/6. Address your cards to: Churu-Meru Expedition, Asociacion de Radioaficionados de Venezuela, P.O. Box 3636, Caracas 1010-A, VENEZUELA, S.A.

DX contests

Although it may be too late to make this issue, the Botswana DX Association reports their QSO party the weekend of the ARRL DX Competition in February. If this copy of Worldradio reaches you before 18 February, look for Botswana stations, (A22 prefix), on or near the following frequencies: 28.050, 21.050, 14.050, 10.103, 7.028 and 3.550 MHz.

Stations not working in the DX competition, fear not, as they are also operating SSB on the following frequencies: 28.650, 21.275, 14.250, 7.063 and 3.795 MHz. They are listening up from the 40-meter frequency. Stations reported to be active during the party include A22BX, A22CA, A22ED, A22ME and A22TE.

For a commemorative QSL card, send your card to: Clarence A. Allison, A22CA, Box 29, Selebi-Phikwe, Botswana, AFRICA.

The above information was received in January, a bit on the too-late side. My reports are sent in mid-month with the paper going to press the end of the month and into the mails the beginning of next month. So what I get early in the month (January in this case) probably will not reach you until the latter part of next month (February in this case). Anything received later in the month will be delayed an additional month. But, whatever, we still beat our competition by a month or two.

Dutch Sint Maarten (PJ7)

Bill O'Kain, K4LTA, and wife Ruby N4FKO, plan a three-week operation from Sint Maarten, 17 February to 08 March. Bill will be active in the ARRL DX Competition, hopefully with a P47 call; otherwise, look for him signing K4LTA/PJ7.

They will be joined on 01 March by Grady O'Kain, KR4C, and Mickey Ivey, WA4CDH, and will operate as a multi-operator, single-transmitter entry in the ARRL DX Competition in March. If you miss this bunch during the contests, look for them following the contest periods.

American Samoa (KH8)

Kenneth Roy Palmer, K2FJ, reports a DXpedition to the South Pacific about the same time from 20 February to 09 March. Look for Ken on the following

frequencies: 3.797, 7.027, 7.087, 14.030, 14.052, 14.145, 14.230, 21.030, 21.052, 21.240, 21.355, 28.010, 28.490 and 28.580 MHz. He will be signing K2FJ/KH8, and also 5W1ER from Western Samoa. Ken also plans some operations from the Fiji Islands, signing with a 3D2 call. All QSL cards should be sent to K2FJ, RFD 2 Williston Rd., E. Aurora, NY 14052.

Activities in Korea

Bill Wilson, HL9RC, reports on the activities of American personnel assigned in the Osan area of Korea. This group of amateurs has recently formed the Morning Calm ARC. Bill says, "We have also just begun a Novice class and have six students participating. There are currently about five active hams in the Osan area." These include Bill Moore, HL9TA, who likes running 20 meters along with HL9SV and HL9FG. HL9FY can be found on 15 meters during the week at about 2200 UTC, working his QSL manager on 21.285 MHz.

Bill HL9RC says he likes working pileups on 15 and 10 meters, provided that 10 is open. He also works a little CW and is looking for Novice stations on 21.138 MHz, and can be found on the bands usually after 2200 UTC. As for what days, Bill says, "Friday and Saturday evenings your time." On the West Coast, that is the afternoon.

There are about 20 members in the club, Bill reports, but various work schedules prevent them from being active. "Our Korean counterparts are really gaining in activity on the bands. I QSO'ed a friend of mine last night on 40 meters who finally got his station approved by the Ministry of Communications, so HL2ARR is finally on the air also," Bill writes.

Bill suggests that upon contacting an American amateur in Korea, (one with an HL9 prefix), you should send your QSL plus an SASE (20 cents U.S. postage), to the American Amateur Radio Club Korea, which is the QSL bureau as listed in the Callbook.

There are provisions for U.S. Novices that are military, or have military-related connections, being assigned to Korea to operate. Bring your rig and antennas with you as they are fairly hard to get in Korea. There are no reciprocal operating agreements between the United States and Korea, so only military persons assigned there can operate.

Anyone considering operating there under those provisions may contact the Morning Calm ARC: Charlie Hopkins, HL9FY/KA0QFY, Box 1002, APO San Francisco, CA 96366.

160 meters

Reports of activity on the top band are not lacking, and there seems to be an

increase of interesting calls showing. The following have been reported being worked in North America, with frequency and time in kHz and UTC:

SM6EHY	1831	0500
WA8MOA/A9	1826	2300
FC9VN	1831	0600
GD4PEG	1834	0500
HB9CM	1832	0600
HB9AMO	1842	0600
HK1AMW	1825	2400
HZ1AB	1850	2100
JA1GQO	1811	1200
OZ1LO	1832	0500
PA0HIP	1826	0700
TF3KG	1832	0600
UA9CBO	1832	0100
XE1MD	1831	0500
6Y5IC	1828	0500
EA8AAU	1833	0500
TG9NX	1827	0500
7X5AB	1831	0600
JX6BAA	1840	2230
LX1PD	1826	0200
CN8ES	1829	0530
T30AT	1823	0630
9M2AX	1823	2145
JW5NM	1835	0700
ZL1BT	1844	0730
KV4FZ	1839	0130
VP2VI	1839	0130

160-meter DXCC

Jim Cain, K1TN, of *The DX Bulletin*, must visit ARRL headquarters often in Newington. Included in his newsletter is the latest list of top-band DXers, who have accomplished the difficult task of working 100 DXCC countries on 160 meters. They are not necessarily in order: W1BB, W1HCT, W8LRL, KV4FZ, K1PBW, W4BRB, W2QD, W2DEO, W4QCW, W4YWX, K4CIA, W9NFC, N4JJ, PY1RO, N4EA, G3SZA, PA0HIP, K5YY, GD4BEG, N4WW, N4SF, W4PZV, W5SUS, G3RPB, W6RW, KH8AC/W1, AA1K, GI3OQR. Jim reports that four additional applications have been received at Newington, including one from West Germany.

10-10 DXCC

No, this is not another type of DXCC. In fact, it isn't an ARRL award at all. Those of you who tune 10 meters often have heard many amateurs exchanging 10-10 numbers, and most likely if you spend much time on that band, you are familiar with the system and may even belong to 10-10 International. (I do, so no smart remarks.) One of the various awards from the system (also known as paper chasing) is the 10-10 Countries Award, which is offered to any 10-10 member who has confirmed at least 25 different DXCC countries with 10-10 members in those countries.

Berniece Tieleman, N9CDO, is the first 10-10 member to have worked at least 100 DXCC countries with 10-10 members. (She actually is over 105.) This (please turn to page 24)

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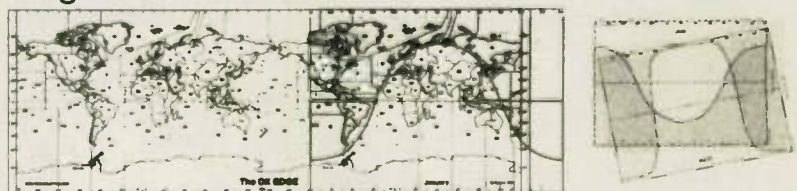
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7511083

DX World

(continued from page 21)

is no easy task, as you must exchange the 10-10 number over the air and then confirm the contact with a QSL card.

Several others are approaching the 100 mark, with Jerry Carder, WB5TXP; James Hardy, K4HAV; Raymond Hubbardault, W1FPH; and Jack Oxley, WB5RQM, sitting at 95 DXCC countries. This information was taken out of the Fall 1983 10-10 newsletter, and there probably have been some changes to the list.

Clubs

The Western Pennsylvania DX Association has elected a new slate of officers for 1984 that include John Getz, AD8J, as president; Phil Koch, K3UA, as vice president; Wayne Albert, KB3KV, as secretary, and Don McDaniel, KJ3Q, as treasurer.

The Western Pennsylvania DX Association operates a repeater on 145.37 MHz, (transmit 144.77 MHz). The club members use this frequency to make announcements concerning DX stations that are heard on the bands. Each Sunday at 9:00 p.m. local time, they hold a net to exchange the latest DX information.

The club has a newsletter, *DX Is*, that is published at least four times a year. Information on joining this club can be obtained from any of the officers or by asking on the repeater.

Silent Key

Bud Divine, HC8GI, of the Galapagos Islands, recently became a Silent Key. He had been a serviceman from the States who eventually settled there. Bud gave out a new one for many a DXer.

Visalia DX Convention

Don't forget to mark on your calendar the annual Visalia, California get-together, the weekend of 13-15 April. Master of Ceremonies will be Dave Bell, W6AQ. Full details were on page 1 of last month's *Worldradio*.

World Wide South America CW Contest

The Grupo Argentino de CW sends the results of 1983 World Wide South American (WWSA) CW Contest. The largest number of entries from a single country outside of South America was East Germany with 14, followed by Japan with 13 entries. The United States had 10 entries, with the standings as follows:

Call	Band	Contacts	Multipliers	Score
W3GM	M	326	85	27,710
W3ARK	M	188	52	9,776
W5WG	M	136	51	6,936
AG5C	M	144	45	6,480
K8PYD	M	132	43	5,676
K1BV	M	76	21	1,596
K1KI	M	62	25	1,550
W4VQ	14	58	22	1,276
KA4FEF	21	20	8	160
W4VQ	21	8	4	32

Canada had two entries, with VE1BNN operating solely on 10 meters

for a score of 1254 and VE3MGY on 15 meters for a score of 182. The only other North American was HH2VP, with a score of 3710.

Brazil led the world with the number of entries, those being 50. They should, as they were the sponsoring country of this contest. The next WWSA contest will be in June — I think. The publication is printed in Spanish, in which my facility is limited, so I can only hope I got it right.

Malpelo reflections

After many DXpeditions, there seem to be many comments — positive and negative, most of the time one's attitude upon working the DXpedition or not. My comments to the operation of a DXpedition are usually based on the feelings I pick up.

Fred Laun, K3ZO, wrote to me in regard to the comments concerning the HK0TU DXpedition. Fred, as you know, helped push this DXpedition, and many of you have worked him in the past as HI8XAL, LU5HFI and HS1ABD. In fact, I'll print all of it.

"Your comments about the Malpelo expedition in the January *Worldradio* motivated me to do something which I had been planning to do for some time anyhow; that is, go over to HK3DDD's house and study the logs from the expedition. I have done so, and — after five hours' worth of study — I find that those who missed the expedition from W6-land have little to complain about. Though I did not make an exact count, it appeared to me from five hours' worth of study that there were as many W6's in the logs as those of any other district. I noted some pages (the special log pages made up for the expedition held 30 QSO's each) which were entirely filled with W6 calls. These tended to be on 10 and 15 meters toward the end of the opening, which was when the savvy DXers were present. However, there were also swatches of 6's on 20, 40 and 80. On SSB, it was obvious that from time to time the operators stood by for W6's only and then W7's only.

"The thrust of your comment appears to be that anyone who is on the air 'deserves' to get the DXpedition of the moment, and if they don't, it is the fault of the expedition. This certainly isn't the way things were 30 years ago when I started DX'ing. In those days, one expected to have to work to get a new country and was admired, not resented, when he did so. I am hearing much the same comments about the recent (first) VU7WCY expedition. Because they used low power, no split frequency and dipoles, they were roundly criticized. Since when is working DX supposed to be easy? I say, let's have more of these types of DXpeditions so that the men will once again be separated from the boys.

"Incidentally, there were a few interesting things that turned up in the logs. One N5

worked HK0TU about 20 times and QSL'ed each QSO separately. Yes, he got 20 QSL's! Should be enough to paper one wall of the shack entirely with HK0TU cards. And a pair of JA's obviously had a confederate working for them in the United States because they appeared in the logs in the midst of W openings, when it would have been impossible for the band to be open to Japan from Malpelo (0200 GMT on 40 meters????!). Yes, one of the JA's has already claimed his QSL, and he got it, because — after all — he was 'in the log'."

Fred's comments are worth noting. Things were different 30 years ago and probably not much different than they were only 10 years ago. The ranks of DXers have increased recently, and it is easier to work DX with the sophisticated equipment and antennas that are available for those willing to pay for it. Perhaps the recent attitude that Fred is writing about is a result of those damn lists and DX nets that have surfaced in the last few years. I am curious, though, as to what possessed that N5 to work HK0TU 20 times? Unsure of himself? Or just a big overinflated ego.

'Big Cookie' speaks up

Along the same lines as the above comments, Tom Wong, VE7BC, also responds to some negative comments regarding his recent SSB operation from BY1PK. Tom had been very disappointed in the remarks printed in *QRZ DX*, which read as follows: "Now for the bad news... From the *DX Report*: Many stations who worked VE7BC have had QSLs returned 'not in log'. VE3HGN was told he was logged as CE3GN, VE3DR as VE2DR, etc.!!!"

Tom says his rules are simple. If you are not in the log, you don't get a QSL card. Not to pick on VE3HGN, (the subject of the "bad news"), but this happens to many of us whose calls may have or may not have been logged incorrectly. VE3HGN was not logged as CE3GN; Tom worked CE3GN and included a copy of the QSL card sent by CE3GN to prove it.

This has happened to me, one particular time when Palmyra Island was on.

The log showed another station with a similar call and I was sure that I had worked him due to the nature of the contact and heard what I thought was my call. As a result, a return of my card and a "not in log". Too bad, as I needed Palmyra for that mode.

And again I will be chasing DX and right under (over) me will be Morris Brown, N6DJM, down in the Bay Area. As N6JM and N6DJM are very much alike, that sure can be frustrating.

Back to Tom's letter to end this with some positive information. He will be back in China at BY1PK the last week of March and the month of April. He will be taking five operators with him (three Canadians and two Americans). Tom says if time permits, he will activate BY4AA on SSB.

Will the real 3X4EX please stand up

I received an interesting note from Orin Levis, W6DZ, who writes: "On 11 January, at about 0030 Zulu, I heard a pileup on 14195. It was a good strong signal signing 3X4EX. He was working split, (listening 14200 to 220), but he also was answering a few on his transmit frequency. This created bedlam — as you would expect. He gave his QTH as Republic of Guinea, and his QSL Manager as N4CID.

"After a few minutes he said he was going to QSY to another band, and he

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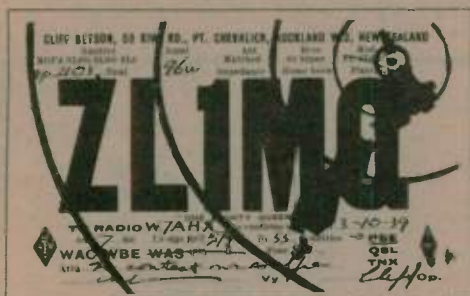
went off. However, in just about one minute, a signal came on signing the same 3X4EX, and proceeded to work a lot more guys, contest-style. The mystery here, however, was that now my beam peaked up at 115 degrees instead of the former 70 degrees. To clinch matters, after quite awhile, a station signing 3X4EX came on and announced that he was the one and only owner of that call, and that he had not been on during the past 20 minutes! He also said that he didn't know who it was, and he couldn't stop him, but that you surely would not get a QSL from the boot-legger. Then he left the air!"

Antique QSL Department

George Heitzman, W7AHX, researched his files for us and submitted some very interesting antique QSL cards that we will be sharing with you in future issues of Worldradio, beginning with this issue.



The first QSL is that of VK5CM, for a 20-meter contact that took place back on 20 September 1936. This station was operated by Reg Anthony of Unley Park, South Australia. A look in the foreign edition of the Callbook shows that this call is still assigned to Reg, although he now lives in Somerton Park. This is how Reg looked in 1936.



Cliff Betson used the phonetics "One Mighty Queer" for his 1939 version of his ZL1MQ card. George contacted Cliff on 40 meters back then. The card is of buff stock with black printing and green map and arcs. Cliff is still active from the Auckland area, and we assume he doesn't use those phonetics anymore.



Down in South America, George worked — on 20 meters — CX1FB of La Paz on 14 March 1931. The cartoon on the card was drawn by Otto Geyer, W8EA, as indicated on the card. A check with the Callbook shows that CX1FB still belongs to the same operator. Has anyone "clicked" with Carlos recently?

Eric Roberts, K4RF, responds to the VU7BR QSL card that was in the December issue. The call was used by

T.J. (John) Brown, ex-G5TB. Eric writes:

"I have that card in my collection, so I decided to check up on my old friend Trevor J. Brown, who I knew personally for a few years. We both worked for Texaco, Inc. in N.Y.C. At that time he held the call WA1KSU in Connecticut and I was W2BJ. I retired to South Carolina as K4RF and Trevor retired to Flat Rock, North Carolina, and was issued KA4DDB, and then KD4GE which he now holds.

"Trevor still holds his first call G5TB, through the courtesy of the British authorities and subsequently held VU7BR (the first ham license issued in Bahrein Island), VK2ABG and VQ4IA (Kenya). He is still active on the air — mostly 20 meters, but says he does more listening than transmitting."

Eric says he has been on the air for 60 years and has held the calls 2AFV, W2AFV, W9VDQ and W2PEO, in addition to the W2BJ and K4RF calls listed above.

I received two responses to the XU8CB that was in the January issue. A.B. Ward, W4PQL, writes:

"During 1937-38, when XU8CB was active in Shanghai, I was the owner/operator of XU2AW in Peking. My station, running 300 watts CW, was located in the German Legation compound within the then Diplomatic Quarter. At that time, there was only one other ham station in Peking, XU2UU, located in the British Embassy compound and operated by members of the British Army.

"Incidentally, Shanghai was not then or ever a British Crown Colony. Perhaps Hong Kong was confused with Shanghai. Several foreign nations, including Great Britain, held concessions in Shanghai. The United States had no concession but did keep the 4th Regiment of Marines stationed there for a number of years until late 1941."

My oriental history is not very good, and it evidently surfaced when I included the remark that Shanghai was once a British Crown Colony. Philip Maslin, N6GKE, also informed me of the error. He writes:

"I was born and raised in China and attended high school at the Shanghai American school.

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"In the other so-called Treaty Ports of China, extra-territorial rights concessions were granted in satisfaction of demands of the Western allies after the Boxer rebellion. The United States, Britain, Russia, France, Japan and Germany made up these powers. For instance, in my hometown (my parents were missionaries to China) of Hankow, there was a portion of the city set aside for each of these powers, in which Chinese law and administration was not in force, and the laws and courts of the powers themselves were in effect. So there was a French, a British, a Russian, a German and a Japanese 'Concession'.

"The United States declined to participate in this program, and instead underwrote the expenses for the Government of China to send a number of Chinese students annually to the United States to obtain a western-type education. For this act of generosity, Americans were held in high esteem and favor among the Chinese for many years. I am afraid that in later years this regard dissolved away.

"In Shanghai there were no separate concessions. There was one area known as the International Settlement, jointly administered by all the powers except the United States and France. France had in Shanghai their own concession known as French Town. And it was in this area that the Shanghai American School was located."

QSL information

In the January issue, I included a comment that WB8SSR could be a QSL route for YI1BGD. I quoted Matt as saying, "He is a chronic no-QSLer, so finally convinced him to be manager." This is incorrect as I received a phone call followed up with a letter from Matt himself. Matt (the real Matt) writes, "I am not QSL manager for YI1BGD. Some jackass has taken it upon himself to cause trouble. I would appreciate a retraction so I will not get any more cards for this station, (14 to date)."

Matt Mattes, WB8SSR, does handle QSL cards for certain DX stations which he prints himself. Unfortunately, some Lid has decided to have some fun — or has it in for Matt — and wrote to me, claiming that he was Matt, and stated that he was the new QSL manager for YI1BGD. If you remember, I wasn't sure of this as I had never heard of YI1BGD using a manager and suggested asking YI1BGD how he wanted QSL cards routed. The Lid who sent me the card didn't really hurt Matt, except to the DXer who wasted his time and money mailing his QSL card the wrong direction — and me for printing this, believing it was sent in good faith. But then, what else is new? Take a listen to your local DX repeater with the foul-mouthed types making harassments at the DXers.

After this incident, I will have to keep a suspense file of my contributions, so if any question arises I will still have the evidence.

The QSL routes given in my column (and in other publications) are not guaranteed. My sources are the DX newsletters and readers of this column. At times, errors are made somewhere along

the route between the original source and the column. If it causes inconveniences, we are sorry. To the gentleman in El Cajon who was rather perturbed, what can I say? When someone sends you a card and states his name and call, do you reply to him to prove it?

In the January issue, I listed Tom Wood, N4CID, as the QSL route for ZD7BW, which is not correct. QSL cards for ZD7BW are to be sent direct to St. Elena Island, and I should have known better. Tom says he handles QSL cards for ZD7CW and 3X4EX only. Sorry for the mixup, Tom.

QSL routes

A22ME	-AK1E	VP2EEW	-KU8E
A82LC	-SM4CWY	VP2VDQ	-A15P
AZ5ZA	-LU2A	VP2VEG	-W0DVZ
C31LBL	-EA3BG	VP8AOD	-K0JW
H1B0P	-F6FQK	VP8AOH	-K0JW
HC10T	-W2KF	VP8AQH	-GM4GRC
HH5CB	-K9WJU	VU7WCY	-(See Note 1)
HV3SJ	-10DUD	W5AT/PJ7	-W5AT
J28CB	-F6GXB	W6KG/HIC8	-Yasme
JX6BAA	-LA7JO	Y8JABT	-Y44ZK
KC7UU/5U	-K6EDV	YW5R	-YV5HUJ
KT6V/AH9	-N6CW	ZF2AG	-N8AG
PY0TAU	-PY1DOQ	ZL7OY	-VK3DWJ
S42HZR	-WA2HZR	3X4EX	-N4CID
T32AQ	-AD8J	4U38UN	-W2WZV
TR0AB	-F6AJA	6V3HL	-WA6VDE
V3CAG	-W0JLC	6V0DY	-VE4SK
V3CAI	-K0RWL	9HICE	-W2KF
VP2EAG	-KJ0D	9X5MB	-ON5CM

AT0A	-P.O. Box 4015, New Delhi 017, INDIA
FB8WK	-P.O. Box 190, Mazamet, 81200 FRANCE
H5ABP	-P.O. Box 3848, Mabatho, BOPHUTHATH-SWANA
P29JM	-J. Mowappi, P.O. Box 1205, Arawa, Bougainville, PAPUA NEW GUINEA
PUR8I	-P.O. Box 203, 66000 Belem, P.A., BRAZIL
T30DB	-D. Blythe, P.O. Box 457, Betio Tarawa, KIRIBATI
WH0AA	-P.O. Box 1398, Saipan, M.I. 96950
3D6AQ	-P.O. Box 64, Manzini, SWAZILAND
5N8AMA	-P.O. Box 461, Kano, NIGERIA

Notes

1. Cards for the operators signing VU7WCY/MY, /RBI, /RM and /RYL, may be sent via Andhra Pradesh Radio Society, VU2APR.

Contributors for this month's column include AK1E, K2FJ, K3ZO, N4CID, WI4K, K4LTA, W4PQL, K4RF, KF6AW, W6DZ, N6GKE, W7AHX, AD8J, WB8SSR, W9LNQ, VE7BC, HL9RC, PY7AHJ, YV5EED, Grupo Argentino de CW, Alaska DX Association, Kansas DX Association, Northern California DX Club, Redwood Empire DX Association, Southern California DX Club, Long Island DX Bulletin, DX News Sheet and The DX Bulletin.

It is now approaching the latter part of January, and we are in hopes of better band conditions. With the band conditions the way they are working DX can be a test of a real DXer. The ARRL has said that the true DXer never calls "CQ DX" but rather listens, listens and listens. One local DXer broke all those rules recently and called "CQ DX Asia Longpath". Isn't that dumb? That's not DX'ing. And what did he get for all the wasted efforts? VU7WCY! 73 de John, N6JMJ. □



The following article appeared in the September 1983 edition of the 7th Signal Command Western Area MARS Bulletin. The article was prepared by Norm Brooks, K6FO/AAR9NI.

Meet Army MARS member Danny Nunn, AAR9QX/WA6IAB

Danny was born in Arkansas and raised in northern Oklahoma. While on his way to and from school, he was intrigued by the click-click sounds that came from the railroad station. He hung around so much that the station agent finally said, "Come on in and I'll teach you the code." So Danny learned the American Morse Code when he was about 13 years old. He earned 25 cents each for delivering messages, too. Thus, he was the richest kid on the block because he always had money in his pocket.

In 1941, before Pearl Harbor, he volunteered for enlistment in the Air Corps, then part of the Army. He was finally stationed at Scott Field, Illinois to learn


(you guessed it) radio. He was separated in 1946, but was recalled in 1951 for the Korean conflict. Out again in 1952 and recalled that same year. This time he made a career of the Air Force, and stayed until retired in 1972.

In his military and civilian life, Danny has been in 17 different countries. He philosophizes: "This good old USA, no matter what part you may want to talk about, is the best place in the world to be. Here I can do what I want to do, go where I want to go and say what I want to say, and no one is going to throw me in jail for that. Many of our citizens don't realize the lack of rights and the oppressive discrimination that exist in most foreign countries. Here I am rich. Even though I don't have much money, I have my home and my family."

When Danny retired, he opened a restaurant business in Sacramento. In 1975, he had open heart surgery. He has come through excellently, and now does road work along with the other joggers. In 1978, along with a cousin, he opened an ornamental iron works shop. The cousin having recently passed away, Danny is coaching the cousin's son to take over the business.

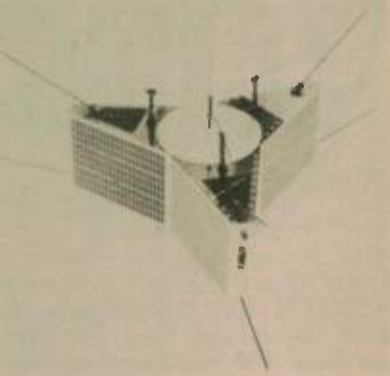
Danny wants to devote his full time to politics. He ran for a seat on the Sacramento City Council in 1980 and got a respectable number of votes. He was nominated for appointment to fill a vacancy in 1983. He has seen so much support that he is spending full time on his campaign and will be on the ballot this fall.

The Red Cross has been fortunate to have Danny's support since 1954. He has held several leadership jobs over the years, and is now Communications Chairman for the Red Cross in Sacramento.



AMSAT

Radio Amateur Satellite Corp.
P.O. Box 27, Washington, DC 20044
Telephone: 301-589-6062



Dear Fellow Radio Amateur:

Do you know that the AMSAT Phase III Program is designed to bring you a new worldwide DX/local amateur band via communications satellite? This new band will be scarcely affected by the ionosphere, so that unlike the current hf bands or the three new bands we gained at WARC-79, propagation via this band will be 100 percent predictable. For the first time, the technology used to provide the reliability, predictability and ease of use of a two-meter repeater will be applied to provide worldwide coverage. The AMSAT Phase IIIB satellite will be capable of providing reliable communications among all stations within its range, be they local to you or DX up to half way around the world. There will be no skip zones in this new satellite communications band. At times, stations in New York, New Jersey, London, Paris, Tel Aviv, Moscow and Tokyo will be able to hold a round table QSO. The potential for multi-language bulletin transmissions, RTTY, computer, emergency, and public service communications is tremendous.

You owe it to yourself to be informed about this new band. The new band almost happened in May, 1980 but the launch vehicle malfunctioned and the Phase IIIA satellite did not achieve orbit. Our replacement Phase IIIB satellite is a million dollar undertaking. We are going full steam ahead secure in the knowledge that we can do our part to make the new band happen following the successful launch of Phase IIIB. Why don't you join the AMSAT Team and receive regular news as to the status of the Phase IIIB Program.

73,
The AMSAT Team

Yes, I want to be a member of the AMSAT Team and receive ORBIT Magazine. Enclosed are my dues of \$24 (\$26 overseas) for 1983 (\$600 for Life Membership).

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JOHN RICHMOND



Danny Nunn. AAR9QX/WA6IAB

Danny became a radio amateur in 1953 and joined Air Force MARS almost immediately. However, he switched to Army MARS because he said he saw people doing more things. Amateur Radio-wise, he likes to build high-power linear amplifiers and has worked a lot of DX. He also likes RATT and 2-meter operations. He built a room on his home to house his radio station, and it is "off limits" to anyone not inclined to radio. In MARS, Danny likes to handle messages and once participated in a record-setting delivery of a MARSgram from Southern California to Washington, D.C. □

ARRL

(continued from page 3)

sages for the Olympians would be handled by the countries that have third-party agreements with the United States. The three villages are at the University of California, Los Angeles, University of Southern California and the University of California, Santa Barbara. There is an agreement that what one village has, all must have.

For cost-cutting reasons, construction at the three sites has been cut back and Amateur Radio was one of the first things to go. Holladay has appealed and the outcome is not yet known. If we fail, Holladay hopes we will still have commemorative operation from the three club stations at the three campuses.

Another area for consideration is Amateur Radio communications for medical teams. The American Red Cross has contracted to provide the medical support. We expect to provide the Red Cross with communications.

Motorola has obtained the right to be the "official communications for the Olympics." They are providing hundreds of hand-held radios, repeater stations, etc. They keep telling us that Amateur Radio is not needed.

The Southern California Amateur TV group hopes to help in the areas where traffic jams are expected. This would be a back-up for the police and sheriff.

What happened to Amateur Radio involvement in the Olympic torch run?

Holladay said Amateur Radio showed the world what it could do during the Torch Run at the Winter Olympics at Lake Placid, New York. This time, AT&T is the official sponsor of the torch run, and AT&T is in the communications business. They have involved the Telephone Pioneers of America, which is the voluntary public service organization within the telephone industry. The Pioneers are planning to use Amateur Radio operators through its organization.

In summary, Amateur Radio is not as involved in the Olympics as it would like to be.

Space shuttle

Dave Sumner, K1ZZ, asked the audience, "How many heard W5LFL?" A great majority held up hands.

"How many saw some publicity on the W5LFL activity?" Even more held up hands.

"How many are happy with the outcome of 'no-code'?" The audience roared approval.

ARRL Headquarters

In an earlier program time slot, Dale Clift, WA3NLO, assistant to the League General Manager, put on a slide show — *A Tour of ARRL Headquarters*. This is a

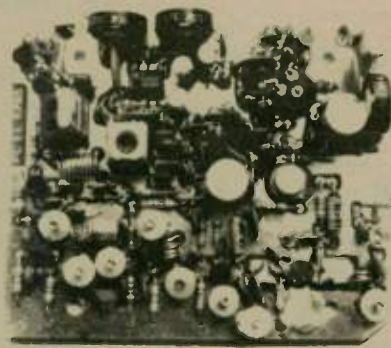
recently compiled series of about 85 pictures gathered at the request of late ARRL President Vic Clark.

The show was impressive. I have never been to League Headquarters, but now feel like I've been there.

Clift did not use the prepared sound track. Instead, he narrated extemporaneously at the mike. Like Stevens, he knew the names and titles of all the ARRL staff shown in the pictures.

If your club would like to borrow the slide show, contact ARRL Headquarters, Newington, CT 06111. □

THE "KREEPIE PEEPIE" ATV TRANSMITTER IS HERE!



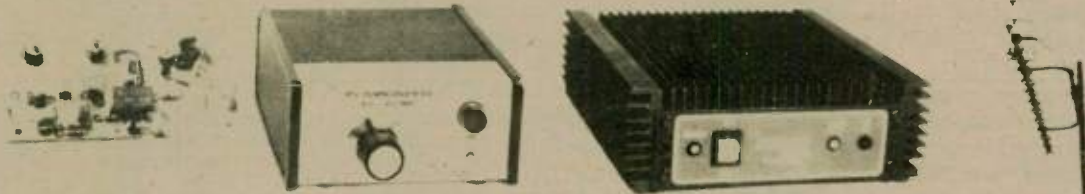
KPA5 1 WATT ATV TRANSMITTER BOARD FEATURES:

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- ★ Schematic and application notes supplied for typical external connections, packaging, and system operation.
- ★ Price delivered via UPS surface in the USA is only \$159. Technician class amateur license or higher required for purchase and operation.

DO SOME OF THESE APPLICATIONS INTRIGUE YOU?

1. PORTABLE CORDLESS TV CAMERA. No heavy VCR to lug around or cable length limitation. You can even use your home VCR rather than a portapak. Now you can creep around and peep thru your camera more easily. Gives good pictures up to a mile with simple whip, and 40 miles using beams in flat terrain.
2. MOBILE OR PORTABLE ATV for public service events such as races, parades, marathons, etc. A Mirage D24N 40 watt amp can be added for greater mobile coverage or base operation. Mount in an airplane for CAP and rescue searches for an eye in the sky.
3. REMOTE CONTROL OF R/C AIRPLANES or ROBOTS. Fly with a camera in the nose to control as if you are in the plane. Likewise a robot can now be out of site of the operator.
4. REPEATER SITE SECURITY OR COMPUTER VIDEO DISPLAY. Turn on thru your repeater a camera at the site to see the area, weather, read meters, or if a computer is used, show status, play games, etc. by remote control. With all the new technology using TV displays, it is natural for hams to adapt these new products to transmission over the air. What applications come to your mind?

WHAT IS REQUIRED FOR A COMPLETE OPERATION SYSTEM? A TV set with a TVC-2 or TVC-4 420-450 mHz to channel 3 downconverter, 70 cm antenna, and coax cable to receive. Package up the KPA5, add 12 to 14 vdc, antenna, and any tv camera, VCR, or computer with a composite video output. Simple, eh?



ACCESSORIES:

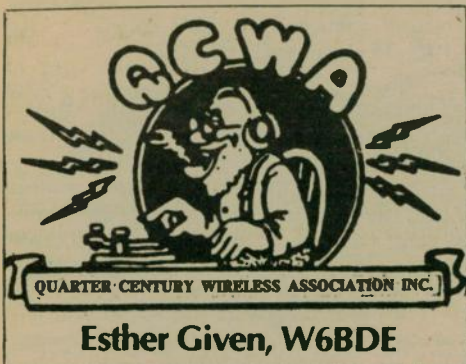
Downconverter: TVC-2 wired & tested board	\$49	Mirage D24N 1 in / 40 wats out all mode amp	\$179
Varicap tuned. Requires +11 to +18 vdc at 20 ma.		450 ISOPOLE omni gain 70cm antenna	\$59
TVC-4 (TVC-2 in cabinet with ac supply	\$89	J Beam 48 element 14 dbd gain 70cm antenna	\$79
more sensitive "L" versions with NE64535 preamp		100' roll Saxton 8285 50 ohm low loss coax	\$41
stage add \$10.			

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We are a full line supplier of ATV products including transmitters, antennas, cameras, downconverters, Mirage 70cm amplifiers and much more. Want to know who is on ATV in your area? Ask, and we will check our list for you. Our address is for mail order only, we are primarily a manufacturer not open to the retail public. We accept Visa and Mastercard, money orders, cash only CODs, and checks. Californians only, please include sales tax.

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Let Worldradio know what you do in Amateur Radio; many others will be interested in your experiences.



We're all gratified to learn of the FCC's scuttling of the no-code proposal. QCWA takes pride in having given active support along with ARRL to this end. An informal poll of QCWA chapter members' responses on this subject last year indicated a 50 to 1 vote against the adoption of no-code.

The sudden passing of Vic Clark, W4KFC, to the rank of Silent Keys shocked the radio amateur world. Vic had devoted his life to his chosen hobby and was probably the world's best-known and loved radio amateur. During his 50 years in Amateur Radio he was licensed as W6KFC, W7IXH, W9DVO, W4JIZ, and finally W4KFC, which he held since 1947. In that 50-year span he logged over 250,000 QSO's, involving every facet of Amateur Radio activity.

A DX hound, avid contester and a regular on CW traffic nets, he still found time to hold a moment's ragchew with friends met along the way. Clark was a charter life member of ARRL and QCWA, a Fellow in Radio Club of America, Senior

Five QCWA members were among the recipients of special awards given by the Radio Club of America at its 1983 Winter Meeting. Awards presented and those honored were: Batcher Award — Joseph Pavec, W0OEP; Busignies Award — David Talley, W2PF; DuMont Citation — Fred Link, W2ALU; President's Award — Stuart Meyer, W2GHK; and Sarnoff Citation — William Halligan, W9AC. The awards are in recognition of personal contributions to the fields of electronics and communications.



Vic Clark, W4KFC, receives one of his last honors, the QCWA 50th Golden Anniversary Award, presented by QCWA Director, Ethel Smith, K4LMB, at the ARRL Convention banquet in Houston, 08 October 1983. (Photo by Jean Wolff, LX1JW)

Gator Chapter 32 QCWA recently enjoyed the guest presentation of Ian McKinley, G13NUM, of Lisburn, County Antrim, Northern Ireland. McKinley is the electronic engineer at a planetarium in his country, and an accomplished astronomer who has travelled worldwide to photograph eclipses as they occur. Licensed in 1959, McKinley will attain QCWA eligibility this year. Gator Chapter plans to grant him honorary membership in their chapter as soon as his QCWA International membership is established.

QCWA membership can become effective the first day of the year in which one celebrates the 25th anniversary of licensing. All amateurs first licensed in 1959 and still holding a valid ticket are eligible to send in an application for membership now. An early bird for 1984 QCWA membership is Armond Noble, N6WR, editor and publisher of Worldradio. Welcome aboard!

Member of the Institute of Electrical Engineers, a member of the FCC Advisory Committee, and was involved in the International World Administrative Radio Conference and IARU, Region 2. Other affiliations include AMSAT, AWA, Society of Wireless Pioneers and charter member and past president of the Potomac Valley ARC.

Clark was elected a director of QCWA in 1981, in which office he served until he found it necessary to resign and assume the office of president of ARRL. He was one of the founders of the Amateur Satellite Service Group and was instrumental in arranging for Owen Garriott, W5LFL's Amateur Radio operations from space aboard the *Columbia* — an event which Vic did not live to participate in and enjoy.

New Year's Eve Hand Key Night 1983, honored Clark's memory. Each participant signed off "73 Vic", a tribute of the outstanding regard and admiration of the Amateur Radio community.

(please turn to page 37)

VISIT YOUR LOCAL RADIO CLUB.

ALASKA

Borealis Amateur Radio Club
Mission Road
P.O. Box O
North Pole, AK 99705

ARIZONA

Tucson Repeater Association
P.O. Box 40371, Tucson, AZ 85717-0371
2nd Sat/monthly — 7:30 p.m., Pima Co. Bldg.
Net Thurs 7:30 p.m. 146.22/82 (146.28/88 & 147.69/09)
(602) 747-8903 or 899-4776

CALIFORNIA

The Amateur Radio Club of El Cajon, Inc.
Parkway Jr. High School
La Mesa, California
2nd Thursday/monthly — 7:30 p.m.

Conejo Valley Amateur Radio Club
Home Federal Savings and Loan
164 W. Hillcrest Drive
Thousand Oaks, CA
1st Thursday/monthly — 8:00 p.m.

East Bay Amateur Radio Club
P.O. Box 6017, Albany CA 94706
Salvation Army Bldg., 36th & Rheem,
Richmond (415) 525-6200
2nd Friday/monthly — 7:30 p.m.

Fresno Amateur Radio Club, Inc.
P.O. Box 783, Fresno, CA 93712
Meets: 2nd Friday/monthly - 8:00 p.m.
Wawoha Middle School; 4524 N.
Thorne; Fresno. W6TO/R 146.34/94

Gabilan Amateur Radio Club
Monterey Savings & Loan Public Room
Corner First & Westwood
Gilroy, CA 95020
2nd Thursday/monthly - 7:30 p.m.

Livermore Amateur Radio Klub
3508 Gresham Ct., Pleasanton, CA 94566
Meets: Valley Memorial Hospital
Multi-purpose room, Livermore, CA
2nd Saturday/monthly - 9:30 a.m.

MT. Wilson Repeater Association
P.O. Box 977
Yorba Linda, CA 92686
WA6KOS Repeater — input 146.40 output 147.435
Amateur Radio QST Net — Monday at 7:00 p.m.

North Hills Radio Club
P.O. Box 41635, Sacramento, CA 95841
Meets: Gethsemane Lutheran Church
4706 Arden Way, Carmichael, CA 95608
3rd Tuesday/monthly

Sacramento Amateur Radio Club, Inc.
Contact: Chet Almond, N6DRU, (916) 967-4295
Meets: MARS Building, Sacramento Army Depot
Troop gate, Florin-Perkins Road
2nd Wednesday/monthly - 7:30 p.m.

San Fernando Valley ARC (W6SD)
Red Cross Building
14717 Sherman Way
Van Nuys, CA 91704
3rd Friday/monthly - 7:30 p.m.

San Gabriel Valley ARC
Bowling Green Clubhouse
405 S. Santa Anita Avenue
Arcadia, CA 91006
1st Tuesday/monthly - 7:30 p.m.

Santa Cruz County ARC
PO Box 238, Santa Cruz, CA 95061
Last Friday/monthly — 7:30 p.m.
San Fran. Fed. Savings, 1995 41st Ave., Capitola
K6BJ repeater 146.19/146.79

S. Counties Amateur Teleprinter Society (SCATS)
2nd Sat/monthly — alternates in L.A. & Orange Counties.
60 WPM RTTY Net, Wed. 8 p.m. on 146.10/70 W6IWO/RPT
For info. call Jean Carter, KA6HJK, (714) 523-9519

Sierra Foothills ARC
PO Box 3262, Auburn, CA 95604
Office of Education Bldg.
360 Nevada St., Auburn CA 95603
2nd Friday/monthly — 1930

Simi Settlers ARC (SSARC)
PO Box 3035, Simi Valley, CA 93063
3rd Thursday/monthly - 7:30 p.m.
Bank of A. Levy (across Larwin Sq.)
K3HZP/R 147.165/765 Simplex 147.48

Sonoma County Radio Amateurs, Inc.
Box 116, Santa Rosa, CA 95402
Hank Davis, W6DTV (707) 823-7885
County Office of Emergency Service
1st Wednesday/monthly - 7:30 p.m. rpt 146.13/73

South Bay Amateur Radio Association
P.O. Box 91 • Fremont, CA 94536
Fremont School, 40230 Laiolo Rd
3rd Wednesday — 7:30 p.m.

Stanislaus Amateur Radio Assoc. (SARA)
P.O. Box 4601 Modesto, CA 95352
Stanislaus Co. Administration Bldg.
12th & H Streets • 3rd Thurs./monthly 7:30 p.m.
145.39 MHz WD6EJF

Stockton Amateur Radio Club
U. of Pacific, Rm. 122
Kensington & Mendocino Sts.
2nd Wednesday/monthly - 7:30 p.m.
Rptr. roll call: Wed. 8 p.m. - 147.165/765

Ukiah Amateur Radio Club
P.O. Box 1373, Ukiah, CA 95482
Meets: Carpenters Union Hall
2nd Monday/Monthly 7:30 p.m.
President: Bob Rowe - KA6CXM (707) 485-7147

West Coast Amateur Radio Club
Fun Meetings — No Business
Fountain Valley Recreation Center
Visitors welcome — call in 144.330 simplex
Call KA6RRR (714) 636-8661 for dates

Western Amateur Radio Assoc.
Cerritos Park East
166th St. and Carmenita Ave.
Cerritos, CA.
1st Tuesday/monthly 7:00 p.m. - 145.400

West Valley A.R.A. W6PIY
Meets: Los Gatos Red Cross Bldg.
18011 Los Gatos - Saratoga Rd.
Los Gatos, CA 95030
1st and 3rd Wednesdays/monthly

CONNECTICUT

Tri-City ARC, Inc.
P.O. Box 686, Groton, CT 06340
Meets: Groton Public Library
Rt. 117, Groton, CT
2nd Tuesday/monthly - 7:30 p.m.

FLORIDA

Platinum Coast Amateur Radio Society, Inc.
American Red Cross Building
1150 S. Hickory • Melbourne, FL 32901
Dan Yelverton WA4RGK President
Call-in 25/85 Rptr. • Meets 2nd Mon/monthly 7:30 p.m.

HAWAII

Big Island Amateur Radio Club
Helco Auditorium
1200 Kilauea Avenue, Hilo
Call-in 146.28/88
2nd Tuesday/monthly - 7:30 p.m.

ILLINOIS

Bolingbrook Amateur Radio Society
Fountaindale Library
300 W. Briarcliff Rd., Bolingbrook
(312) 739-0045 / call in 147.93/33
3rd Monday/monthly - 7:00 p.m.

Chicago Suburban Radio Association (CSRA)
Clyde Federal Savings & Loan Assn.
7222 West Cermak Road
North Riverside, IL 60546
2nd Wednesday/monthly - 8:00 p.m.

Fox River Radio League
Valley National Bank, Lower Level
Northgate Shopping Ctr. & RT. 31, Aurora, IL
(312) 898-2779 for more information
2nd Tuesday/monthly - 7:30 p.m.

For information on how to get your club listed in this column, please receive many other benefits, write to Dave Tykol, WA6RVZ, Club Liaison, Worldradio, 2120-28th Street, Sacramento, CA 95818.



of life and happiness. Let's don't let "The Other Guy" do it all. Let's roll up our sleeves and pitch in with the kind of principles and ethics this country was founded on. Enough of this! Gotta get off the soap box.

Remember, write a note, telephone me, or see me at the meeting and let me know 1) why you don't attend meetings, if this is the case, and 2) what we can do to make the club and meetings better so you will attend and share in club functions. Again, I'll say I'm sorry if this article has sounded negative or like a "put down". It's only me trying to do my job as your president, as I see it — keep the club together and running the very best we can make it. If anyone should feel my approach was wrong and out of line, please forgive me. It really makes me feel bad that I felt duty-bound to say this. However, I promise not to bring this subject up again. — 73's, Bill WA6VTL

Neighboring clubs

Why not give your members information about meetings of nearby Amateur Radio clubs? The McMinnville ARC does, and the list is impressive. Editor Bob Kuhn, KC7YN, put it in their newsletter, *The MARC Wireless*:

Visiting a nearby club?

For those of you who might like to go visiting other ham clubs in the area, a partial list of who meets where and when. Thanks to Al Berg, WB7SIC, for doing most of the work in putting it together:

Chehalem Valley ARC — 1st and 3rd Tuesday, PG&E Service Center on Springbrook Rd.

Salem ARC — 4th Tuesday at 7:30, NW Natural Gas Co; 3123 NE Broadway.

Clark County ARC — 1st Friday at 7:30, Clark College Applied Arts Bldg., Vancouver.

Hoodview ARC — 3rd Thursday at 7:30, Mount Hood Community College Town & Gown Room.

Oregon Tualatin Valley ARC — 3rd Wednesday at 7:00, PG&E Center, Beaverton.

Portland ARC — 3rd Friday at 7:30, BPA Building cafeteria near Lloyd Center.

Lower Columbia ARA — 1st and 3rd Thursday, Clubhouse in Longview.

Clackamas ARC — 3rd Monday at 7:30, Clackamas Community College.

Mid-Willamette ARC — 3rd Monday at 7:30, somewhere in Corvallis-Albany area.

Willamette Valley DX Club — last Thursday at 7:30, 2145 NE Hoyt in Portland.

McMinnville ARC — 2nd Thursday at 7:30, Yamhill County Courthouse.

There are a few I've missed for sure, like TERAC, for instance. Also, the ARRG has been having an informal weekly luncheon at North's Chuckwagon at the Beaverton Mall for years, each Tuesday at 11:30 a.m. □

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Radio Amateur Megacycle Society, Inc.
Irvingwood Acacia Church
3900 N. Plainfield, Chicago, IL 60634
(312) 625-2879
3rd Friday/monthly - 8:00 p.m.

Six Meter Club of Chicago, Inc. - K9ONA
Land of Lincoln Savings & Loan
6655 W. Cermak Rd.
Berwyn, IL 60402
2nd Friday/monthly 8:00 p.m. Rptr. 146.37/97

INDIANA

Allen Co. Amateur Radio Tech'l Society, Inc.
PO Box 10342, Ft. Wayne, IN 46851
Allen-Wells Chapter House • Amer. Red Cross
1212 E. California Rd., Ft. Wayne, IN 46825
3rd Tuesday/monthly - 7:30 p.m.

Fort Wayne Radio Club
Ron Koczor, K9TUS
PO Box 15127, Fort Wayne, IN 46885
The Salem Church
3rd Friday/monthly - 7:30 p.m.

Indianapolis Repeater Assoc.
4th Monday/odd numbered months
Carson Manufacturing
5154 N. Rural St., Indianapolis
146.10/70 147.72/12 146.625/025

Northeastern Indiana ARC
John E. Zumbaugh, WD9CVI
507 E. Quincy St., Garrett, IN 46738
Daily 6 p.m. net on 147.96/36
2nd Tuesday/monthly - 7:30 p.m.

IOWA

RSCB (Radio Society of Council Bluffs)
Richard Swig, WA0ZQG, Secretary
104A Jennings Road
Council Bluffs, IA 51501
2nd Tuesday/monthly - 7:30 p.m.

MARYLAND

Frederick Amateur Radio Club
Frederic Electronics
Orville C. Bowersox, N3AGM
(301) 662-4550
2nd Tuesday/monthly — 2000

MICHIGAN

The Metropolitan A.R.C.
Harper Woods City Hall
I-94 & Eastwood (Between Vernier & Moross)
Repeater - 448.55T./443.55R.
1st Sunday/monthly - 2:00 p.m.

MASSACHUSETTS

Q.R.A. (Quannapowitt Radio Assoc.)
Masonic Hall — Salem Street
Wakefield, MA 01880
2nd Friday/monthly Sept-May 8:00 p.m.

MISSOURI

Heart of America Radio Club
3521 Broadway
Kansas City, MO 64111
3rd Tuesday/monthly

NEW HAMPSHIRE

Great Bay Radio Assn., WB1CAG
P.O. Box 911, Dover, NH 03820
(603) 742-0130/332-8667
2nd Sunday/monthly - 7:00 p.m.
Dover Dist. Court. Talk-in 147.57

NEW JERSEY

Central New Jersey Chapter No 138, QCWA
Net: Ea Tue. evening-10:00 p.m. 147.645/147.045 MHz
Mtg: Quarterly; Membership or more info:
Bob McKinley, W2OMR, Sec., 89 Stratford Rd.,
Tinton Falls, N.J. 07724 (201) 542-2113

Gloucester County ARC, W2MMD
PO Box 370, Pitman, NJ 08071
VFW Post #2117, Woodbury, NJ
1st Wednesday/monthly - 8:00 p.m.

NEW YORK

Amateur Radio Assoc. of the Tonawandas
City Hall, Community Room
200 Niagara Street
City of Tonawanda, NY 14150
3rd Tuesday/monthly - 8:00 p.m.

Hall of Science Amateur Radio Club, Inc.
PO Box 131, Jamaica, NY 11415
Queens County Dental Society Bldg.
86-90 188th St., Jamaica, NY
2nd Tuesday/monthly - 7:30 p.m.

Long Island Mobile Amateur Radio Club (LIMARC)
146.25/85, 147.975/375, 223.22/224 .82, 444.125/449.125
Membership: Woody Gerstner, WB2IAP, 42 Mohawk Ave.,
E. Atlantic Bch., NY 11561. Net Mon. 8:30 p.m. 146.25/85
Meets 1st Tues/8 p.m., H.B. Thompson, JHS, Syosset

Staten Island Amateur Radio Assn. (SIARA)
P.O. Box 495
Staten Island, New York 10314
Third Friday/monthly — 8:00 p.m.
Rm. B-127, College of S.I. — Sunnyside

Suffolk County Radio Club
Meets 1st Tues. monthly, 8 p.m.
Bohemia Recreation Center
Smithtown Ave., Bohemia, Long Island
More info! Dave Potter, W2GZD, (516) 472-2394

Westchester Emergency Communications Assoc.
Little Theater — County Center
White Plains, N.Y.
Talk-in WB2ZII/R 147.66/06
2nd Monday - 8 p.m.

OHIO

Ashtabula County ARC
Ken Stenback, A18S (964-7316)
County Justice Center
Jefferson, OH
3rd Tuesday/monthly-7:30 p.m.

C.A.R.S. (The Clyde Amateur Radio Society)
Ervin Remaley, KA8CAS, Secretary
2nd Tuesday/monthly - 7:30 p.m.
Community Rm., City Building, Clyde, OH
Repeater 144.75/145.35

Findlay Radio Club
1333 W. Sandusky St./Box 587
Findlay, OH 45840
Repeater 147.75/15
1st and 3rd Thursday/monthly - 7:30 p.m.

NOARS-Northern Ohio Amateur Radio Society
P.O. Box 354, Lorain, OH 44052-3rd Mon. 7:30 p.m.
K8KRG — Home of the WW II Submarine USS COD
WB8JBM — Noars Contest Station — K8KRG/Repeaters: —
146.10/70; 144.55/145.15; 449.8/444.8; 223.10/224.70

Xenia Weather Amateur Radio Net (XWAR)
2nd and 4th Monday — 7:30 p.m.
Xenia PD, City Bldg.
call in/147.165-147.765
Xenia, Ohio

OREGON

Oregon Tualatin Valley ARC
Beaverton Elks Lodge
3500 SW 104th Ave.
Beaverton, Oregon
2nd Wednesday/monthly - 7:00 p.m.

VIRGINIA

Eastern Shore ARC (ESHARC)
110 Church Street
Chincoteague, VA 23336
Repeater WA4TVS 147.855/255
Net Mon. 9 p.m. Mtgs. as announced.

Southern Peninsula Amateur Radio Klub (SPARK)
Repeater 146.13/146.73 — WR4ALW
VEPCO Bldg. (Penbrooke Av. & G St.)
Hampton, VA
1st and 3rd Wednesday/monthly - 7:30 p.m.

WEST VIRGINIA

Jackson County Amateur Radio Club, Inc.
Bob Morris, WA8CTO, Sec.-Treas.
308 Edgewood Cir., Ripley, WV 25271
First National Bank of Ripley, WV
1st Thursday/monthly - 7:30 p.m.

WISCONSIN

Racine Megacycle Club
Red Cross Building
4521 Taylor Avenue
Racine, WI 53405
2nd Monday/monthly - 7:30 p.m.

Lend a helping hand

The River City Amateur Radio Society, Sacramento, California, ran an editorial twice in its *The ARCS News*:

NOTE: The following article by our President Bill Allport, WA6VTL, first appeared in August 1982. We reprint it at this time because the message is still very, very valid.

The President's Corner

Hi, everyone. It's high time I took a few moments to thank everyone for the vote of confidence for electing me president this year. I may not do as well as those before me, for I have no vast reserve of experience in being a board member or president of Amateur Radio clubs. However, bear with me and "Lend a Helping Hand," and I'll give it a good ole "Bloody Go".

Now, it so happens that's the name of my next subject. "LEND A HELPING HAND." In my estimation, Amateur Radio clubs are only as good as the club members make it. The problem is that we always have the hard-working, dedicated few who always show up for projects, committee work and somehow seem to be the only ones who are willing to shoulder the responsibility of being a club "Officer". Then to make matters worse, instead of these jobs being passed around through the membership, these same people get recycled from year to year. This seems to be prevalent in so many clubs.

Another situation that creeps into the picture is that people join the club, then don't attend the meetings. Would someone please explain to me how we can expect to enjoy the fun and fellowship derived from having the club in the first place when most of us don't show up at meetings to share in the work, responsibilities and efforts that it takes otherwise to make our club the very best that we can make it?

Please don't misunderstand; it's not my intent to criticize anyone. I think highly of the River City Club and its membership or I wouldn't be a member, and hence president. Also, please accept my apology for saying it like this, just in case the above should offend someone. However, as you get to know me better, you'll come to understand that that's my kind of communications — all the cards laying out on the table, face up.

Now it's time to ask, "What can we do about this? Why don't you, the membership, tell us? What can we, the board do — with your help of course — to make the meetings interesting and productive enough so that most all members will attend and share in the fun, enjoyment and work that it takes to harvest the most from all our combined efforts?"

"I beg of you on bended knees, please don't feel shy, inadequate or embarrassed if your efforts don't seem to turn out just right. We're supposed to all be friends and neighbors that come together to share a common fellowship in the pursuit

MARITIME MOBILE



Gordon West,
WB6NOA



"Floating radios and other gadgets"

This month, let's look at some exciting accessories that may enhance your maritime mobile operation. We have tried each of these items in actual field tests, and I'll give you some frank comments about their usefulness.

HT waterproof bag

This spring and summer, many of you are going to take your favorite VHF hand-held down to the sea or your favorite lake or river. Probably half of you will either dump it overboard, or allow water to splash into it — ruining it for good.

"We probably receive 10 units per week that are water-damaged and are totally unserviceable," comments the service manager for a major line of equipment sold out of the West Coast.

"Seawater damage is the worst — the radio is a total loss if it's not rinsed out in fresh water. Fresh water damage also takes a heavy toll on hand-held sets — they are simply not designed for any type of water."

Rain damage is also likely with a hand-held unit. As soon as water gets into the set, the microprocessor circuits go bananas, and your set is probably ruined — temporarily or for good.

A new product from ICOM solves this problem — it's a heavy-duty waterproof Mylar bag that holds any popular hand-held radio (not just ICOM radios). Simply place your hand-held into the bag, secure the ingenious sealing device, and you are on the air. They even give you a finger cavity that allows you to change frequen-



A finger port for channel changing!

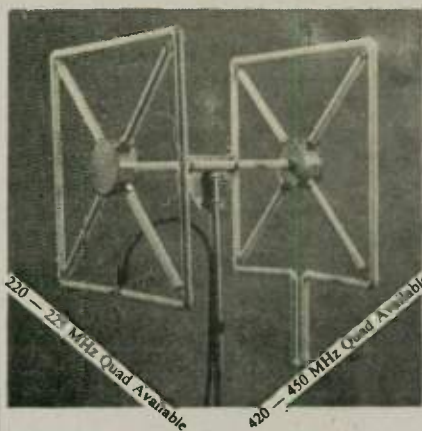
cies and volume settings when your radio is encased in this plastic bag.

No, there's no problem hearing the audio — it transfers quite nicely through the plastic. No, your voice doesn't sound like you're in a goldfish bowl. There is no discernible difference in audio characteristics when you are talking through the plastic bag. They give you a special slot that you talk into for maximum audio transfer.

The bag is 100 percent waterproof. We took it down to 35 feet, and our hand-held stayed dry as a bone. By the way, the attenuation of seawater on radio signals at VHF and UHF frequencies is dramatic. We found that reception got quite fuzzy when we got below 20 feet of water. Who knows — maybe we have established a new record for under water communication!

If you want some more details on this waterproof bag, write us here at Radio School Marine Division, Gordon West, 2414 College Dr., Costa Mesa, CA 92626. The bag sells for \$30 and will hold any

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type of hand-held set. Available immediately from Gordon West's Radio School.

We finally found a waterproof world-wide radio. It's manufactured by SGC Corporation out of Bellevue, Washington. The set is intended primarily for survival craft operation. It's crystal-controlled and works on Amateur Radio frequencies as well as marine frequencies. It's completely self-contained with a battery pack that lasts up to 24 hours. Power output is 15 watts, and the antenna may either be mounted directly on the unit or remotely. It tunes from 2 MHz through 15 MHz, single-sideband. You can select either upper or lower sideband, depending on

which ham band you have it crystallized up for.

Although 15 watts PEP doesn't sound like much, we were able to establish many calls when the unit was floating in the seawater. Seawater makes a terrific ground, and it allows the unit to perform magnificently. Although the unit is very expensive — near \$3,500 — it does perform well in survival craft situations or in situations where the radio will become completely immersed in water. We took it down the Feather River to stay in communications with local hams on 40 meters, and it worked great. It took three direct dunks, and except for a bent antenna, no problem in getting out.

If you have special river rafting expeditions planned or you want to sail off in your dinghy to a distant port, and you have a need for a completely waterproof sideband, contact SGC Corporation, 13737 South 26th St., Bellevue, WA 98005, ATTN: Pierre. They also produce a very inexpensive marine single sideband transceiver that will accept amateur frequencies near the \$1,200 mark.

Speaking of marine transceivers, ICOM is soon to debut a new type-accepted marine single sideband set that will offer the serious mariner a 100 watt output set that works on both marine frequencies as well as ham frequencies — and one that is FCC type-accepted for Part 83 marine operation.

I have seen this set in person, and it looks like what many mariners have been looking for. It offers channelized operation on marine frequencies, yet can still be used quite nicely on ham frequencies. No longer do mariners need to risk their ham license by using non-type-accepted ham gear on marine frequencies.

We still haven't had a chance to check out that new \$800 Yaesu FT-757GX. This appears to be about the only rig that closely matches the performance and features of the popular Kenwood TS-430S that most mariners are putting on board their boats. Chip at Yaesu has promised me they will soon have delivery on this set; and by the time you read this column, chances are the set will be available. You can give me a phone call (714/549-5000), because by the time you read this, I will have had a chance to run it through the mill.

Our review of the automatic Maxcom tuner brought in a raft of mail. Several mariners have tried the tuner, and feel that it is indeed a remarkable product. However, everyone seems to agree that its ability to transfer energy from the transceiver to a random-length antenna with a good ground is not as good as a conventional manual tuner or the very expensive relay-stepping automatic tuners. I agree.

Repeated tests with the Maxcom indicate that it's only 50 to 70 percent efficient in most marine installations. This is far less than the 80 percent efficiency they claim.

Five times I requested the manufacturer to detail to us what was on the inside of the tuner. No luck. One reader went so far as to chip away the black epoxy that hides everything, and found one integrated circuit.

"Curiosity prompted me to look inside the unit which indicated that the whole unit was sealed in an almost opaque potting compound making investigation of the 'insides' virtually impossible. In my unit, a circuit board is mounted just inside the top of the unit. Closer examination indicated that it had no functional use and was simply a piece of chopped up surplus board and was undoubtedly in-

Preamplifiers



The famous Palomar Engineers preamplifier has been updated and packaged in an attractive new cabinet.

For the SWL there is the P-305 (9-v DC powered) and the P-308 (115-v AC powered) featuring full shortwave coverage, selection of two antennas, 20 db attenuator, 15 db gain control and on-off-bypass switch.



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serted both to make the inquisitive think that it was part of the circuit and to make it impossible to see the actual components underneath it," comments J.B.M. from Canada. That's pretty tacky, folks, on the part of the manufacturer, if you ask me!

Yet I still receive many letters from mariners with the Maxcom who swear by it. They say it's about the only thing that will match their random-length backstay or whip antennas well and get out well, too.

Antenna experts tell me there is probably an elaborate transformer assembly on the inside that does the matching and the transfer of energy. As for a microprocessor, few believe it in this \$600 box. Everyone agrees that it does a nice job, and it's well worth its money when no other manual tuner set-up is feasible. I agree. Maxcom has my vote, but only in applications where a manual antenna tuner is out of the question and a slight loss of power output is acceptable. As for the unconnected circuit board, I still think that's pretty tacky!

Shortwave bonanza

Those new all-frequency ham sets that give you shortwave as well as ham frequencies are quite nice in finding out what's happening around the world.

There is a new book out for shortwave listeners that really gives you the low-down on what can be picked up, where and when. *Tailgunner on a Superheterodyne* was written by Editor Larry Brookwell, nationally acclaimed editor of a shortwave monthly newsletter. His book covers the excitement of monitoring random shortwave calls — and also is a tongue-in-cheek account of what happens when you let the shortwave bug really get to you! It will provide many a laugh while swinging on the hook at a distant harbor, and is available for \$8.95 plus \$.63 book rate postage from Larry Brookwell, 1826 Cypress St., San Diego, CA 92154.

Voltage gadgets

I have tested some voltage gadgets, and if you need 110 volts AC from 12 volts DC, the power inverter is just for you. A company that produces solid-state (no more vibrators) power inverters is Tripp Lite, 500 N. Orleans, Chicago, IL 60610. They have over 15 models of inverters for any power capacity. Write them for their complete catalogue No. 95-475 and No. 95-567.

Now if you need a huge power inverter that will transform 12 volts DC to 110 volts AC at a whopping 1500 watts, this monster is available from GTO Electronics, 430 Ritt St., St. Peter, MN 56082, ATTN: Cliff Swenson, President.

You hide the guts below decks, and a convenient panel allows you to turn on the inverter for service at the bridge or at any convenient spot aboard. It automatically shuts itself down when there is no AC device demanding to be turned on.

Thirteen amps of AC is enough to run some pretty hefty devices, such as a small microwave oven, hair dryer, 1kW amplifier, AC ham rigs, and other high-demand home AC products. Write him for his catalogue No. PACS-1500.

Battery isolators are also a good idea if you run your equipment a lot, but still want to be able to start your engine. Your alternator will charge both batteries, but the isolator will automatically keep current from being drawn from your starting battery. No manual switching is required — it's all done electronically through the isolator. It takes only seconds to install, and will allow you to charge both batteries simultaneously while only pulling

one down when you use your high-frequency rig.

It's also available from GTO Electronics, and you can write them for a catalogue on this product, too.

Net of the month

This month, we salute the United States Coast Guard Auxiliary National Radio Net for Amateur Radio operators. U.S. Coast Guard Auxiliary National Branch Chief Communications Manager, William Robinson, KA6LIR, gives us this report:

"We operate on 14.328 MHz at 0200 hours Zulu. There is a 30-minute warm-up net that precedes the actual starting. The net is well-structured to handle emergencies and priority and regular traffic for the U.S. Coast Guard and Coast Guard Auxiliary. We call roll by Coast Guard districts. We also have a spot in the net for 'guest' appearances by National and District officers, as well as other Coast

Guard Auxiliarists," comments Robinson.

If you are a member of the U.S. Coast Guard Auxiliary and want more information about this excellent Amateur Radio net, contact Net Manager, E.A. Weinberg, N5EW, 3917 Crest Park Dr., Dallas, TX 75234, or your local Coast Guard Auxiliary District Communications Officer. Unfortunately, this net is not intended to handle routine phone patch traffic or other third-party traffic for non-Coast Guard Auxiliary members. However, in an emergency, this net can act promptly on your call for help, whether or not you are a Coast Guard Auxiliary member.

Listen in on the net — it's well run and their net procedures are quite precise, yet they still run the net in a friendly fashion.

Installation of the month

We close this column with a three-picture pictorial of an installation of a Ken-



Installation of the month

wood 430 engineered by newly licensed amateur operator, John Payne, of Long Beach. The set easily pulls out like a drawer for service. The speaker has been remoted above the head of the operator so as not to disturb sleeping guests. The audio output is also remoted to a weather facsimile machine when the receiver is switched into the general coverage bands.

The set is virtually immune from water damage by its recessed installation. There is still plenty of room for the set to "breathe," and these three pictures are worth a thousand words on how easy it is to service or add more accessories.

We look forward to receiving your photos and publishing them here in our new monthly section entitled, "Installation of the Month."

Good cruising, and we'll see you next month. □

Virginia Beach club officers

Linda Crawford, KA4JXZ, has been elected president of the Virginia Beach ARC. Serving with her are "Slim" Bloodworth, WT4C, vice president; Chuck Harding, N4IBY, secretary; and Al Crawford, WA4TCJ, treasurer.

The club meets at 7:30 p.m., on the first Thursday of each month at the Open Door Chapel on Virginia Beach Boulevard. Visitors are always welcomed. — Linda Crawford, KA4JXZ □

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Recently I received a phone call from a student who had made the decision to discontinue studying Amateur Radio. In the course of our conversation, the reasons for this decision were carefully outlined. I wished her the best of luck in future endeavors and thanked her for phoning. We at HANDI-HAMS would much rather see students enrolled who are studying and truly interested in the hobby than to have those folks who are active in name only.

But then I started thinking about why people would choose other hobbies over hamming. Amateur Radio is certainly a specialized hobby — not for everyone. But there is a group of people who most commonly seem to think it is not for them. And what group is that, you might wonder? Well, it is the YL's and XYL's. When I started working for the Courage HANDI-HAM System three years ago, there were only two or three female students out of 100 people. The numbers are steadily increasing as knowledge of the System spreads to different groups of disabled persons, but the OM's still far outnumber the gals.

Maybe you have had people who appear to be interested in hamming who are YL's but, when it comes to attending a local ham class, going to flea markets or actively pursuing the hobby, they just don't seem to quite get the ticket. Below are some of the major reasons, I think, why YL's are frightened of getting into Amateur Radio, and some of the countermeasures you might think of when trying to increase your club membership to include this group.

"Ham Radio is a man's hobby." Some YL's may feel this is a distinct advantage, while others may feel it is an exclusion. Having teachers who are YL's in the club (at least one), or having active YL's in the area can shortly belie this fear. Information on YL nets and systems or other nets where there is a majority of YL

participation might also encourage folks.

"You have to be able to build equipment in order to become a ham." This is a fear of both OM's and YL's. This was true in years past, but now, how many hams really know how to build equipment or even tinker well around their shacks? With the advent of solid-state rigs, the builders are becoming ever fewer. How many of you know how to build well-running equipment?

"Hams have to know how to repair their own equipment." True, it does make things considerably easier when one can diagnose a problem and it's just great if one can repair and maintain one's own station. But this is not a requirement for being an amateur. Like those building from scratch and even from kits, the number of repairers is growing ever smaller.

"You have to know a lot of math to pass the exam." Many women seem to equate math with a foreign language made for aliens with far superior minds (hi, hi). If they weren't good at math in high school, they don't think they can make it in hamdom.

However, anyone who has taken the Novice or even the Tech/General Class exam knows that there is really very little math involved. The majority of the exam is basics of station operation and ideas used in electronic theory.

"The only thing there is to talk about on Amateur Radio is electronics." It is a common belief that folks just sit around and talk about their equipment while on the air. Indeed, there are some folks who do this and some nets set aside for this purpose only, but Amateur Radio can cover many, many topics, as you well know. Perhaps if you know of a YL who seems to be somewhat interested in radio, you might want to peruse a net directory to locate some of the nets and groups which meet to discuss things which are far removed from electronics, Ohm's Law, computers or radio at all.

"That is my husband's hobby; I don't want to get into it." I had the reverse of this situation around my place with my husband not being licensed at all and myself with an Extra. We would go to hamfests and flea markets and folks would always be saying to him, "Now when did you get your ticket," or (to me) "I suppose he taught you all the way up through Extra, that's great." Paul has gotten his General Class ticket now but is not very active.

A two-operator family may cause some tensions if both parties are wanting to use the same equipment on different frequencies at the same time, but the advantages outweigh the disadvantages by far. Espe-

cially if the OM or YL travels. It is much easier to keep in touch. If the kids live a distance from home, either parent can catch them on the air through phone patch or by sending traffic.

At any rate, hamming is a fantastic hobby for YL's and XYL's. It is just communicating this message to the ladies that will soon give them the bug and the enjoyment of Amateur Radio. I look to the day when there will be equal numbers of OM's and YL's on the bands. Some might say the numbers are terrific in their present ratios, but I think those times of 4 or 5 to 1 will soon be lowered to 1 to 1. □

Repeater invitation

The North Myrtle Beach (South Carolina) VHF ARC welcomes amateurs everywhere to use their repeater, at any time. The repeater's call is WA4JYR. Receive on 147.03; transmit on 147.63. □

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TEACHER

Alan Kline, KB1DJ

P.O. Box 54
West Lynn, MA 01905

ED: This is the second half of a column about a booklet entitled Ham Radio on the North Shore, which KB1DJ has had printed and used as a handout to students of his classes.

The first half covered the introduction to the class, background on the sponsoring clubs, HANDI-HAMS, class times, fees, donations, audiovisuals, textbooks and info on high school radio stations.

"As it is a large gathering of various Amateur Radio facts," says Kline, "it is also useful to give to anyone who moves into your part of the country. Please feel free to copy any part or the whole concept if you like."

Morse code

If there's one aspect of the hobby that scares people off, it is the Morse code requirements. By international agreement, you must prove you can send and receive a minimum of 5 wpm to get operating privileges in the 80 to 10-meter portion of the ham bands. Once you've heard how slow 5 wpm really is, you will know how easy it is to learn. It just takes

some practice. We teach the code by the Farnsworth method. The actual letters and numbers are spaced at 5 wpm, but the speed of the character is sent at 13 wpm. This way, as your copying skill improves, we move the letters closer together. This helps you to copy the required 13 wpm for the General Class license.

There are many good Morse code study tapes on the market. We suggest the 73 Magazine series. It starts at 5 wpm and progresses to 20 wpm. Using the Farnsworth method, it has been very successful. Just listen to it for two 15-minute sessions each day for a few weeks and you should be copying the code. You can also try generating the Morse code on your home computer.

For those of you who seem to have a tough time learning the basic code even at 5 wpm, there are some tapes on the market that are sent at 5 wpm and spaced at 5 wpm. Both AMECO and the ARRL have such tapes. But the key to learning the code is always the same — practice every day.

Clubs

NSRA — The North Shore Repeater Association meets on the second Monday of the month at the Danversport Yacht Club. Time is 8:00 p.m. and wheelchair access is perfect.

QRA — The North Shore's oldest ham club, the Quannapowit Radio Association meets on the second Friday of the month at the Masonic Hall on Salem Street in Wakefield.

CAARC — The Cape Ann Amateur Radio Club meets at their own clubhouse at 6 Stanwood Street in Gloucester on the first Wednesday of the month. Because it is on the second floor, wheelchair access is difficult.

19/79 — The 19/79 Repeater Association meets the third Wednesday of the month at the Beachmont VFW Post in Revere at 8:00 p.m. Wheelchair access is good.

ECAT — The East Coast Amateur Television Association is one of only 20 amateur television clubs in the country.

They meet on the fourth Tuesday of the month at the Prince Restaurant on Rt. 1 South, Saugus. Wheelchair access is good.

The North Shore also has many active computer clubs. Ask about them at Heathkit or Land of Electronics.

For new amateurs only

To help you enjoy our hobby, we recommend:

- 1) Join one of the local ham clubs.
- 2) Join the ARRL.
- 3) If you don't join the ARRL, subscribe to one of the Amateur Radio magazines.
- 4) Introduce yourself to fellow hams in your neighborhood.
- 5) Practice your code skills.
- 6) Keep your first antenna very simple.
- 7) Don't hold back from asking a fellow ham for help.

Repeaters

Most of the below listed FM repeaters

Frequency	Location	Sponsor	Uses
146.88	Salem	NSRA	Open/autopatch
146.88	Danvers	NSRA	Open
447.800	Salem	NSRA	Open
147.285	Topsfield	W1VYI	Open
146.79	Chelsea	19/79 R.A.	Open/autopatch
145.13	Gloucester	CAARA	Open
145.29	Malden	ECAT	ATV-audio, computers, RTTY, SSTV
434.00	Malden	ECAT	Video input for FSTV
147.075	Reading	QRA	Open

All the North Shore area repeaters are very friendly, open machines. The ones with autopatch are for members' use only,

can be programmed into your home scanner.

except in an emergency. The 88, 79 and 29 repeaters are monitored 24 hours a day.

Buying your first radio

As a Novice, you will have 80, 40, 15 and 10-meter CW or Morse code privileges only. So you want to find a ham band transceiver that has the following minimum specs: 80 to 10-meter coverage, 200 to 250 watt input, SSB/CW modes,

and 110 volt AC or 12 volt DC power requirements.

In looking for this first radio, remember these helpful hints:

- 1) Low-power (QRP) rigs are not good buys; they are for the experienced ham.

(Continued on next page)



Do you remember your first QSO?

Mike Peterson sure does! His exciting first contact was the beginning of a new world for him — a world without restrictions — a world supported by the Courage HANDI-HAM System.

The Courage HANDI-HAM System is an organized group of disabled and able-bodied licensed hams, who help individuals with physical handicaps become involved with Amateur Radio.

As a HANDI-HAM member, Mike's travel adventures have not been limited by his wheelchair. If you'd like to help HANDI-HAM students travel the airways and discover the thrill of making the first QSO, contact the address below.

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Aerials



Lil Paddle

One thing I have to agree with Kurt on is his opinion about the "Spider" antenna. I duplicated his test conditions exactly and went into the ARRL 10-metre contest.

In the limited time I had to spend in the competition, my results were: twice I had four contacts in a five-minute period; also three in three, four in four, four in five and six in seven. My most distant contact was 6,000 miles away. This was done with a key down power of 40 watts. Remember, we are talking about the antenna being used INDOORS.

One letter said we should tell more about the noise bridge. Great device indeed! You can check out if your SWR bridge is truly accurate. Find out if your dummy load is what it is stated to be. You can cut your quarter-wave matching stubs with confidence, not depending on published velocity factors which can be off. You can measure inputs and outputs of anything. Anyone who doesn't have one is just kidding himself.

Let's move to another vertical antenna, the well-known Butternut. I've also used one of these. But this time let's let someone else give a report on the results. Here's Robert McKay, N8ADA:

The Butternut HF-6V is a high efficiency unguyed 10-80-meter vertical system (including 30 meters) which can become a 10-160-meter antenna with the addition of an optional resonator. No switching is required to cover the bands. The antenna is unique in that it uses no traps, but does use resonators and some very ingenious engineering to provide the all-band coverage. The entire 26 feet radiates on all bands.

The antenna breaks down into sections short enough so that it will fit into the trunk of the average car, making it a good vacation antenna. Butternut also makes this antenna in an export model which comes in even shorter sections for greater portability and would fit better in a compact car.

We took one to Seattle last summer and worked Dayton with 100 watts almost daily on 20, and many times at night on 40. For a Midwesterner, it was a real shocker to have

FO8BW (Tahiti) come back to a CQ one evening on 20. We have used it on all bands except 30 meters, with very good results.

Like any vertical, a good ground system is essential. For those mounting an antenna on a roof or where a ground system isn't available, the manufacturer also sells a set of stub-tuned radials made from 300 ohm lead-in that provides an adequate groundplane.

On return to Dayton, the antenna was mounted on a one-story house in a very poor RF environment. Problems were experienced with high SWR, so a sketch was drawn of the installation and a set of SWR curves sent to the manufacturer. The vertical is not far from a TV antenna, a dipole and a tower. Five feet under it are many square feet of ungrounded aluminum foil insulation and the outside of the house is covered with aluminum siding. How all these things might affect the antenna were of major concern.

The answer came back in a few days — two complete typewritten pages, analyzing the situation on a band-by-band basis. Without a doubt, the best and most complete answer I have ever received from any manufacturer anywhere.

Incidentally, their first suggestion covered the problem, and everything else fell into place. They are really interested in customer satisfaction.

A 160-meter resonator was added in July and the first evening with 100 watts we worked Arkansas, Long Island, South Carolina, Pennsylvania and Michigan, receiving good signal reports from all. This was all in an hour and July is not prime time on 160.

As you would expect with a short antenna, the bandwidth on 80 and 160 is somewhat limited. However, an antenna matching unit (tuner) will allow you to move about the bands and still keep your finals happy. The addition of the 160-meter resonator reduces the normal bandwidth on 80. We didn't check it on 30, but have no doubt it would have been almost flat. As installed, the SWR on 10 meters is a little high, but we didn't work on it as we usually use a beam on 10. A little adjusting would have brought it in.

In summary, for city dwellers or anyone who has very limited real estate, this antenna will give you excellent all-band (10-160) capability in less space than anything we know of. Even those with other antennas will find it very useful when signals are coming in with vertical polarization. If you have given up ever

operating on 160 for lack of room, here is the solution to your problem.

Would I buy another? Yes!

Rather impressive wouldn't you agree? I have only one slight disagreement with the excellent report.

At HF frequencies, signals are not vertically or horizontally polarized based on what axis the transmitting antenna is. (At VHF line-of-sight, such is true, but not at ionosphere propagation of HF.) It is just a big jumble — some of this, some of that, some in the middle, all twisting and turning around.

What is truly more likely to be the actual case when comparing signals on a horizontal vs. a vertical antenna, is the angle of radiation of the incoming signal. Based upon the conditions found at the average amateur installation, the dipole will react better to incoming high-angle signals and the vertical better to low-angle energy.

This would be a good place to clear up one widely stated misconception. Much is bandied about regarding the superior low-angle transmitting capability of the vertical. Such an attribute is dependent upon a good radial system. Without it, the claimed properties of the vertical do not exist. In fact, without a proper radial system, the exact opposite of what one is striving for with the vertical will occur.

For the newcomers, I should mention that the virtue of a low-angle signal is that it takes fewer hops to get some-

where and thus less absorption on its way to the intended receiver. Also, under marginal conditions, the high-angle signal will just go up and pierce the ionosphere while the low-angle signal will carom off the layer and end up at some DX station's shack.

The Earth absorbs more signal than the ionosphere, and an ocean path between two stations is the best.

Should conditions at your QTH restrict you to a vertical and you cannot lay out the optimum ground system, do not despair. Try to run out as many short radials as you can. Scrap aluminium plates can be of help. In a portable/temporary situation — camping out, Field Day, etc. — sheets of Reynolds Wrap may provide a solution.

With a ground screen in place, the energy that would otherwise be lost is captured, flows back to the feedpoint and is radiated.

Any metallic surfaces in your habitat (chain link fences, gutters, sprinklers, towers, masts, other antennas, et al) should be part of your earthing system. It's a lot of little things that can give your signal that tiny bit more that gets you up out of the noise level and turns it into a copyable signal.

Catch everything you can — a metal desk in your shack, metal patio cover, a garden tool shed, washers, dryers. Search out everything metallic you can find and use it. As you know, there are times that half an "S" unit can mean getting that multiplier or not.

When you beat your buddy out in the contest by getting a few more contacts times a few more multipliers, don't tell him how you did it. Let's keep it our secret.

If you want to check out your SWR bridge, reverse the input and output lines, and see if the readings are the same on the different scales.

(Lil Paddle goes by her monicker, among other reasons, in order to protect the identity of Mr. Paddle, who will be here next month.) □

Teacher

(continued from page 33)

2) Older, all-tube rigs are usually cheaper, but drift and are difficult to get parts for.

3) Newer rigs, manufactured within the last 10 years, with either tubes or transistor finals are good buys.

4) Once you purchase a new radio, the value drops about 40 percent.

5) Some dealers have sales and close-outs on last year's models.

6) Buy from a dealer who offers service.

7) If in doubt, don't buy it until you've asked a few amateurs about it.

8) All the major dealers take trade-ins, so ask for their used lists.

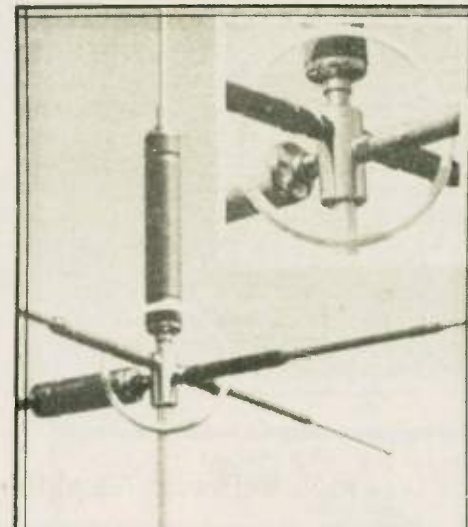
9) If you are on a budget, there are some older rigs on the market that will never be outdated by technology. (Heathkit HW101 or Yaesu FT-101)

10) If you are handicapped, please contact Alan Kline, KB1DJ.

Conclusion

If you have any questions, please feel free to call me in the evening from 7:00 to 9:00 p.m. only, or at work on Saturdays — all day. The instructors would also like you to only call them from 7:00 to 9:00 p.m. I hope this booklet has given you some help in enjoying your Amateur Radio hobby.

73's, Alan D. Kline, KB1DJ (ex-WB1FOD) □



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balcony railing offered an adequate place from which to tie it off, but the fourth-floor balcony above me was even more enticing, since it was about 10 feet higher.

I went up and knocked on the door of the room above mine. A woman, who refused to open the door, quizzed me through it and ended up refusing to help me with my crazy scheme, particularly at that time of night. I learned the next day that the room above was occupied by a couple on their honeymoon.

However, next morning, just as the sun was coming up, I got my nephew to climb up the outside of my balcony, loop a thin rope through the railing of the balcony above, and pull my antenna higher. The honeymooners either didn't notice it or didn't care.

Luckily, I had rigged my HW-8 for silent keying many months ago, so I was able to operate without the noisy chatter of a relay. I was on the air at 1100Z while my wife slept a few feet away.

I had problems with other radios on the island, however. The ship-to-shore transceivers (mostly old citizens band rigs) and a few, nearby sideband ham stations clobbered the front end of my HW-8 more than once.

ZF2AL created a few pile-ups. I gave preference to those stations identifying themselves as QRPers, but I worked my share of higher-powered stations, too. With one exception — a K4 who was angry because I pulled a QRPer out of the pile-up — all of my QSOs were pleasant. Everyone worked to pull my

1½ watts output through mostly marginal band conditions throughout the week.

This was a family vacation trip (we got out of Texas just before the December 18 winter storm got there), and I had to split my time between the family and operating. The family won out, for the most part.

For instance, just as the one good opening to Europe on 15 meters occurred and I had worked an ON4, up came requests that I drive the kids across the island to snorkel for the day.

Next time I go to a DX location to operate, it will be with the idea of getting plenty of time on the air and lying on the beach with a book will be in second place.

Now that I have had my turn at operating from a semi-rare DX location, I can report that others who have written about their experiences have not confided everything to us.

The glowing accounts of operating from another country have been, for the most part, lacking in what lawyers call full disclosure. Not that they have lied, mind you, but we've not always had the whole truth — especially as it affects QRPers.

Most of the other DXpeditions were mounted by multi-member, highly financed task forces having to ferry crates of equipment, antennas and the like ashore from a chartered boat. By sharp contrast, I managed to tuck my HW-8, antennas and associated gear into two briefcases that fit beneath the seat in front of me on the airplane, and I hand-carried them through customs.

My solo effort to operate from the Cayman Islands for a week this past December got off to a bad start, which should have warned me to prepare for the worst. I telephoned the ARRL and got the necessary papers to apply for a license and to bring equipment into the country for the duration of my stay.

Following the instructions the ARRL provided with the papers, I sent the completed forms and \$25 to the Postmaster General on Grand Cayman. Within a week, I had a notice from his office telling me my personal cheque was unacceptable and to send a U.S. postal money order instead — a point the ARRL had failed to mention.

I sent the money order by return airmail and, thanks to the efficiency of Caymanian officialdom, I had my authority to operate as ZF2AL within 10 days.

The timing of an arrival at a DX location is important. Do it early enough in the day so you can get to work erecting antennas. Our flight from Houston reached Georgetown airport around 8:30 p.m. local time, and it was dark when we got to our hotel. After unpacking, I immediately set to assembling my station, while the family explored the hotel, beach and bar.

Darkness may have proved a help to me, since I was able to put up the antenna (an inverted Vee fed with balanced line) and tie off the ends in palm trees in the garden below. I did this without any objections from the hotel management — probably because they didn't see my scrambling around out there in the dark — and I went the week without anyone questioning the antenna.

We were in a U-shaped hotel, with the open portion facing onto the beach and to the west. Our third-floor room looked into the U and faced north, giving me a clear shot back to the United States but blocking the path to South America and limiting access to Europe.

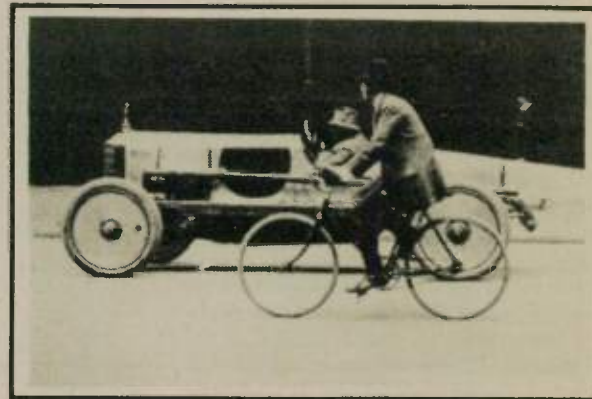
Had I had a chance to look things over in the daylight, I would have requested a room on the fourth floor and in a better location for antennas, however.

I wanted to get the antenna's feed-point as high as possible and as free of the building as I could. My third-floor

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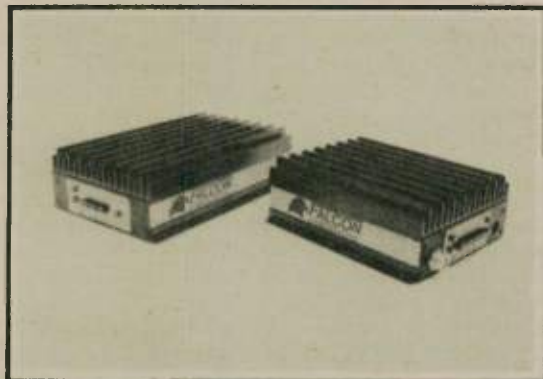
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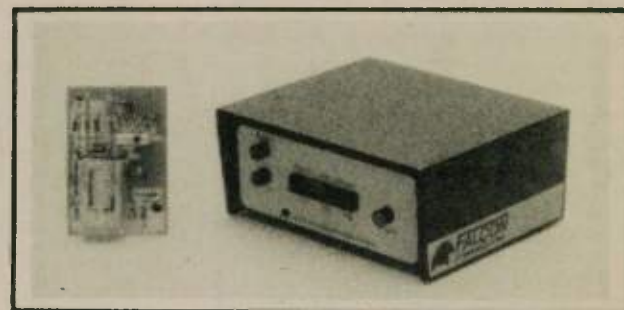
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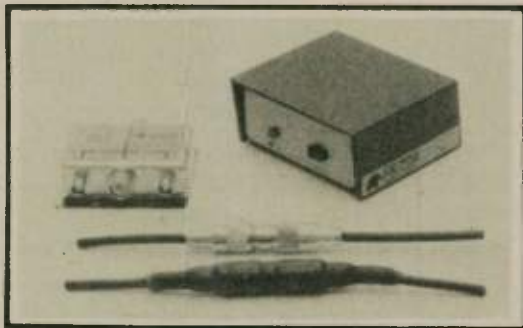
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TRAFFIC

Chuck Clark, K4ZN

Assistant Director
Roanoke Division, ARRL

Getting started

This column tries in its own way to address the needs of all traffic handlers, from beginners to old hands. It's partly self-interest: if there are no newcomers, there will eventually be few old-timers left, and no readers. But more important is the fact that traffic handling has been and still is one of Amateur Radio's principal ways of serving the public, thereby giving the FCC grounds to decide that the Amateur Radio Service does indeed operate in the "public interest, convenience and necessity," as it must if amateurs are legally qualified to be granted station licenses.

Yes, traffic handling is a public service. But those of us who have done much of it have learned that it's an enjoyable way to operate too. We find, as so many others have, that — while according to the Declaration of Independence, the pursuit of happiness is an inalienable right — your pursuit stands a much better chance of success when you pursue it for others rather than for yourself.

You receive something like this for delivery: "Arrived safely at San Diego Friday." You call the addressee, thinking it's just another visitor reporting a safe arrival home, and are taken aback by the enthusiastic response until you learn that the sender of the message was two weeks overdue sailing from Hawaii and everyone was fearing the worst.

But even more ordinary messages can be a way to pursue happiness for others. "I love you" may not seem an important message to others, but to the two persons involved, these are the three

most important words in the English language. Indeed, the very survival of the human race depends on them. Join us in helping people keep in touch with one another.

The best way to get started would be to have an experienced traffic handler show you the ropes. But don't worry if you don't have contact with any such people. If you try it on your own, you will soon meet them on the air, and they will be more than happy to help. After all, there probably isn't a net on the air that has more participants than it can use.

If you decide to go it on your own, send a 9-by-12-inch self-addressed envelope with 88 cents U.S. postage to ARRL and ask for the *Net Directory*.

Revised annually, this contains a listing of all registered nets, with their times of meeting and frequencies and areas of coverage. In addition, it contains much material of special interest to the beginning traffic handler. You might also ask for a copy of *Operating an Amateur Radio Station and Public Service Communications*, and you will have just about everything you need at your fingertips.

If you have a Novice ticket, you will have to check into a net operating in the Novice bands using CW. The *Net Directory* carries a special list of such nets, which generally operate at slow speeds, 10 or 12 wpm, and are managed by experienced traffic handlers who want to help newcomers enter the game. If you have a higher class ticket, you have more choice. Technicians will find VHF nets in most areas, and Generals can check into almost any net in the United States.

It is recommended that you listen a few times first, to find out how it's actually done. Then, after a few listening sessions, check in. When net control asks for check-ins, give your call. The exact procedure varies somewhat with different nets. Usually on CW, one gives just the suffix of the call, or sometimes just one letter, I usually send ZN, for example.

On voice nets, some net controllers ask only for call signs. In other cases, stations are expected to state their traffic and give their location at once. On MARS nets, stations check in by saying, "This is," and then pausing to listen. If nobody else is transmitting, the operator checking in continues by giving call, location and traffic. You have to follow whatever procedure your net is using. That's one reason why it's important to listen first, to understand the procedure used by an individual net.

Once the net control station has acknowledged your presence, just listen to the action until net control directs you to do something. It's as simple as that.

You may soon tire of just sitting there doing nothing, so after you have been checking in long enough that you are comfortable in doing it, write out a message and list it. When you check in, tell net control you have a message, and give the name of the town, state or NTS region, or if it is outside the coverage of your NTS section net, you can just say "Through." On CW, you would say QTC 1 PODUNK, QTC 1 OHIO or QTC 1 THRU, as the case may be.

Write a message? Why not? You are very unusual if you know nobody outside your local telephone calling area. Nearly everyone has grandparents, uncles, aunts and friends, somewhere. And hams have friends all over the world. You ought to be able to think of something to say to somebody.

Then write it up in proper form. Don't let that scare you, either. If it's your first message, it's NR 1. It will probably be routine, so 1 is followed by R.

Next, you put your call sign. Then leave a space for a couple of numbers, write your own city, state and the date (month and day). Follow that with the address; include ZIP code and telephone number unless it's to a ham that you know to be an active traffic handler. Follow that with "break" (dah dididit dah on CW).

Write the text, telegraphic style, with no punctuation except for X where you would put a period and QUERY where

you would put a question mark. Add another "break," and your signature. Then count the words in the text, between the two breaks, counting each X or QUERY as a word, and put the total in the space after your own call in the preamble or heading of the message. It's ready to send.

If you have been listening to the net, you should have heard how it's done by this time. Don't worry about goofing. You will. We all do. But that's the way we learn. If you never make a mistake, you will never learn anything.

Recruiting

Once or twice a year, I try to include something like the above to encourage readers to join the ranks of traffic handlers. Many of us in those ranks already have ways to do it. Here are some that may be of interest:

Peter Skorupsky, WB2IQJ, manager of the New Jersey Slow Net, writes in the *New Jersey Traffic Bulletin* for November-December 1983 describing a standard Novice message that the two Section Managers send to newly licensed amateurs in the two Sections of New Jersey. The text is as follows:

"Congratulations on your ham license. Please consider checking into New Jersey Slow Net on 3735 kHz at 6:30 PM local time. A good way to meet people and increase code speed."

Sending the message is nothing special; it's the delivery that is important here. Here is what WB2IQJ has to say: "Remember, this may be one of the newcomer's first contacts with another licensed ham, so first impressions and helpfulness are important. You are encouraged to leave your name and telephone number, if you are nearby, as a contact. Also, a list of clubs will be made available shortly, should the addressee be in need of local club information. . . ."

"First-time recipients of radio message deliveries are sometime too shy to say or ask anything! Please feel free to initiate friendly discussion after reading the

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message and volunteer to explain the message, or answer other questions the addressee may have. You will be providing a very important service to Amateur Radio and traffic handling."

Ken Hand, WB2EUF, recently wrote me in much the same vein, but he suggests that it need not be the Section Manager. Any amateur can originate a welcome to Amateur Radio message and send it to newcomers, inviting them to check into a net. Usually, such messages will be delivered by someone who is acquainted with traffic handling and in a position to answer questions.

Anyone who teaches a class preparing aspirants to take the amateur test is in a position to make the students aware of traffic handling as an important amateur activity. Tell them about it. Other instructors may tell about their DXploits, Field Day adventures, antenna-raising parties, strange antics of their favorite lids. Let's tell them about public service and traffic handling. Maybe we traffic handlers aren't represented among Amateur Radio's instructors; we're too busy keeping our schedules.

For some practical suggestions, see what Jonathan Towle, WB1DNL, has to say in his "In Training" department, page 75, January QST.

Frequency is in use

Tom Moulton, W2VY, has a wise recommendation in the November-December *New Jersey Traffic Bulletin*: "I think it's much easier to get the phone frequency from someone by first talking a little ('you're 5-6 in Summit, NJ...') and then asking the other station to move up or down, depending on which side is clear (check first), 'because the net which meets on this frequency is scheduled to start in about five minutes, and we really like to be as close to the frequency as possible.'

"We could also mention a few times during the net the call that someone is looking for who is 'calling on schedule' on our net frequency.

"It's natural for us all to resist moving from a frequency that we are using when asked to move for no reason, especially when it's the first thing the guy ever hears from us!"

Well said, Tom. The only communications that are privileged in Amateur Radio are emergency communications in the strict sense — messages directly concerning the safety of human life. Otherwise, we're all equal. And when we net folks try to throw our weight around to clear a frequency — "We're an official net of the National Traffic System," "We were here first," "There are 20 of us and only two of you" — we'll only make traffic nets more unpopular.

Take Tom's advice and do it diplomatically. No harm in inviting the stations to join in the net if they desire, either. You might recruit a new member. □

Ohm-Brew answer

OHM-BOUND (Home-bound)

When submitting photos, please **DO NOT** write on the backs of them — they often stain the fronts of other photos, making them unusable.

• Silent Keys •

John Vitale

A grand old man of Amateur Radio in New Jersey became a Silent Key Thursday, 22 December, just two days before his 84th birthday. John J. Vitale Sr., W2IIN of Elizabeth, New Jersey — who held an Advanced Class license — spent a full radio life, starting in 1912 with a spark transmitter and living long enough to enter the age of computers and satellites.

"Two Eyes and a Nose" was John's translation of his call sign, W2IIN. Once heard, it never was forgotten.

In recent years, he spent quite a bit of time in hospitals, but he was not without Amateur Radio communication. His practice was to have a 2-meter hand-held on his night table. As a member of the Electronic Technology Society of New Jersey, much of his radio work in later years veered toward the club 2-meter FM repeater, W2NR, at Green Brook in Somerset County.

Electronics was John's livelihood as well as his hobby. Until his retirement in 1965, he was supervisor of electrical

maintenance at the Wilson-Jones stationary plant in Elizabeth. An Army veteran of World War I, Vitale lent his radio knowledge to civil defense during World War II, when he served on a state level.

Among his many activities over the years, he served at one time as North Jersey Section Communications Manager of the ARRL's far-flung traffic handling nets.

Even amateurs who thought they were old-timers were fascinated by John's recollections of the early days of radio. He remembered when a federal license was not required if you used low power and, in theory, could not be heard beyond your state's borders. That was before the federal communications authorities learned there was a thing known to the amateurs as "QRP."

Vitale was known on 2-meter FM as a tough control operator. He couldn't abide sloppy procedure, and any violation of FCC or repeater rules brought immediate censure to the offender. W2IIN didn't just love Amateur Radio; he respected it and would defend its integrity against any wise guy deviations.

John belonged to many radio organizations, including the QCWA and the SOWP. But it didn't take long to discover his heart belonged to UCARA, the fabled Union County Amateur Radio

Association, which flourished in Elizabeth prior to World War II. It was nothing less than an incubator for developing Amateur Radio expertise, and its former members are scattered all over the nation and beyond.

This is 73 to W2IIN, whose Amateur Radio career spanned 71 years-plus. He got a lot out of Amateur Radio, but he gave much more in return. — Bob McGarvey, WB2EVF □

QCWA

(continued from page 28)

QCWA members are reminded to participate in the 27th annual QSO parties: CW — 0001 UTC, Saturday, 11 February to 2000 UTC, Sunday, 12 February. SSB — 0001 UTC, Saturday, 10 March to 2000 UTC, Sunday, 11 March.

Recently, the *Omaha World Herald* interviewed QCWA Director, Leo Myerson, W0GFQ, to establish whether or not his was the first radio signal broadcast from Council Bluffs, Iowa.

Way back in 1924 at the age of 13, Myerson, who was destined to found World Radio Laboratories, went on the air with a homebrew transmitter. He spun a few records, played the piano and threw in a few news reports and weather forecasts. It took only two weeks in those days for the "Feds" to descend and notify the budding genius that he was operating an illegal communications device. In those early days, who knew there was such a thing as a license to get on the air?

Although Myerson has never tried to claim fame as having been the first broadcaster in Council Bluffs, he modestly admits having listened to a crystal set since he was 9, and had there been other broadcasters in the area, he surely would have heard their signals. Council Bluffs should be most proud of this local prodigy.

QUA? A new service is being provided by QCWA News for amateurs who are looking for ancestors, descendants or perhaps old buddies. Inquiries — one item to a page, printed or typed with surnames capitalized — should be addressed to Henry Hively, W3PTV, 4111 Tuxey Ave., Pittsburgh, PA 15227. The inquirer must identify himself, and a slight charge may be required of non-members. □

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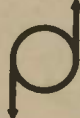
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Ron Flynn, KB8LU

I have recently had the chance to review the final version of PICVIEW, the software for the Magnum Distributors SSTV system for TRS-80C and TDP-100 computers. The Magnum system is a hardware/software package. Besides SSTV, the complete system includes full CW and RTTY operation and FAX receive.

The software portion of the system, PICVIEW, is provided on EPROM at no additional cost. PICVIEW was written and developed by Charles (Ben) Blish, N4EJI. There are a number of SSTV programs currently available for various computers. PICVIEW, however, is by far the most versatile, sophisticated and comprehensive SSTV program written for any computer. What is amazing is that PICVIEW has 75 separate functions, many additional subfunctions within the 75, an upper and lower-case

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graphics character generator, and resides in only two 4K EPROMS.

Hardware

The hardware portion of the Magnum SSTV system is in two parts.

The CMJ-IF is a multi-function plug-in cartridge which plugs into the game port of the TRS-80C and TDP-100. First, it serves as an extender. Program paks and a disk controller can plug right into the CMJ-IF. In addition, up to 8K of EPROM/ROM space is provided. The CMJ-IF has two parallel ports and one serial communications line.

There is an optional speech synthesizer

available which converts text and print statements to speech.

The CMJ-TU is the second part of the system, and it is connected to the CMJ-IF by a supplied cable. It has its own on-board 6809 microprocessor which communicates with your computer and controls the various functions and modes of operation.

The CMJ-TU comes assembled and tested in its own case. No adjustment or alignment is required. Everything is crystal-controlled. The only control supplied and needed is the power on/off switch! There is a 16-element bar graph frequency display for SSTV. There are RTTY mark and space LEDs plus mode indicator LEDs.

The CMJ-TU can also serve as a simplex answer or originate modem, and with proper owner supplied software, could serve as a "mailbox". A 64K TRS-80C or TDP-100 computer is required.

There are a number of other products being used with the TRS-80C for SSTV, and they have been around for a couple of years or more. Various interfaces are combined with a variety of other boards in many configurations and hooked up to the computer to make a "system". When all is assembled, tested and aligned, they work well.

The problems and agonies of SSTVers in getting all those pieces of hardware together and working is well documented. Hardly a day goes by without someone getting on the air with a problem with their system. Some have had problems for months and still their systems aren't working. Some have sent their hardware to others to try and fix it, and others have given up. Many have found out that it is not easy and not for everyone. Others are quite happy.

I've received over 30 letters and phone calls on this one subject alone! I've used the term "hodgepodge" to describe some of these systems.

This is *not* the case with the Magnum system. It is assembled and tested. Plug it in and away you go!

Software

I'm afraid that even if I had devoted this entire column to the PICVIEW software, without mentioning the hardware, I couldn't do it justice in the space I am allotted. With PICVIEW, you can receive and transmit all of the popular SSTV modes: 8-second B&W, two versions of 17-second B&W, 34-second B&W, RGB frame-sequential color, 25.5-second single-frame color, and the new 12-second Robot color. There are five separate picture buffers to work with.

A variety of grey scales, both horizontal and vertical, can be generated. Graphics can be generated in a wide

variety of sizes and can be placed anywhere on a frame. In addition, the graphics can be overlaid onto a picture or grey scale. You can also quarter-frame pictures.

There are two helpful menus, and the program documentation is thorough and well-written, to guide you through the various functions and operations.

The main menu shows 26 basic functions, labeled A-Z; many of them were mentioned above. Some of these functions operate with one keystroke, and others require an additional command or two or more information before operating. Under the commands of A-Z, the letter J provides a series of 41 additional functions. This is where the picture processing and enhancement and other sophisticated functions are activated.

There are seven different grey scale possibilities and a color bar. You can convert a picture in one or more of the buffers to another mode or format and transmit it over the air. Thus a 17- or 34-second picture can be converted to 8 seconds and vice versa. In addition, a 25.5-second single-frame color picture received out of color sync, can be resynced or restored to its original colors within the buffers of the system.

There are some very sophisticated picture enhancement and processing functions included. People commonly send the green frame of a RGB color picture as the B&W equivalent of that picture. Though in most cases it is close, it is not true B&W. PICVIEW can convert an RGB color picture into a true B&W picture. You can do histograms and computerized contrast enhancements. You can process the brightness and contrast levels of pictures in both directions. Some noise elimination is possible with pixel averaging.

You also have the capability to zoom or enlarge a picture many times over. Unlike zooms of other SSTV systems which turn out blocky and digitalized, the Magnum system adds comparable pixels, and no blockiness or digitizing can be noticed even if the picture is blown up many times.

I certainly have not covered all the features of this system, but I do want to mention picture printing before I close.

The contents of a buffer can be printed on an Epson MX-80 printer with a one-keystroke command. This, in combination with the zoom feature of this system, enables one to print poster-sized SSTV pictures with no loss of resolution or quality!

For more information about this remarkable SSTV system, write to Magnum Distributors Inc., 1000 S. Dixie Highway, West Unit #3, Pompano Beach, FL 33060. □

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tenna bearing, long-path antenna bearing, and the distance in miles and kilometers.

Prefix Locator and MUF Forecaster is available in two versions for the VIC-20: the 16K version, which uses all the RAM in a VIC expanded with a 16K expansion cartridge, and the 28K version, which has all the prefixes and countries in the world, and many of the large cities around the world, also all the states of the USA and many of the large cities across the USA. There is enough free RAM to add many of your own listings.

Prefix Locator and MUF Forecaster Program is available on cassette tape for \$12.95 (C64 version) and Locator/MUF I (VIC 16K) for \$9.95. Locator/MUF II (VIC 28K) sells for \$12.95. Please specify which version and computer type when ordering. Add \$2 for shipping and handling and \$3 additional for diskette

orders. A catalog is available from RAK Electronics, Box 1585, Orange Park, FL 32067-1585.

6-meter amplifier

Mirage Communications has recently been granted FCC-type acceptance on their new 6-meter amplifier: the A1015.

The solid-state A1015 is rated at 150 watts out for 10 watts in and comes with a list of features that include a built-in receiver pre-amp, "all-mode operation" (FM, SSB and CW), and antenna changeover capabilities.

The A1015 has been designed to fill the growing demand for a 6-meter amplifier that is compatible with a variety of different 10 watt



radios now in use.

The retail price is \$279.95. For more information on the A1015 or any Mirage Communications product, contact your local dealer or write to: Everett Gracey, Mirage Communications, P.O. Box 1393, Gilroy, CA 95020.



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The replaceable front panel is bolted in with steel clamps for easy low-cost station updates over the years. Front panel holes are precisely cut by computerized X-Y wood-cutting table, hole/equipment gaps are less than 1/32 inch. The price includes: front panel cut for your station; hidden accessory shelf for power supplies, dummy loads, etc.; pre-assembled rear equipment support system (rigging); teak mica; casters; multiple tap station ground bus; one set of puppets of your equipment and half-scale front panel grids for station layout; station layout and design assistance.

Corner units are available (\$150) to integrate standard width consoles into "L" & "U" and circular configurations. Options are: 1000 micas to match your decor; drawer/bookshelf combination; pencil drawer in desk's front edge; keyboard cut-out in desk top; shelf under desk; desk top extension into the front panel, dolly for floor standing amplifiers; temperature-controlled fan-cooling system; wire duct, labels, ties, etc. Custom work to make the basic console just right for your station.

For additional information, contact Larry Kushner, WA6BKC/4, at Break Communications Systems, Inc., 5817 SW 21st St. Hollywood, FL 33023; (305) 989-2371.

Prefix locator, MUF forecaster

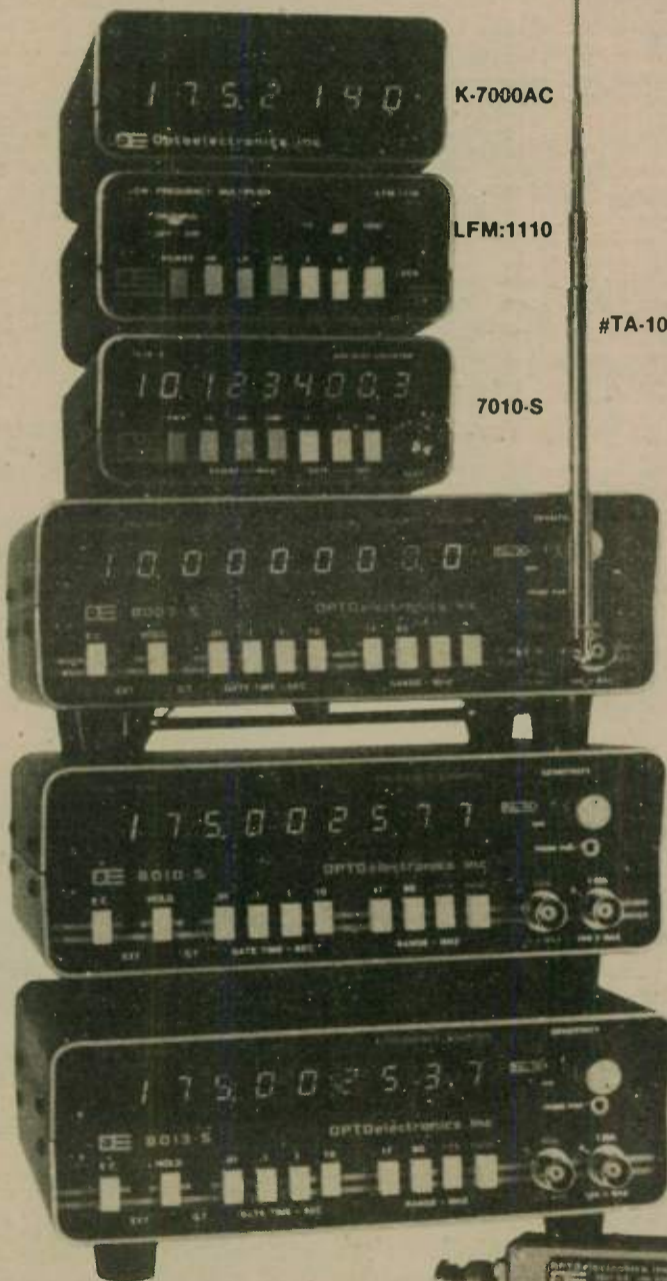
The Prefix Locator and MUF Forecaster Program for VIC-20 and Commodore 64 was designed to give the Amateur Radio operator a quick and easy method of locating any prefix. After the prefix is located, you can enter the MUF portion of the program and determine the best frequency for QSO capability. Prefixes can be located by entering either the prefix or the name of the city, state or country. You will see these different modes of prefix location in the main menu.

After the prefix or country is located from the data statements, the computer will display the name of the country, the prefix, the an-

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#LFM:1110 115VAC/12VDC \$150.

MODEL 7010-S 10 Hz to 600 MHz counter. 50 Ohm & 1 megohm inputs via BNC type connectors on rear panel. ±1 PPM TCXO standard ±0.1 PPM TCXO time base optional for greater accuracy. 10 mV average sensitivity. Very compact 5 1/2 digit counter. Size 2" H x 4" W x 5" D, 1 lb.

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MODELS 8007-S, 8010-S, 8013-S Deluxe series with frequency ranges of 10 Hz to 700 MHz, 1 GHz and 1.3 GHz. Standard features include: external clock input/output, excellent sensitivity, sealed ±1 PPM 10 MHz TCXO time base, 4 gate times, 9 digit resolution to 175 MHz, front panel power jack for optional Broadband Preamp accessory, 115 V AC or 12 V DC operation, high quality compact construction housed in rugged aluminum cabinet. Optional features: internal Ni-Cad rechargeable battery operation, precision ±0.1 PPM TCXO or ±0.05 PPM proportional oven (OCXO) time base. All time base oscillators, including the standard TCXO, have 10 turn calibration adjustment accessible from rear panel. Size 3" H x 7 1/2" W x 6 1/2" D. 2 3/4 lbs.

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		FREQ	STAB-DESIGN	BELOW 500 MHz	ABOVE 500 MHz		12 MHz	17 MHz	60 MHz	175 MHz					MAX FREQ
K-7000-AC	550 MHz	5.24288	±1 PPM-RTXO	15 mV -24 DBM	N/A	(2) .1, 1 SEC	10 Hz				100 Hz	No	No	Yes	No
7010-S	600 MHz	10.0 MHz	±1 PPM-TCXO *±0.1 PPM-TCXO	10 mV -27 DBM	20 mV -21 DBM	(3) .1, 1, 10 SEC	.1 Hz	1 Hz	10 Hz		Yes	No	Yes	No	
8007-S	700 MHz		±1 PPM-TCXO			(4)									
8010-S	1 GHz	10.0 MHz	*±0.1 PPM-TCXO *±0.05 PPM-OCXO	10 mV -27 DBM	20 mV -21 DBM	.01, 1, 1, 10 SEC	.1 Hz	1 Hz	10 Hz	Yes	Yes	Yes	Yes	Yes	
8013-S	1.3 GHz														

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Woodall Software

Gary Woodall, WD9ECD, announces a new concept in Amateur Radio and computer interfacing. RTTY 2.0 is a SOFTWARE-ONLY radioteletype transmit and receive program for the Radio Shack Model III and Model IV microcomputers.

This unique program uses the standard TRS-80 cassette I/O ports for input and output connections to a communications receiver and transmitter (or transceiver). No terminal unit is required!

This machine language program has special routines that handle tone and shift decoding of received RTTY signals. The program also generates the normal tones and shifts used in amateur RTTY communications (2125 Hz with 170 Hz shift).

Transmit and receive speeds of 60 and 100 wpm are selectable from the computer keyboard. Keyboard selection is also available for normal and inverted tone decoding. High and low-frequency receive tones are also supported.

A built-in spectrum analyzer gives a visual indication as an aid for proper receiver tuning. The program has a split-screen display that allows transmit text to be composed on half of the screen while received text is being decoded and displayed on the other half.

The tone output is connected to the microphone input of the radio transmitter. Most rigs can handle the simulated (stair-stepped) sine wave without any other components being required. A small capacitor may be required for some installations. Patch cords and/or connectors are all that is required to interface your ham transmitter/transceiver or communication receiver to your TRS-80 Model III computer.

A special receive-only version for shortwave listeners is nearing completion. The SWL version will feature multiple tone and shift decoding as well as ASCII and Baudot codes which allow the interception and decoding of amateur, commercial and governmental transmissions.

The RTTY 2.0 program is being offered at an introductory price of \$34.95 until 01 February 1984, at which time the price will go to \$39.95 plus shipping and handling. Write or call for club discount prices.

To order, send \$34.95 plus \$2.50 S&H to Woodall Software, P.O. Box 284, Plainfield, IN 46168. Questions can be answered by calling (317) 271-2565 Monday through Saturday. □

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International IARS/CHC Contest

The International Amateur Radio Society and Certificate Hunters Club are pleased to announce their semi-annual contest. It will be held 10-11 March (CW) and 17-18 March (SSB); both will last 48 UTC hours, starting 0000Z.

Frequencies: CW — 70 kHz from the bottom of the band; SSB — 3960, 7260, 14300, 21360, 28600.

Exchange: Work stations calling "CQ CHC". Signal report, IARS and/or CHC number, and state, province or country. (Ex: 599 IARS 955 CHC 175 CA)

Scoring: Work stations once per band, no repeater or crossmode. Multiply QSO's × countries × IARS/CHC members worked. (A member of both divisions will count as two multipliers.)

Entries: Mail by 01 June 1984, to Ted Melinosky, K1BV, 525 Foster St., South Windsor, CT 06074, with large SASE for results.

Awards: Engraved plaque to highest overall score. Certificates awarded to highest scorer per band and to the top 10 runners-up.

Logging: Must show date/time in GMT, station worked, exchanges sent and received, QSO points claimed and final score. All entries with 100 or more QSO's include checksheet. □

1984 Tennessee QSO Party

The 14th Annual Tennessee QSO Party, sponsored by the Tennessee Council of Amateur Radio Clubs and directed by the Oak Ridge ARC, will be held 17-18 March.

Operating periods: Saturday, 17 March, 2100Z to Sunday, 18 March, 0500Z, and from 1400Z to 2200Z on 18 March.

Exchange: Tennessee stations give a signal report and county. Out-of-state stations send signal report and state, province or country.

Suggested frequencies: CW — 1815 kHz and approximately 50 kHz from bottom of each

band. Phone — 1860, 3980, 7280, 14280, 21380, 28580 kHz. Novice/Technician — 3725, 7125, 21125, 28125 kHz. A minimum operating time of 10 minutes must be logged for each change of band or mode.

Scoring: 1.5 pts. per CW contact; 1 pt. for each phone contact. Combine phone and CW score, unless you wish to compete for phone-only or CW-only awards.

Multipliers: Out-of-state stations multiply QSO points by the total number of Tennessee counties worked. Tennessee stations multiply QSO points by the sum of the following worked: states (50), Tennessee counties (95), VO and VE1-7 (7). DX stations count only for points — not as multipliers.

Bonus points: Portable and mobile operation: Add to total score a bonus of 500 points for each county you operated in outside of home county. A minimum of 10 contacts must be made in each county to qualify for bonus points. Note: The Committee will endeavor to have mobile operation in all 95 Tennessee counties!

Miscellaneous: Mobiles compete against mobiles, portables against portables. No county-line operation for multiple contacts. Portable stations must set up per Field Day rules. Single transmitter entries only. Repeater contacts not allowed. No list operation permitted. No CW contacts in phone bands. Contestants may work the same station on different bands, modes and counties in Tennessee.

Logs: Enter date/time (GMT), stations worked, band, mode, exchange and score. Logs must be legible to avoid disqualification. Submit crosscheck sheets (similar to ARRL form CD77) for each band and mode if over 100 contacts on a band/mode.

Awards: Plaques to highest-scoring stations in the following categories: 1) Tennessee home station, 2) Tennessee mobile station, 3) Tennessee portable station, 4) out-of-state station.

First Place certificates to highest-scoring stations in the following categories: 1) Tennessee phone-only station, 2) Tennessee CW-only station, 3) Tennessee Novice/Technician station, 4) each state, 5) Canada, 6) DX entry, and 7) out-of-state Novice/Technician station.

Participation certificate to all stations submitting logs with at least 25 contacts.

Logs must be postmarked no later than 01 May 1984. Send SASE (business-size) with your log to ensure return of log (if desired), complete results and any certificates earned. Mail to: Oak Ridge ARC, ATTN: Mel Wardell, K4PJ, P.O. Box 489, Oak Ridge, TN 37830. □

YL Anniversary Party results

CW: 1st Place (Gold Cup) — M. Paulina Bloemen, DJ0EK, 1,500; 2nd Place (Certificate) — Doris Bedford, K4AOH, 1,332; 3rd Place (Certificate) — Martha King, WD4NKP, 1,250.

Phone: 1st Place (Gold Cup) — DJ0EK, 13,688; 2nd Place (Certificate) — WD4NKP, 13,360; 3rd Place (Certificate) — Betty Collins, KC9V, 13,110.

Top combined Phone/CW scores: DX World-wide Hagar Award — DJ0EK, 15,188; Corcoran Award — WD4NKP, 14,610. Other combined scores: KM8E, 9,680, NY4H, 6,409; N4DDK, 5,990; WD5FQX, 5,010; CT1YH, 4,862; K4AOH, 4,252; WD8DQG, 4,012; WA2NFY, 3,959; NA0V, 3,447; K4LMB, 3,340; DF6UI, 2,002; VK3KS, 1,614.

CW scores: *KY2L, 146; *WA2NFY, 522; *W3CDQ, 252; *K4AOH, 1,332; *K4LMB, 540; WD4NKP, 1,250; *N4DDK, 350; *CT1YH, 1,187; DF6UI, 507; *DJ0EK, 1,500; *NY4H, 616; *K8ONV/4, 688; *WD5FQX, 60; *KA5GIS/7, 625; *KA6SOC, 337; *KM8E, 840; *WD8DQG, 15; *11MQ, 748; JA2AEQ, 105; SP2FF, 50; *WD8IKC, 510; *WD8MEV, 725; *W8YL, 617; NA0V, 35; *VE2DPO, 455; *VE3KTX, 356; *VE7BIP, 750; SM5CXC, 24; VK3KS, 552.

Phone scores: *WA1UVJ, 4,180; *WB1EHS, 212; *KY2L, 2,138; *WA2NFY, 3,437; WB3CQN, 6,812; WA3HUP, 8,690; K4AOH, 2,920; *WD4NKP, 13,360; *WN4VAU, 3,467; NY4H, 5,793; *N4DDK, 5,640; K4LMB, 2,800; *WD5FQX, 4,950; W2GLB/5, 5,145; *K6KCI, 1,020; *WA7TLL, 495; KU7F, 3,000; *WD8DQG, 3,997; *KM8E, 8,840; *WD8MEV, 8,877; KC9V, 13,110; KL7P/0, 1,800; K0EPE, 1,960; *NA0V, 3,412; *VE1BWP, 9,693; *VE3KTX, 175.

*VE7BIP, 1,960; *CT1YH, 3,675; *DA2YL, 2,755; *DF3BN, 460; DF6UI, 1,495; *DJ1TE, 11,632; DJ0EK, 13,688; *DK1HH, 1,260; DK6FM, 2,850; *DK9ZL, 1,430; *F5RC, 1,150; *G4EZI, 2,340; *G4GAJ, 3,770; *HB9ACO, 2,580; 11MQ, 364; *IS0LLJ, 390; *IT9JLA, 4,725; *SM5CXC, 665; SM0HNV, 2,625; *4X6DW, 3,442; *VK3KS, 1,062; *VK3CYL, 960; *VK3DYL, 892.

Check logs: OZ1EZC, G8LY, N7COR, JA1AEQ, W7NJS, ZS5VF, PA0HIL, SP9LDQ, KB2HM, W4DEV, G4ESR.

(*Indicates low power multiplier) □

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HAMFESTS



Indiana

The Martinsville Hamfest will be held on Sunday, 11 March. Sponsored by the MORGAN COUNTY REPEATER ASSOCIATION CLUB, it will be held indoors at the Indiana State Fairgrounds Pavilion Building in Indianapolis.

Admission is \$4 at the door. Premium table \$30; flea market table \$8; flea market space without table \$1. All tables must be reserved in advance. Set-up for reserved tables will be available Saturday, 10 March, 1:00-9:00 p.m. Space set-up will be Sunday, 11 March, 6:00-8:00 a.m. Free paved parking.

Talk-in on 147.21 and 146.52 simplex.

For table reservations or information, send SASE before 01 March to Aileen Scales, KC9YA, 3142 Market Place, Bloomington, IN 47401. □

Illinois

The LIBERTYVILLE AND MUNDELEIN ARS announces its annual hamfest — LAMARSFEST 1984, to be held Sunday, 25 March, at the Lake County Fairgrounds in Grayslake, Illinois, located at Routes 45 and 120.

Set-up begins at 6:00 a.m. Open to public at 8:00 a.m. Swapfest area tables (8 ft.) are \$5 each. Commercial exhibitors contact LAMARS for info. Reservations encouraged (sellout last year). Tickets are \$2 in advance, \$3 at the door. Free parking. Food available on premises.

For tickets, table reservations or exhibitor information, send SASE to: LAMARS, P.O. Box 751, Libertyville, IL 60048. □

Massachusetts

The FRAMINGHAM ARA, Inc. will hold its annual spring flea market on Sunday, 01 April. This is the largest indoor ham flea market in New England. Because of the overwhelming success of our previous flea markets, we will remain in the new facility — the Framingham Civic League Building, 214 Concord Street, (Rte. 126), downtown Framingham.

Doors open at 10:00 a.m. (Sellers may begin set-up at 8:30.) Admission is \$2 and tables are \$10 — pre-registration required. Radio equipment, computer gear, food in-house and bargains galore!

Talk-in on 147.75/15 and 52.

Contact Jon Weiner, K1VVC, 52 Overlook Dr., Framingham, MA 01701; (617) 877-7166.

Missouri

The PHD AMATEUR RADIO ASSOCIATION, Inc., of Liberty, Missouri will sponsor the 1984 Missouri State ARRL Convention (15th Annual PHD Hamfest) on Saturday and Sunday, 7-8 April, in the Trade Mart Building, at the Downtown Kansas City, Missouri Airport.

There will be a complete program of forums: ARRL, legal, DX, XYL; commercial booths; large flea market; 200 tables — all inside the 45,000 sq. ft. building. Unlimited free parking adjoins the site. RV's are welcome, but no hookups. Missouri-Kansas Amateur of the Year and open CW contest winners to be awarded plaques.

Doors open 10:00 a.m. to 5:30 p.m. both days. Commercial exhibitors set up 7:00-9:00 p.m. Friday or 7:00-10:00 a.m. Saturday (may drive into booth and unload). Swappers — 9:00 a.m. Saturday.

There will be a Saturday night banquet at the world-famous Gold Buffet. Speakers will be ARRL Counsel Christopher Imlay, N3AKD, Paul Grauer, W0FIR, ARRL Midwest Director, and others. On Sunday, a QCWA and a YL luncheon will be held. Missouri-Kansas Repeater council meeting on Sunday.

Registration \$4 for both days; banquet tickets \$10.50; swap tables \$10 for both days (includes one registration per table). Those desiring banquet tickets and swap tables are urged to order in advance. All pre-registrations will be held at the door. (SASE for confirmation if desired.)

Talk-in 146.34/94.

Send registrations or requests for information to PHD Amateur Radio Association, Inc., Liberty, MO 64068-0011, or call (816) 781-7313, 452-9321. □

New Jersey

The GLOUCESTER COUNTY ARC will hold its 25th Anniversary Open House on Wednesday, 07 March, 8:00 to 10:00 p.m., at Clearview Regional High School, Jefferson, New Jersey.

Talk-in on 223.36/224.96 or 147.18.

For more information, write to Gloucester County ARC, P.O. Box 370, Pitman, NJ 08071. □

SHORE POINTS ARC, Inc., invites you to Springfest '84 to be held Saturday, 10 March, from 9:00 a.m. to 4:00 p.m. at the Atlantic County 4-H Center, Egg Harbor City, New Jersey — approximately 15 miles west of

Atlantic City. Buyers and sellers can make their deals inside 8,000 square feet of heated indoor selling space (covered tailgating available weather permitting). Sellers \$5 per space (bring own table); buyers \$2.50 advanced, \$3 day of hamfest.

For more information, write to SPARC, P.O. Box 142, Absecon, NJ 08201. □

Ohio

The LAKE COUNTY ARA will present their 5th Annual Lake County Hamfest and Computer Fest, Sunday, 25 March, at Madison High School, Madison, Ohio.

Doors open for exhibitors at 5:30 a.m. and for the public at 8:00 a.m. at this large indoor

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Matches everything from 1.8 to 30 MHz: dipoles, inverted vee, random wires, verticals, mobile whips, beams, balanced and coax lines.

Built-in 4:1 balun for balanced lines. 1000 V capacitor spacing. Black. 11 x 3 x 7 inches. Works with all solid state or tube rigs. Easy to use anywhere.

MFJ-949B 300 WATT DELUXE VERSA TUNER II

\$139⁹⁵ MFJ's best 300 watt Versa Tuner II.

Matches everything from 1.8 - 30 MHz, coax, randoms, balanced lines, up to 300W output, solid state or tubes.

Tunes out SWR on dipoles, vees, long wires, verticals, whips, beams, quads.

Built-in 4:1 balun. 300W, 50-ohm dummy load. SWR meter and 2 range wattmeter (300W and 30W).

6 position antenna switch on front panel, 12 position air-wound inductor; coax connectors, binding posts, black and beige case. 10 x 3 x 7 in.

6 position antenna switch on front panel, 12 position air-wound inductor; coax connectors, binding posts, black and beige case. 10 x 3 x 7 in.

\$329⁹⁵ Meet "Versa Tuner V". It has all the features you asked for, including the new smaller size to match new smaller rigs - only 10 3/4"W x 4 1/2"H x 14 7/8"D.

Matches coax, balanced lines, random wires — 1.8 to 30 MHz. 3 KW PEP - the power rating you won't outgrow (250 pf-6KV caps).

Roller inductor with a 3-digit turns counter plus a spinner knob for precise inductance control to get that SWR down to minimum every time.

Built-in 300 watt, 50 ohm dummy load, built-in 4:1 ferrite balun.

Built-in 2% meter reads SWR plus forward and reflected power in 2 ranges

MFJ-940B, \$79.95, 300 watts, SWR/Wattmeter, antenna switch on rear. No balun. 8 x 2 x 6 in. eggshell white with walnut grained sides. MFJ-945, \$79.95, like MFJ-940B with balun, less antenna switch. MDJ-944, \$79.95, like MFJ-940B with balun, antenna switch on front panel, less SWR/Wattmeter. Optional mobile bracket for 940B, 945, 944, \$5.00.

MFJ-900 200 WATT VERSA TUNER

Matches coax, random wires 1.8-30 MHz. Handles up to 200 watts output, efficient airwound inductor gives more watts out. **\$49⁹⁵** (+\$4)

5x2x6 in. Use any transceiver, solid state or tube. Operate all bands with one antenna.

OTHER 200 WATT MODELS: MFJ-901, \$59.95, like 900 but includes 4:1 balun for use with balanced lines.

MFJ-16010, \$39.95, for random wires only. Great for apartment, motel, camping operation. Tunes 1.8-30 MHz.

MFJ-962 1.5 KW VERSA TUNER III

Run up to 1.5 KW PEP **\$229⁹⁵** (+\$10)

and match any feedline continuously from 1.8 to 30 MHz; coax, balanced line or random wire.

Built-in SWR/Wattmeter has 2000 and 200 watt ranges, forward and reflected power. 2% meter movement. 6 position antenna switch handles 2 coax lines (direct or through tuner), wire and balanced lines. 4:1 balun 250 pf 6 KV variable capacitors. 12 position inductors. Ceramic rotary switch. All metal black cabinet and panel gives RFI protection, rigid construction and sleek styling. Flip stand tilts tuner for easy viewing. 5 x 14 x 14 inches.

MFJ-989 3 KW ROLLER INDUCTOR VERSA TUNER V

(200 and 2000 watts). Meter light requires 12 VDC. Optional AC adapter MFJ-1312 is available for \$9.95.

6-position antenna switch (2 coax lines, through tuner or direct, random/balanced line or dummy load). SO-239 connectors, ceramic feed-throughs, binding post grounds.

Deluxe aluminum low-profile cabinet with sub-chassis for RFI protection, black finish, black front panel with raised letters, tilt bail.

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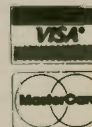
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location. We'll close at 4:00 p.m. Admission is \$3 advance and \$3.50 at the door. Table and display space is \$5 for 6 ft. table, \$6.50 for 8 ft. table.

Plenty of free parking and all display space is indoors at this location, just 40 miles east of Cleveland.

Check-in and talk-in on 147.81/21. Main prize drawings start at 3:00 p.m.

Information and reservations are available by sending SASE to: Lake County Hamfest Committee, P.O. Box 150, Mentor, OH 44061; (216) 953-9784. □

The 1984 Hamvention will be held 27-29 April, at the Hara Arena and Exhibition

Center in Dayton, Ohio.

Among the events to be featured at the hamvention are: technical, ARRL and FCC forums; a giant three-day flea market; new products and exhibits; YL forum; CW proficiency awards; Amateur of Year Award and Special Achievement Awards; women's activities; and a grand banquet.

Admission price is \$7.50 in advance, \$10 at door (valid for all three days). Cost of banquet is \$14 in advance, \$16 at door. Flea market space is \$15 in advance (valid all three days). Send checks for advance registration to: Dayton Hamvention, Box 2205, Dayton, OH 45401.


Seating will be limited for the grand banquet and entertainment on Saturday evening,

so please make reservations early. If you have registered within the last three years, you will receive a brochure in January. If not, write Box 44, Dayton, OH 45401.

Nominations are requested for Radio Amateur of the Year and Special Achievement Awards. Nomination forms are available from Awards Chairman, Box 44, Dayton, OH 45401.

For special motel rates and reservations, write to Hamvention Housing, Box 1288, Dayton, OH 45402. **NO RESERVATIONS WILL BE ACCEPTED BY TELEPHONE.** All other inquiries write Box 44, Dayton, OH 45401, or phone (513) 433-7720. Special flea market phone (513) 223-0923. □

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