



# Worldradio

international friendship · local public service

## Hams Help Rapid City Flood Victims

"Antibiotics being flown in." - "Two Army medevac helicopter teams are being sent from Fort Carson." - "A medical team is coming from Houston."

Such is the type of messages that could be heard on the 20 meter amateur band following a flood in the Rapid City, South Dakota area that left over 200 dead and 400 missing.

The outgoing traffic told of "hospitals overcrowded, schools are being used as hospitals." - "five feet of water in the downtown area." - "The south and south-east portions got it the worst." And there was the most tragic answer of all when an inquiry came in for a particular location -- "That area was wiped out."

In the midst of tragedy the Amateur Radio Service responded as they always have. The traffic on 14.278 MHz would go - "There is a need for insulin." A short time later the answer would come back, "Lilly and Company are donating it through the American Red Cross of Indiana."

At 2030Z the word came out "50-60 are dead, 350 missing" by 2114Z the scope of the disaster became more apparent with "105 dead, 500 missing". An inquiry to determine the amount of medical help needed resulted in an answer at 2137Z of "900 injuries." At 2140Z a call for food and clothing came out of the stricken area.

Worried relatives of people in the Rapid City area would call local Red Cross chapters to see if any information was available. Red Cross officials would contact amateurs. Due to the scope of the disaster and the destruction of local communication facilities coupled with the heavy emergency traffic, a 48-hour moratorium was placed on requests for individual welfare messages.

In addition to the emergency traffic, location queries such as "800 block on 4th Street" were taken in by Dean Albertsen, KØTVJ, on 20 meters, he would forward the query into Rapid City on 40 meters, receive the reply back on 40 and put out the answer on 20 meters. He was greatly assisted by Al Kalinauskas, WB-8HVJ, (see other story).

The anxiety of a nation was reflected in the calls spanning the U.S. from New York to Hawaii.

Amateur Radio's legacy of public service resulted in a smooth, professional communications service operating during a disaster and bringing aid to the victims.



by Ed Gray, WAØCPX

The Pennington County Amateur Radio Emergency Corps activated around 10 p.m. Friday, June 9th. The water was very high at this time. At 10:45 p.m. due to the extreme velocity and volume of the water, the Canyon Lake Dam across Rapid Creek where it enters Rapid City gave way and sent a wall of water downstream in addition to the swollen flood water already flowing. Extreme flash flooding also occurred on Box Elder Creek north of Rapid City and on Spring Creek south of Rapid City.

An area of approximately five blocks on either side of Rapid Creek was severely damaged, and a lot of that area was completely destroyed. Large areas lost electrical service, telephone service, and gas service. Numerous fires were ablaze in the flood area during and after the flood for several hours.

At 2:00 a.m. the full impact of the seriousness of the flooding was being realized by the amateurs on 3.955 MHz. Stations on at this time were: Steven Crecelius, WAØEYY; William Van Vickle, WAØBGL/Ø; Marvin Vosika, WØHYQ, Ed Gray, WAØCPX; Edith Gray, WAØ-UFS; Arthur Exe, WØOQQ, and Fred Lehmann, Sr., WAØUEN.

Several hams played an important part

in getting KOTA on the air. They could not get on from the studio due to losing their remote lines so they began broadcasting from the transmitter site as well as activating the Emergency Broadcast System from the Emergency Operations Center at the court house.

For the first few hours they were the only source of information for the public of Rapid City. Hams helping to get the necessary equipment and personnel to the transmitter site to get KOTA on the air were: Ben Rinehart, WØEJM, and the before mentioned WAØEYY, WØOQQ, and WAØBGL/Ø.

WAØCPX was responsible for getting on the air from the EOC at the court house. WAØCPX/Ø went on the air on 2 meter FM at 3:00 a.m. the morning of June 10, Saturday. This station was the link to 75 meters through WAØUFS, (wife of WAØCPX) and on 40 meters to Elmer Meyer, KØCXL. The amateur radio station at the EOC station at the court house handled all 80 and 40 meter traffic in and out of the court house. The 2 meter FM station at the court house also handled all the traffic from the 2 meter mobiles in and out of the court house. The court house station was operated for 64 straight hours by David Habicht, WAØ-ZCE; Gary Johnson, KØKLR; Richard (Turn to page 4, please)

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Worldradio is two-way communications. Send in Amateur Radio news and information. Share your knowledge with your fellow amateur and Worldradio reader. Photographs will be cared for properly and returned. We are most interested in your comments and suggestions. We would appreciate being placed on the mailing lists of Amateur Radio club bulletins.

Worldradio has a Swan 270 Cygnet (220 v.) transceiver, in carrying case, available for loan to medical personnel, relief agency staff, etc., going overseas on the short-term volunteer tours.

Subscriptions and advertisements, most essential to the support of this project, will be very thankfully received.

**COMMUNICATIONS**



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## What's Happening

contents

Newsfront (3)

Rapid City Flood (4)

California Flood (8)

Editorial (10)

Washington Flood (12)

LMRE Convention (14)

FM: West (16)

American Samoa, KS6 (18)

(2) Geri McGlynn, WA6CNW (22)

Report to the Readers (24)

Vic Olacke, VE3IG (25)

MARN News (26)

Darleen, WA6FSC, marries (28)

DX Den (30)

IMRA (32)

200 Meters and Down (34)

Letters (36)

The Mart (40)



## FCC

VALINDA, CALIF., AMATEUR RADIO OPERATOR'S LICENSE SUSPENDED. Peter J. Metz, holder of an Amateur General Class Operator license, WB6LXJ, of Valinda, Calif., has been notified of suspension of his license for violation of Section 97.7 (a) of the rules by operating the station on a frequency reserved for use by licensees holding an Amateur Extra Class License, and for repeated violation of Section 1.89 of the rules by failing to reply to official correspondence. The license was suspended for the balance of the license term. Metz may make written application for hearing within 15 days in which the suspension order will be held in abeyance until conclusion of proceedings on the application. (Action by the Chief, Safety and Special Radio Services Bureau, June 6, 1972, by Order.)

DONALD R. TARANTO, MARLBORO, MASS., licensee of Amateur radio station WA1GBN. Ordered to show cause why the license should not be revoked for repeated violation of Section 308(b) of the Communications Act by failing to reply to official communications requesting information (SS-435-72).

## Handi-Ham Leader Dies



Ned Carman, WØZSW, one of the founders of the Handi-Ham System of Minnesota died unexpectedly at his home in Rochester, Minnesota, June 1. His death came less than a month after he was honored with a special Founder's Day ceremony by members of the Handi-Ham System

Ned was instrumental in founding and continuing support of the Handi-Hams, an organization composed of handicapped, and those who assist the handicapped (termed verticals), amateur radio operators throughout Minnesota.

The funeral service was unique in that it was the first service for a lay person conducted at Assisi Heights in Rochester, the motherhouse of the Sisters of St. Francis.

During the service Amateur Radio was praised for its humanitarian aspects.

The combined Catholic and Episcopal service, conducted by Rev. Thomas Bloof, (Turn to page 28, please)

## ARRL

OFFICIAL BULLETIN #376 JUNE 1, 1972 Long expected changes in Canadian rules recently became official with publication in the Canada Gazette, amending the Radio Regulations. The minimum age requirement of 15 years has been dropped. The revised schedule for the 1.8-2.0 MHz band page 78 November QST was formalized. The 26.96-27.0 MHz remnant of the old 11 meter band was withdrawn from use by amateurs and now is part of the General Radio Service allocation, analogous to the Citizens Radio Service in the United States.

OFFICIAL BULLETIN #377 JUNE 8, 1972 Because of recent NASA weather satellite launch changes, the piggyback launch of Oscar 6 is now expected later this year. A change from the Itos-D to Nimbus-E mission is likely. Details will appear in a future issue of QST. If you're not yet ready to use the high-in-the sky 2 to 10 meter repeater, check the articles in March, page 58, and May page 69, QSTs for further information.

OFFICIAL BULLETIN #378 JUNE 15, 1972 The Director General of the Posts and Telegraphs Department of Viet Nam has notified the ITU that they have no objections to communications between XV5AC and amateur stations outside the republic.

OFFICIAL BULLETIN #379 JUNE 22, 1972 All amateurs who participated in the recent South Dakota flood emergency are requested to supply ARRL with full details of their activity. Data on communications by amateurs in the immediate area are being collected by Ed Gray, WAØCPX, 2402 Hoefer Avenue, Rapid City, South Dakota 57701. Data on supporting activity should be forwarded directly to ARRL Headquarters, 225 Main Street, Newington, Connecticut 06111. It is hoped that QST for September 1972 can carry the full story of what the amateurs did.

## Third Party: Guyana-U.S.A.

(FCC June 29)-The United States and Guyana have entered into a bilateral agreement providing third party privileges for amateur radio operators. Effective 30 days from June 6, 1972, amateur radio stations of Guyana and the United States may exchange internationally messages or other communications from or to third parties, provided:

- "1. No compensation may be directly or indirectly paid on such messages or communications;
- "2. Such communications shall be limited to conversations or messages of a technical or personal nature, for which, by reason of their unimportance, recourse to the public telecommunications service is not justified. Permission for such communications is also applicable to the extent (Turn to page 27, please)

## Plan to Start International Communications University

Former White House aide Kenneth P. O'Donnell and a group of associates are attempting to establish an International University of Communications based at a donated farm estate in suburban Virginia.

O'Donnell, who served under Presidents Kennedy and Johnson, and his partners are contemplating an international network of non-traditional graduate schools where communications will be studied as a tool toward solving the world's problems in that sphere. The concept is to seek new ideas on the nature of communications itself and testing them in a project-oriented "school without walls" atmosphere, free of traditional classes, lectures, grades, and credits.

In addition to the 25-acre "home" campus near Dulles International Airport, which would hopefully have some 300 to 400 students, the organizers foresee electronically-linked branch campuses ultimately being established in the U.S. and abroad. Regional centers reportedly are now in the planning stage for St. Louis and Tokyo.

The proposed university was chartered two years ago with Dr. Robert L. Hilliard, chief of educational broadcasting for the Federal Communications Commission, as president, and Mrs. Dorothy H. Davies, Washington office manager for the Corporation for Public Broadcasting, as secretary-treasurer.

Actual launching of the project, it was reported, is awaiting the results of a fund-raising campaign.

## Washington, D.C.-Information/Hospitality

The Information/Hospitality Committee provides a central clearing house for information regarding Amateur Radio activities in the Washington, D.C. area. Special consideration is given to visiting foreign amateurs, and a volunteer staff of linguists is available. Chairman of the committee is Bill Parrott, W4URL, 8548 Georgetown Pike, McLean, Va. 22101. Phone (703) 893-8383 between 8 a.m. and 8 p.m.

## HAM OPERATION

On Friday, June 2nd, in Asuncion, Paraguay, Myrna Packard, ZP5DD, was operated on at the Seventh Day Adventist Hospital in that city.

The Surgeon: Ira Bailie, ZP5PK  
The Assistant: Juan Drachenberg, ZP5JC  
The Anesthetist: Tomas Milto, ZP5CX  
The Old Man: Dave Packard, ZP5KK

It was reported that the old man, ZP5KK, spent the three hours that the operation took hamming it up on ZP5JC's rig located in the hospital.

Operation successful, of course, and patient back on the air. House and car to hospital room communications during the convalescent period were maintained 24 hours daily through the first 2 meter amateur repeater in Paraguay installed by ZP5KK and Brad Die, ZP5TQ.

Dave is with the State Department(US-AID). His active and former calls are: K1RZW, YN1TAT, KZ5DP, HKØHCA, HRØDP, HH2P, TI2TAT, TG9TAT, ZP5DD, VP1WS, HI8XAA, VP3AA, VP2GZW, 8RIP, XEØRZW, HS1ACF and HL9KQ.

Myrna, WA1EXR, has also operated as HI8XBB and HS1ACG.

# Rapid City



Page one picture and these photos by R. Steven Crecelius, WAØEYY.



Ed Gray, WAØCPX, on 75 and 2 meters, checking addresses as part of health and welfare requests regarding certain areas of town. Pictures taken right after the water receded. The pictured damage was in a widely-separated area of town along Rapid Creek. The major damage occurred between three and five blocks from Rapid Creek. Ed is SCM, South Dakota, and Vice-Director, Dakota Division, ARRL.

Continued from page one

Smith, WØCOV and WAØCPX.

Early traffic handled on 75 meters consisted of Red Cross inquiries into Rapid City, the first of which was about 2:00 a.m. on Saturday morning. The frequency of 7.275 MHz was activated by KØCXL on emergency power at 6:30 a.m. Saturday morning. He was assisted by net control, Alfred Belk, WAØYRI, of Madison, S.D. With the help of Carl Smith, WØLZZ, and Martha Shirley, WØZWL, Rapid City station KØCXL stayed on 45 straight hours. They handled the American Red Cross traffic from KØZZR, the station of Felton Jenkins, which was used as the official Red Cross station of the Northwest Division at Minneapolis. A total of 379 messages were handled by KØCXL; many of which were emergency or priority traffic. Other net controls that operated on 40 were: Chandlor Shippy, WAØYAK; Dean Albertsen, KØTVJ, and Randy Day, WA5WDB/9 on 7.275 MHz.

Many telephone numbers were out of service, and many people were away from their own homes helping other people. It was nearly impossible to handle incoming traffic of even an emergency nature.

Another major problem was that only a few amateurs found their telephone service intact and those that did had to wait many minutes for a dial tone, if they could get one at all. The main way a lot of the incoming traffic for health and welfare requests were handled was that the names were relayed to the court house on 2 meter FM and there they were checked against the missing, found, and dead on arrival list. Donald Schwemle, WAØNRE; WAØZCE, WØCOV, KØKLR, and WAØCPX spent many hours pouring over these lists. Eric Steickman, a volunteer helper, spent many hours as a runner for the amateur station at the court house and was most successful in securing information.

Some of the first outgoing messages to people outside of Rapid City started early Saturday morning on 20 meters from amateur station WAØUFS. She was assisted by Don Steinburger, a W9 stationed at Ellsworth AFB. The telephone and address of WAØUFS was given over KOTA radio several times for people who wanted to get messages out of Rapid City but

could not get out by phone. The telephone rang constantly and the garage was full of people that had messages to send. The brother and sister-in-law of WAØFUS were pressed into service taking messages to go out over the air. Over 500 outgoing messages were handled in this manner over the next 24 hours.

Other stations operating on 40 meters were: Laurance Manning, WA1MAS/Ø; Frederick Bowker, WA1JIZ/Ø; Clifton Hall, KØOOU; Norman Block, KØLXD; Delano Seay, KØMZN; WØOQQ, WØZWL, WAØUFS, a station operating portable Ø from Ellsworth AFB and WØZWL who handled 200 messages on 40 meters.

On Sunday, the Ellsworth AFB MARS station did a fine job of handling incoming traffic on 20 meters. WAØUFS handled outgoing on 20 meters Sunday, assisted by "Tex", a W5 amateur in Rapid City.

WBØBAY, an employee at Jewel Cave, drove to Rapid City Saturday evening and came to the QTH of WAØCPX. These two operators along with Wallace Koppman, WØYOB, handled incoming traffic on 75 meters from 1:00 a.m. Sunday morning until about 6:00 a.m., using the telephone. People were most cooperative about answering health and welfare inquiries even though it was the middle of the night. The station of WAØCPX and WAØUFS, with the help of several operators, handled over 1,000 incoming pieces of traffic.

The 2 meter mobiles were some of the first into the flooded area. They provided help to people who were still stranded. They were most useful in providing the amateurs with a first-hand account of the situation which could be used on the other frequencies. The 2 meter mobiles also provided communication back to the EOC from several refugee centers. They handled requests for medical supplies, food and clothing, and the all-important quantity, pure drinking water.

One 2 meter mobile helped coordinate instructions for the volunteer search parties as to the areas they should search. The 2 meter mobiles were: Bruce Palmer, WA7MPA/Ø; Fred Trueax, WAØGKU; WAØBGL/Ø, WBØHKO, and WAØCPX.

On Monday evening, June 12, WBØBAY, who had been operating portable at Johnson Siding (located about 10 miles west of Rapid City on Rapid Creek), called

WAØCPX on 3.955 MHz and requested a helicopter for a person who had suffered a heart attack. WAØCPX called the National Guard at Camp Rapid in western Rapid City and a helicopter was dispatched immediately to Johnson Siding, where the patient was taken to the hospital at Ellsworth AFB. The whole incident took just over ten minutes until the helicopter arrived at Johnson Siding.

Other Rapid City amateurs who were involved in communications, not previously mentioned were: Ralph Marcy, WØGDE; Eugene Nelson, WAØZZP; Willis Duncan, WØQBK; and Jeffery Bechner, KØWNV. On Sunday, Arthur Mower, WAØFGV, drove in from Hot Springs, S.D., and helped. Amateurs in near-by towns helped a lot too. Some of them were: Dorotha Adams, WØDVB, Lead; Harold Larson, WØIG, Spearfish; Gregg Evans, WØCAS; Custer; Frances Kruse, WØMZI, and her husband in Hill City, and Arnie, WØ???, in Lead.

Two interesting experiences that happened to KØCXL were on Saturday morning, as neighbors were freely coming and going out of his house after being attracted by the noise of his emergency generator, one neighbor came bursting into the ham shack to tell Elmer that his generator was on fire. Elmer hurried out to find that the generator had vibrated against the wall and the muffler had started a 2x4 on fire. They put the fire out successfully. Elmer then gave a neighbor permission to plug in a big coffee pot to boil water so it could be safely drunk. Elmer went back in to operate. About an hour later, the rig started to dim. Elmer went to check, and found three big coffee pots hooked to the generator. Needless to say, they had to take two of the pots off, so that Elmer could operate his rig.

The Rapid City hams want to thank all the other hams in South Dakota and all over the U.S. for so patiently standing by, waiting for traffic for their area. They also want to thank the various net controls who did such a fabulous job and operated such long hours. Some of the net controls that have not already been listed are: Ross Massingale, WØNEO; Mylo Andersen, WAØSBT; Hugh Morris, Jr., WB4GLG; Frederick Compton, K8IOF, and John Hertz, WAØYFR. (More flood story on page six)

Don Payne, K4ID, says

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(Register Photo)  
**JOHN VAIDEAN OF WESTMINSTER OPENED VITAL RADIO LINK WITH RAPID CITY**  
 'Ham' Operator Dialed In By Chance And Learned Of Flood Disaster

## Westminster 'Ham' Kept Link Open To S. Dakota

By ARNOLD COLLINS  
 Register Staff Writer

WESTMINSTER — Glued to his radio equipment for 12 hours at a time, a "ham" operator here relayed news to anxious relatives all over the country as flood waters devastated Rapid City, S.D., last weekend.

John A. Vaidean, 13261 Richardson Way, became one of the few communications links between the disaster area and the outside world after he made chance contact with another amateur radio operator within the stricken city.

Every hour on the hour, from 10 a.m. to 10 p.m. last Saturday, Vaidean broadcast bulletins naming streets which had been wiped out, badly damaged, or which had escaped the floods.

As casualties mounted, finally reaching 216 and damage went into millions of dollars, Vaidean stayed by his elaborate equipment, monitoring new data and feeding it into a recording machine so that he could update the next bulletin.

"It was a hectic time," said Vaidean. "There was new information coming in every minute so I was unable to

The above article, from the "Santa Ana Register" was sent to WORLD RADIO by Stewart MacKenzie, Publisher of the newsbulletin of the American Shortwave Listeners Club. Any SWL wishing a copy may write to Stewart at 16182 Ballad Lane, Huntington Beach, CA 92649. It's packed w/ SWL info.

leave my post." Occasionally he got a break when his wife brought him coffee and sandwiches.

The day started like any other weekend. For John, it meant a rest from his job as a correspondence school representative and a chance to tinker with his \$2,000 wireless equipment — his hobby for the last 40 years.

He was unaware that halfway across the U.S. the Black Hills resort of Rapid City was being pounded by tons of water from heavy rainfall and a broken dam, causing tremendous destruction and loss of life.

(Continued From Page A3)

others and he was asked to act as "net control" — a central monitoring and relaying station. Part of his job was to "ride shotgun" by asking other hams to clear the frequency.

Meanwhile, other operators in the disaster area were gathering and channeling information to Vaidean's contact, who also was acting as a net control. As the day wore on, Vaidean was able to grasp the magnitude of the disaster.

Minute by minute, more streets were added to the list that Vaidean was compiling. The Rapid City voice went on and on....."Rapid Valley Trailer Court, bad. West Hermosa, badly damaged. Omaha Street, wiped out..."

The list grew into hundreds of locations, which Vaidean patiently repeated in his bulletins. His broadcasts were beamed, through a network of other hams, all across the country so that word of disaster victims could reach faraway relatives and friends.

Vaidean is no newcomer to "public service" broadcasting. He regularly makes contact with sailors aboard Antarctic research ships, putting

"I had no idea what was going on," Vaidean told The Register. "I was just tuning in to different frequencies, trying to find someone to talk to."

All at once he came across a "jammed" frequency, one crowded by other radio operators. Amid the babble of voices "flood...disaster."

"I realized that there were operators all over the States trying to make contact with Rapid City so I knew the disaster must be something big," said Vaidean.

He was told that his signal was much stronger than the (Continued On Page A7) them in radio-telephone contact with relatives — a process called "phone patching."

This works by Vaidean first making radio contact with the ship and then telephoning the required party in the United States.

He is also familiar with disaster situations, having lived in the East where he had occasion to monitor hurricanes and tornadoes.

His call sign — W6BNX — is known among amateur radio operators the world over. He has made contact with hams in Britain, Belgian Congo, Russia, Japan, Australia and the Arctic regions.

Vaidean's expertise once saved the life of a boy in far-off France. He picked up a frantic message put out by a French operator — the boy was dying and needed a serum available only in the United States.

He contacted medical authorities and the serum was on its way to France within a few hours. The boy recovered.

"A lot of people think that we're a bunch of nuts and sometimes our wives get upset," said Vaidean. "But it makes it all worth while when you get a chance to do something that helps other people."



## Flood

by Al Kalinauskas, Jr., WB8HVJ

I was not aware the flood had occurred until 2000 GMT on June 10, when I heard a YL on 14.287 MHz attempting to hold the frequency clear. At 2015 GMT, Dean Albertsen, KØTVJ, in Canton, South Dakota, came on the air. He was operating on both 20 and 40 meters. The inquiries began to pour in as to the conditions of various areas and streets.

There was such a mass of calls that I began to take the queries and relay them to KØTVJ. The requests were then put on 40 meters by KØTVJ and were handled by Alfred Belk, WAØYRI, in Madison, S.D., and Elmer Meyer, KØCXL, in Rapid City, who was assisted by Martha Shirley, WØZWL, also in Rapid City.

These inquiries continued through the night and the following day.

By Sunday afternoon four of us had alphabetized this list and were re-broadcasting on other frequencies. I don't remember all the stations, but those I heard well were as follows: James Frazer, K3-MVZ/5, in Texas, who arranged direct communications between the governors of Texas and South Dakota, plus other arrangements for supplies and medical teams. John Vaidean, W6BNX; WØLDV; WØ-TWR; Fred Lehmann, Sr., WAØ-UEN, in Rapid City; the 2029th

Communications Squadron club station, KØFCR, at Ellsworth Air Force Base; WA3RCN, and Lou Potter, K6VT, helped tremendously in spreading information which was transmitted to every part of the U.S., Europe, and Southeast Asia on various frequencies. I know many other hams gave as much of a helping hand as possible although I was unable to hear them all.

In approximately 20 hours of air time on the 10th and 11th, I handled approximately 250 inquiries as to street and area conditions.

By the 12th the inquiries started to come in about individuals and their health and welfare, which we helped in relaying. There was also the opportunity to pass on much good news along with some bad news during this period which continued through the 15th.

Regretfully I was unable to put in as much time on the air as I would have liked, due to my physical disability. In the six-day period involved my activity was eight to eleven hours a day.

I would like to say that better than 99 percent of all amateurs were genuinely helpful. I personally met and made many new friends.

(Editor's note: Al, WB8HVJ, who has received a number of plaudits for his work on the air, is a disabled Korean War veteran confined to a wheelchair and his home.)



Who sent me this?

If this copy of WORLD RADIO came to you in the mail and you are not a subscriber, it is a complimentary sample copy. We wish to chronicle the achievements and accomplishments of the ham radio operators. Such an effort depends, of course, on your support in the form of subscriptions. If you appreciate what we are attempting, please fill out the blank on page 38. Thank You.

# HELP!

Many subscribers have written in saying, "What can I do to help?" For those who wish to help their paper grow here's what you can do. Send us the call of a friend, or look over your QSL cards for the contacts that were particularly memorable, or look through your log for the hams that stood out.

We will send those on your list a free sample copy. With more subscribers you will have a bigger paper with more articles.

# Rapid City Disaster



by Dean Albertsen, KØTVJ

During the night of June 9 and the early hours of June 10, the Black Hills area of South Dakota was devastated by flash floods. Some five to ten inches of rain fell in four hours causing the swelling of streams and the collapsing of Canyon Lake Dam. Hardest hit was the city of Rapid City and surrounding areas.

When word of the flooding reached us in Canton, South Dakota, early Saturday morning, we learned that electricity and telephone service were out and drinking water was contaminated in the Rapid City area. Soon after I learned of the disaster, I began receiving calls from local people who hoped to get news of their friends or relatives in Rapid City by means of Amateur Radio.

I began to work on the disaster immediately. For several hours the only effective communication was handled by ham radio operators, so we were understandably kept very busy. Saturday morning I operated two rigs by myself on 14,275 and 7,275 MHz. At noon, Larry Minor, KØSZM; Bob Wissink, WØZLS; Dr. Faye Nutter, WAØ-WMD, arrived to help with the calls that were piling up. We then operated a third rig on 3,955 MHz.

For a short time we tried to send personal health and welfare messages. Soon, however, the Red Cross declared a moratorium on these requests in order to handle Red Cross and Civil Defense emergency relief messages. For the remainder of Saturday and much of Sunday we handled area requests. People would give us an address and in this way we could tell them whether or not that particular street was in the flooded area. We were able to obtain a detailed map of Rapid City on which James Glenn and Mike Olson charted the numerous streets as flooded, bad, wet or dry. In this way we could give direct replies to street requests without contacting a Rapid City station.

We were greatly aided by stations in New York, California, West Virginia and Pennsylvania who helped net control on 20 meters throughout Saturday and Sunday.

Requests to determine flooded areas came steadily throughout Saturday and Sunday. We also handled calls that the local sheriff referred to us as well as messages for vaccine and water donations. Once we were able to handle a message from the governor of Texas to our governor of South Dakota.

(Turn to page 27, please)

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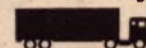
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Doris Conkling, WN6EOO, assisting her husband, Dave, WA6IQK. A sightless amateur, Dave received many accolades not only for his operating skill but, without benefit of being able to depend on

paper, he was able to pass messages verbatim and remember the location of mobile stations (where they were, where they had been and where they were going) for several hours at a time.

## California Flood by Norm Brooks, K6FO

About 1:00 a.m., June 21, a levee of the San Joaquin river broke below Highway 12 near Isleton, California. The water began to inundate Andrus and Brannon islands, which are part of the Sacramento-San Joaquin river delta country. Residents of the area began fleeing the rising waters, seeking higher ground for themselves and their possessions.

The first amateur radio operator to become involved was Dennis Humphrey, WA-6RDH. He activated the Mount Vaca Radio Club repeater, and started to round up MVRC members. At the same time, Keith Crandall, K6QIF, was setting up shop in the Red Cross headquarters in Sacramento, using the Mount Vaca repeater, WA6UGY, as the primary means of communication.

Floyd Luney, WA6HGH, (RACES Radio Officer) manned the Sacramento County Civil Defense repeater from CD headquarters at Sacramento City Hall. Unfortunately, it was later found that the CD repeater would not reach the remote corner of Sacramento County where the flooding had occurred, making it unusable for on-the-spot communications.

By breakfast time a large number of Sacramento area amateurs were actively working on emergency communications for the flood. Many called their employers telling that they would not be in for the day. Four-wheel drive vehicles, equipped with amateur FM radio on the 146 and 450 Mhz bands moved into the stricken area of Isleton and to the relatively high ground at Rio Vista. Administrative messages for the Red Cross began to flow.

At the Sacramento Army Depot, things were also humming. Warrant Officer "Ole" Olson, KØRBO, station director of Army MARS station A6SIG/W6SIG, activated the Army MARS repeater that had been put into service with commercial power only two days before. As a matter of fact, the MARS repeater was still working with antennas strung in trees at its location near Shingle Springs, Calif. A base station on the Army frequencies was installed at Red Cross headquarters in Sacramento, and a radio operator crew, in a camper, was dispatched to Isleton.

Keith Crandall, K6QIF, who is the Red Cross Disaster Communications Officer, requested that the Army MARS repeater be used as the "health and welfare" communications channel, and this was agreed to. Keith explained that this was necessary because of the normally five repeaters available in the Sacramento area, only two could provide reliable communications into the stricken area. They were the Mount Vaca system repeater near Vacaville, Calif., and the Army MARS repeater located on property owned by Gary Hoff, W6JYB/A6JYB, near Shingle Springs, Calif.

On June 23 both repeaters went off the air. The Mt. Vaca repeater went off due to power failure traced to Pacific Gas and Electric "rearranging lines". The gasoline driven electric generator took over immediately. One operator took an extra 15 gallons of gasoline to the site to insure sufficient fuel should there be more such incidents. Army MARS went off and an investigation showed that it was again

PG & E. By the time a group of amateurs arrived at the repeater PG & E had the power restored to the site.

Monitoring the two channels one could hear all the drama of the flood emergency- "Could someone come to help an elderly lady who lives alone, evacuate her belongings? - Can someone deliver a needed drug for a heart attack patient? - Would everyone spread the word as to where the Red Cross assistance center was? - Can we get the word to the people of Isleton where the guarded emergency warehouse is for their furniture and belongings? - Can you find out what happened to 'John Doe' and his family who were camping in the area? - Where are two relief nurses needed?" - and on - and on ---

One typical dilemma for the hams was when the police chief wanted 12 chemical toilets delivered to a particular location and the Red Cross said that the health inspector had just reported everything was O.K. at the location and nothing was needed. Hams had to again contact the police chief with the message. He felt that the health inspector's report should be disregarded (in stronger terms) and said to "get those toilets down here!" So the Red Cross did.

George Patterson, WA6BAR/AD6BAR, reporting on his two day stay in Isleton and Rio Vista, said the cooperation of the local teen-agers was magnificent. "When they were not filling sand bags, they were running messages for the communications center." George said, "We spent a lot of time fighting rumors such as assuring



people there were no known deaths."

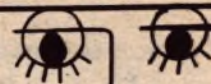
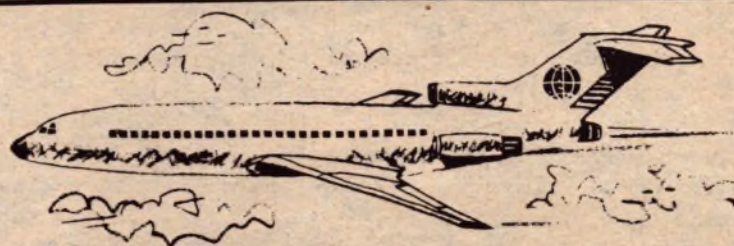
A total of 1200 man-hours were put in by the 24 MARS members and the 25 other hams (including members of the Mt. Vaca repeater group and members of the Radio Amateur Mobile Society (RAMS) of Sacramento) and 6,000 miles were driven by the hams involved in the emergency.

Among those helping the people of an area that was later totally evacuated and declared a disaster area were: Keith Crandall, K6QIF; Floyd Luney, WA6HGH; Carol Luney, WA6THI; Terry Bridges, WB6QNS; Bill Williford, WA6IVI; Norman Brooks, K6FO; Jay O'Brien, W6GDO; Jan O'Brien, K6HHD; Don O'Brien, WA6FZL; Dave Conkling, WA6IQK; Doris Conkling, WN6EOO; Dennis Humphrey, WA6RDH; Ross Stevens, W6FRE; Bill Jenkins, WB6FTU; Lew Bernard, WA6ESA; George

Patterson, WA6BAR; George Burton, K7-WWA/6; Clint Savage, K6PWA; Dan Thompson, WA6FJW; Paul Fransich, W6RSZ; Les Cobb, W6TEE; Vicki Cobb, WB6PHQ; Chuck Klug, K6HLM; Norm Helman, WA6-FRE; Ed Stahl, W6PZC; Ernie Rader, K6-UVI; Norm Younker, WB6BME; George Chong, W6BUR; John Burch, WB6GHA; Hyde Welsh, W6KQV; Ken Welsh, WB6FKV; George Robison, K6JIK; Glenn Price, WA6-HYH; Lee Thornhill, W6ZWZ; Jim Rominger, WA6NWE; Walt Casto, W6QCU, Al Saulsbury, WA6FKM; Gary Hoff; W6JYB; Tom Mc Kenny, WB6SQJ; Helen Stevens, WA6-KHD; Mike Keller, WA6RWR; Gary Hale, WN6PKO; Jack Beckner, WB6HRV; "Ole" Olson, KØRBO/6; Harold Townsend, WB6-ZGT; Leo Kostusak, WA7KZL/6; Dan Nunn, WA6IAB; Stu Biedermann, WB6HBY; Norm Lehman, WB6SBR, and George Masters, W6GHE.



Camper door at Isleton flood



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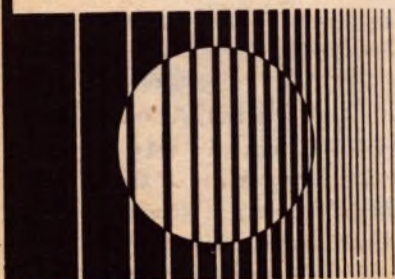
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9

## WORLD RADIO NEWS

reporting on the human side of Amateur Radio



# Editorial

At the present time there seems to be a great hue and cry to lower the requirements to become an amateur radio operator. We are against such a move for several reasons.

What we are most concerned about is the element that seems to be behind the arguments. In our society there are those who want to be called college graduates without studying, those who want to be paid without working, etc., and now those who want to be amateur radio operators without meeting any standard. Possibly Amateur Radio will be the last bastion of those who believe in working for what you get.

We believe that if those who are calling for a dragging down of the accepted standards would devote half as much time to studying as they do to sending out petitions and grumbling, they would have their licenses in the honorable fashion.

A three page news release crossed our desk today in which it was stated that 43% of the CB'ers wanted to become hams but did not take the step because of the licensing requirements. The rest of the release went on to argue against the code and theory requirements.

In contrast to such, a recent article in QST showed a person who was totally paralyzed except for a slight use of his right hand, he passed the code test for the ham license by holding a stick in his teeth and punching out the copy on a typewriter!

There are also cases of people who are blind and deaf who have passed the test!

Are we going to cheapen the licenses that such people obtained, by the greatest effort, by just handing them out willy-nilly to those who find that "it's so hard"?

From which element would the amateur radio service gain its strength, those who are the type of people who make an effort or the "whimperers"?

We have seen what has happened to a portion of the radio spectrum populated by those who have had to invest not a whit of mental effort in order to operate a station. It seems one of the immutable laws of mankind is that you take care of something in a direct proportion to the effort necessary to obtain it.

How anyone can say "extensive radio theory" in the light of 10-year old school children and 70-year old grandmothers obtaining licenses shows the pathetic state of their position. We know of people committed to institutions for the mentally retarded who have obtained licenses!

There is also an outcry against the learning of the Morse Code, calling cw "archaic" etc. As difficult a time as this writer personally had with the learning of cw we are heartily in favor of its full retention.

Probably the most important aspect of the cw test is not in itself the learning of the code for use on-the-air but it is a barrier. What it says is "if you want to share in the wealth of ham radio you will have to put out a little sweat."

We firmly believe that if the standards were lowered, as the whiners want, they would continue to whine once they got on the air and also improperly conduct themselves. There is nothing to suggest that the automatic bestowing of amateur

status would change their behavior pattern.

Also, there is nothing worthwhile that can be obtained without a reasonable amount of effort and an amateur radio operator's license should be no exception.

A release put out by a group in Syracuse, New York, said in part "radio code and theory serve to disenfranchise prospective radio amateurs like the poll tax and literacy tests of earlier days did voters."

The fallacious logic of that argument should fool no one. It is but part of the "gimme" philosophy that is growing.

We know of people that have taken the amateur examination seven times before passing. What a better world it would be if populated by those with such dogged determination. Their breed is what we need, not the "it's so hard" whiners. Kind of goes back to the saying "what kind of guy do you want in the next foxhole?"

The release put out by an organization saying "any citizen without technical knowledge should be able to qualify for an amateur radio license so as to chat by radio and talk "skip" to distant stations" went on to say - "The amateur radio fraternity has tended to be a private "club" and further stated "Leo Sands, editor of CB Magazine, who wrote in an editorial that "the ARRL chooses to keep the ham 'club' exclusive."

While such statements may obtain some members or sell magazines nothing is further from the truth. Ham radio must be the most non-exclusive "exclusive club" in the world. Practically every radio club, many stores, schools, individual hams, explorer scout troops, etc., run license classes. Local libraries have all the books one could want. And how one could say the ARRL is trying to keep it "exclusive" when they send code practice on the air, as do their appointees, as well as sell a book with all the questions and answers in it for a mere dollar, is indeed baffling.

If you show up (that's the rub, you have to show up-for the free class) one is practically spoon-fed all one needs to know.

These organizations and publications would far better serve their readers if they would instead try to inspire their members to reach out into the avenues of achievement. Their best purpose would be to launch their members in the quest for knowledge. The attainment of an amateur license has given many the self-confidence needed and has changed their lives in many ways.

Another view of the situation is-we are at present in the midst of a knowledge explosion, it is a marvelous, fascinating world we live in and there are those who are attempting to learn all that is possible. Wonderful! Only through knowledge can one contribute. On the other hand we are being clawed at by those who wish to learn nothing. You may ponder what the bands would be like populated by such.

There is a call for non-theory tests. A theory test should be retained, if for no other reason than for the protection of these people. We know of licensed amateurs who, through lack of sufficient knowledge, have blown up rigs. What can the absolute know-nothings expect.

Why is it that Amateur Radio is the target of those who would drag us all down to their level? There is no similar outcry to drag down, for example, the qualifications one must meet to be a private pilot.

There is also a small movement within

the ranks of the amateurs themselves to lower the requirements so as to get more amateurs. The feeling is that with more numbers we would have more strength. That position is debatable. We feel that quality will always count more than quantity.

Attorneys as a group have a good amount of "clout" but if tomorrow the requirements for passing the bar should become reading six Perry Mason books and watching three episodes of "The Bold Ones" there would all of a sudden be two million more lawyers and they would lose all their prestige and influence.

Many amateurs point to Japan as an example of the boom in the amateur radio ranks. We asked one of Japan's leading hams, Nobuyasu Itoh, JA1KSO, for his view. He wrote back, "Now we have great increase in the ham population and it will be above one million in 10 years. Capacity of radio bands will not be increased however number of hams shall be increasing. I can not imagine what hamdom going to be. At this time we have 10 stations operating on the same QRG on 7 MHz and we can't find any clear spots on 7 MHz. Besides, we can copy no call signs easily in local contests. From my point of view I do not hope to have a great increase in number. Another problem now is quality of operators. Ninety-nine percent of newcomers can't understand what we do on amateur radio. Their job with radio is as follows: To get license at short course of schooling, then to buy equipment at Akihabara, then to send application of station to PTT, then to get on bands for enjoying long chat with girl friends...and then sell equipment."

Such is the view of one living with it. "Nob" has contributed in every field of Amateur Radio from DXpeditions to contests to QSL committees to TVI teams to writing for Japanese ham magazines, and on and on.

We firmly believe Amateur Radio would be far better off with a higher quality of operator than merely more. We need the responsible people. It seems that those who have positions of responsibility, that have demanded discipline, are those who make the contributions to the hobby/service.

At the FM:West conference there was a seminar in which the problems, and possible solutions were discussed. Participating were hams we recognized as being schoolteachers, engineers, businessmen, etc. They were bringing their abilities, which they obtained through great effort, to Amateur Radio.

What we need is to attract more of the same. Amateur Radio needs more educated, articulate and responsible people in the ranks. We need to attract more doctors, attorneys, educators, journalists, sociologists, psychologists, executives, etc.

A growing problem is the misbehavior on the bands. We can not imagine a policeman, or any of the above mentioned, being of the type that would go home and engage in some of the illegal behavior being heard today.

We remember the days when every ham was a gentleman. It is entirely possible that a renaissance could occur bringing us once again to have pride in every other amateur. Such will happen only if we make an effort to bring in the type of people who will accept the disciplines of Amateur Radio as they have accepted those in other avenues of life.

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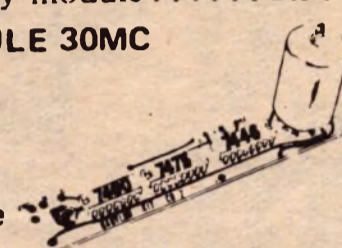
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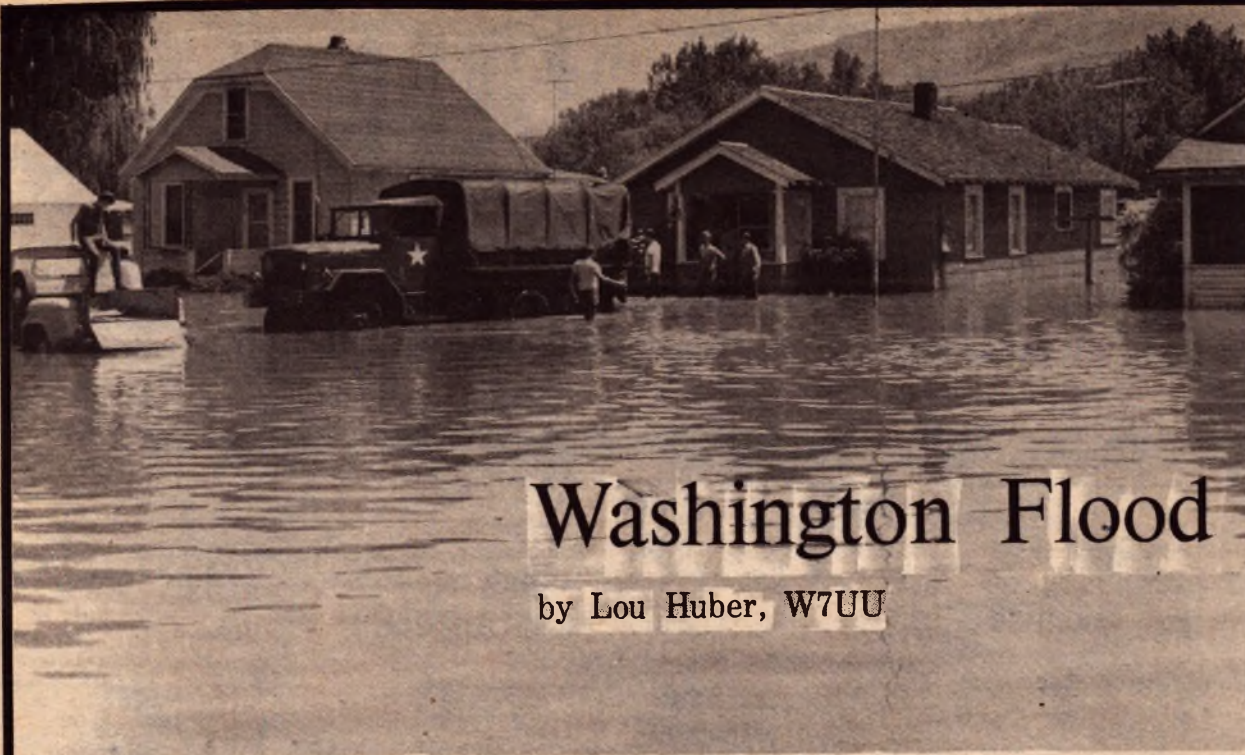
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## Washington Flood

by Lou Huber, W7UU

(Photos by "The Wenatchee World" via Milt Pierce, W7YOP)

A sudden run-off of water going south in great volume occurs when there is heavy winter snowfall in British Columbia (Canada) combined with a sudden arrival of summer melting the snow in the glaciers and great heights of the Canadian mountains.

One of the routes it follows is the Similkameen River, which leads into the Okanogan River and the state of Washington. When this flood water reaches Omak and Okanogan, two small cities on the Okanogan's banks, havoc breaks loose. It has happened several times -- as in 1948 and, previously, over many years reaching back into prehistoric times.

It happened again this year -- and almost with devastating effect. The Okanogan (which is a modest stream, normally) spreads all over its valley; it rose something like 15 to 20 feet above its usual level on 1 June, and was still rising the next morning.

For this disaster-about-to-occur, the Northwest Amateur Monitoring Service, (NAMS) operating from 9 a. m. until 5:45 p. m. was ready. News of the crisis came from Frank Cotton, K7USG, of Omak and from "Buck" Buchanan, W7GSN, of Okanogan early in the morning of 2 June (Friday). Lou Huber, W7UU, of Seattle, was listening on the NAMS frequency (3970 kHz) an hour before NAMS service opened, and heard discussion of the situation between them and Dave Noonan, W7QFR, of Tacoma, who works for one of the Tacoma TV/radio outlets.

Arrangements were made speedily for W7GSN and K7USG to give their versions of the flood situation. Both were in a position to do so -- W7GSN with the flood water almost lapping at his door, and K7USG situated on higher ground in Omak overlooking the scene.

W7UU at once called radio station KIRO, the Seattle outlet for the Columbia Broadcasting System, and was connected quickly with the disc jockey on duty (Ross McGowan), who caught on at once and put W7GSN's description of the flood on the air "live."

"We want more reports on this . . . can you give them to us?" asked McGowan.

Sure thing, came the answer from both

W7GSN and K7USG. And so it was that via phone patch through W7UU the same procedure was repeated half a dozen times on Friday (2 June), and again the next morning for a "wrap-up", when the flood waters were rising and it was touch-and-go as to what really would happen.

Much of the Omak/Okanogan area was closed to highway travel by the rising flood waters, with the lower parts of both cities protected by sandbag dikes. Flood waters lapped to within one inch of the tops of these dikes before the water stopped rising early Friday afternoon. Perhaps 50 homes were evacuated, and around 100 homes were either evacuated or their occupants were ready to move out that afternoon.

In Auburn, Washington, WA7DWH, the club station at the federal General Services Administration there, manned by Will Stratton, WA7EQS, (a director of Western Public Service System -- 3952 kHz, evenings),

offered bags for additional sandbagging. This was relayed to the civil defense authorities in Omak/Okanogan; however, there were plenty of sandbags available from the U.S. Army (being filled by many hands, including those of children from the flood-closed schools.)

As the day wore on, the first-hand reports from K7USG and W7GSN (who both personally toured the flooded area for up-to-the-minute details) were utilized not only over radio station KIRO (Seattle), but also through Karl Casey, W7ZCE, (Walla Walla), Daniel Lander, WA7KNW, (Spokane) and "Curly" Milner, W7MDM, (Vancouver) and perhaps others of whom this writer is unaware for broadcast over radio stations in those areas of Washington -- thus the entire state was covered.

K7USG and W7GSN received many compliments for their factual, sensible and capable reporting of the flood situation. They had the advantage of local knowledge of all factors, and they did not exaggerate as did some of the newsmen on the scene. (Ever notice how much worse things seem in the news media than they really are, when it comes to storms and other disaster-type events?). Of course the flood was bad enough -- over eight million dollars damage was done.

In conclusion it should be noted that while this was a disaster that "didn't quite come off," perhaps, nevertheless it had the potential of being very serious indeed. And ready from the first moment, NAMS was there. Nothing was done that almost every radio amateur could do, if he "set his sights" on the target of public service. The ingredients are rather obvious: a phone patch and the skill for using it, a telephone call to one of the better (the best, if you know which one it is) radio broadcast stations in your area, and you're in business at helping everybody.

Not only that: you also enhance the ham's image considerably in the eyes of the public. It's a good thing to have going for Amateur Radio.



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what type of antenna he uses.



W7CVD's 5 ELE. M520

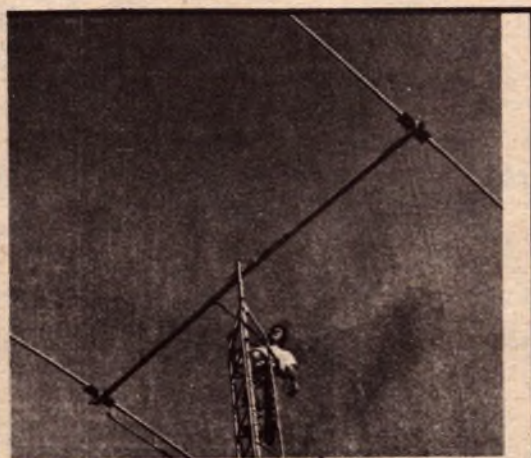
5 ELE. 20 METER BEAM		6 ELE. 20 METER BEAM	
GAIN	12DB	GAIN	13DB
FRONT TO BACK RATIO	26DB	FRONT TO BACK RATIO	26DB
BOOM LENGTH	40 FT.	BOOM LENGTH	50 FT.
	3" OD .065 WALL		3" OD .250 TO .065 WALL
MAX. ELE. LENGTH	36 FT.	MAX. ELE. LENGTH	36 FT. 1 IN.
SWR	1.1 TO 1	SWR	1.1 TO 1
WIND SURFACE AREA	10.5 SQ. FT.	WIND SURFACE AREA	12.5 SQ. FT.
WIND LOAD (80 MPH)	240 LBS.	WIND LOAD	280 LBS.
WIND SURVIVAL	100 MPH	WIND SURVIVAL	100 MPH
TURNING RADIUS	26.5 FT.	NET WEIGHT ASSEMBLED	110 LBS.
NET WEIGHT ASSEMBLED	85 LBS.	TURNING RADIUS	30 FT.

All 40, 20, 15 and 10 meter beams have 3" OD booms .050, .065 and .250 walls depending on model of antenna. Made of top grade aluminum alloys 6063-T6 and 6061-T6.



MACHINED 18" BOOM COUPLER FOR 30 TO 40 FT. .065 WALL BOOMS

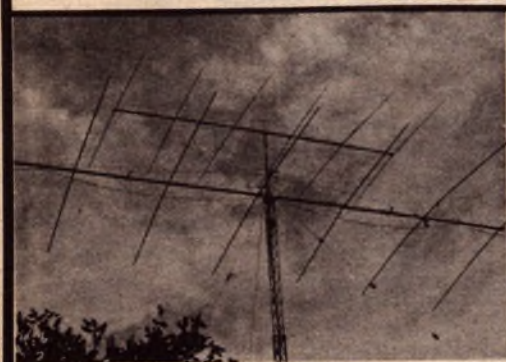
3 ELE. 20 METER BEAM		4 ELE. 20 METER BEAM	
GAIN	8.5DB	GAIN	10DB
FRONT TO BACK RATIO	20DB	FRONT TO BACK RATIO	25DB
BOOM LENGTH	20 FT.	BOOM LENGTH	30 FT.
	3" OD .050 WALL		3" OD .200 WALL TO .065 WALL
MAX. ELE. LENGTH	36 FT.	MAX. ELE. LENGTH	36 FT.
SWR	1.1 TO 1	SWR	1.1 TO 1
WIND SURFACE AREA	6 SQ. FT.	WIND SURFACE AREA	8.0 SQ. FT.
WIND LOAD (80 MPH)	145 LBS.	WIND LOAD (80 MPH)	195 LBS.
WIND SURVIVAL	100 MPH	WIND SURVIVAL	100 MPH
TURNING RADIUS	21.5 FT.	TURNING RADIUS	21.5 FT.
NET WEIGHT ASSEMBLED	41 LBS.	NET WEIGHT ASSEMBLED	41 LBS.



40 METER 2 ELE. BEAM

2 ELE. 40 METER BEAM	
GAIN	5.5DB
FRONT TO BACK RATIO	17DB
BOOM LENGTH	16 FT.
	3" OD .065 WALL
MAX. ELE. LENGTH	66.5 FT.
SWR	1.1 TO 1
WIND SURFACE AREA	10 SQ. FT.
WIND LOAD (80 MPH)	230 LBS.
TURNING RADIUS	34.5 FT.
NET WEIGHT ASSEMBLED	67 LBS.

3 ELE. 40 METER BEAM	
GAIN	8.5DB
FRONT TO BACK RATIO	20DB
BOOM LENGTH	38 1/2 FT.
	3" OD .250 TO .065 WALL
MAX. ELE. LENGTH	69 FT.
SWR	1.1 TO 1
WIND SURFACE AREA	15 SQ. FT.
WIND LOAD (80 MPH)	335 LBS.
TURNING RADIUS	40 FT.
NET WEIGHT ASSEMBLED	145 LBS.



W7GVA's 7 ELE. M720 AND 6 ELE. M615

7 ELE. 20 METER BEAM	
GAIN	14DB
FRONT TO BACK RATIO	26DB
BOOM LENGTH	58.5 FT.
	3" OD .250 TO .065 WALL
MAX. ELE. LENGTH	36 FT. 1 IN.
SWR	1.1 TO 1
WIND SURFACE AREA	13.8 SQ. FT.
WIND LOAD (80 MPH)	340 LBS.
WIND SURVIVAL	100 MPH
TURNING RADIUS	34 FT.
NET WEIGHT ASSEMBLED	135 LBS.

6 ELE. 15 METER BEAM	
GAIN	13DB
FRONT TO BACK RATIO	26DB
BOOM LENGTH	32 FT.
	3" OD .065 WALL
MAX. ELE. LENGTH	24 FT.
SWR	1.1 TO 1
WIND SURFACE AREA	7.7 SQ. FT.
WIND LOAD (80 MPH)	190 LBS.
WIND SURVIVAL	100 MPH
TURNING RADIUS	20 FT.
NET WEIGHT ASSEMBLED	65 LBS.

All our beams come complete with adjustable reactance tuned gamma match network which can handle 4,000 watts plus on CW and SSB.

### NEW IMPROVED WIDE SPACED 40, 20, 15 & 10 METER BEAMS

All W7GVA beam elements are constructed of the finest aluminum available, 6063T832 and 6061-T6 both top quality alloys.

All Wilson Electronics beams have a 3" O.D. boom made of top grade aluminum 6063-T6.

All our beams come complete with adjustable reactance tuned gamma match network which can handle 4 KW plus on CW and SSB.

### QUALITY MONO & DUO BAND BEAMS AT LOW PRICES

Wilson Electronics offer a complete line of Mono & Duo Band Beams. With our purchasing power on large quantities of aluminum and low overhead, we can give you a rugged heavy duty top quality beam for a much lower price than any other manufacturer.

WILSON MONO BAND BEAMS	
Model No.	
M340	3 ELE. 40 METER BEAM (full size) Gain 8.5 DB gain, Boom length 38.5 ft. 3" OD .200 wall to .065. \$375.00
M240	2 ELE. 40 METER BEAM (full size) Gain 5.5 DB, Boom length 16 ft. 3" OD .065 wall. \$189.95
M720	7 ELE. 20 METER BEAM Gain 14 DB, Boom length 58.5 ft. 3" OD .200 wall to .065 wall. \$389.95
M620	6 ELE. 20 METER BEAM Gain 13 DB, Boom length 50 ft. 3" OD .200 wall to .065 wall. \$299.95
M520	5 ELE. 20 METER BEAM Gain 12 DB, Boom length 40 ft. 3" OD .065 wall. \$169.95
M420	4 ELE. 20 METER BEAM Gain 10 DB, Boom length 30 ft. 3" OD .065 wall. \$139.95
M320	3 ELE. 20 METER BEAM Gain 8.5 DB, Boom length 20 ft. 3" OD .050 wall. \$ 89.95
M715	7 ELE. 15 METER BEAM Gain 14 DB, Boom length 40 ft. 3" OD .065 wall. \$169.95
M615	6 ELE. 15 METER BEAM Gain 13 DB, Boom length 32 ft. 3" OD .065 wall. \$139.95
M415	4 ELE. 15 METER BEAM Gain 10 DB, Boom length 20 ft. 3" OD .065 wall. \$ 89.95
M810	8 ELE. 10 METER BEAM Gain 14.5 DB, Boom length 40 ft. 3" .065 wall. \$169.95
M510	5 ELE. 10 METER BEAM Gain 12 DB, Boom length 20 ft. 3" .065 wall. \$ 89.95

WILSON DUO BAND BEAMS	
DB62	6 ELE. 20 & 2 ELE. 40 INTERLACED BEAM Gain 13 DB—20 5.5 DB 40. Boom length 50 ft. 3" OD .200 wall to .065 wall. \$449.95
DB52	5 ELE. 20 & 2 ELE. 40 INTERLACED BEAM Gain 13 DB—20 5.5 DB 40. Boom length 40 ft. 3" OD .200 wall to .065 wall. \$349.00
DB54	5 ELE. 20 & 4 ELE. 15 INTERLACED BEAM Gain 12 DB—20 10 DB—15. Boom length 40 ft. 3" OD .065 wall. \$229.95
DB43	4 ELE. 20 & 3 ELE. 15 INTERLACED BEAM Gain 10 DB—20 8.5 DB—15. Boom length 30 ft. 3" OD .065 wall. \$179.95
DB32	3 ELE. 20 & 2 ELE. 15 INTERLACED BEAM Gain 8.5 DB—20 6 DB—15. Boom length 20 ft. 3" OD .050 wall. \$109.95
DB76	7 ELE. 15 & 6 ELE. 10 INTERLACED BEAM Gain 14 DB—15 13 DB—10. Boom length 40 ft. 3" OD .065 wall. \$239.95
DB65	6 ELE. 15 & 5 ELE. 10 INTERLACED BEAM Gain 13 DB—15 12 DB—10. Boom length 32 ft. 3" OD .065 wall. \$219.95
DB44	4 ELE. 15 & 3 ELE. 10 INTERLACED BEAM Gain 10 DB—15 8.5 DB—10. Boom length 20 ft. 3" .065 wall. \$109.95

If not available from your dealer write direct to factory for catalog or information and fast service. All prices F.O.B. factory. Wilson beams are available at the following dealers:

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 AMRAD  
 HAM RADIO OUTLET  
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 BURLINGAME, CALIFORNIA  
 LONG ISLAND, NEW YORK

All 20, 15 and 10 meter beam elements are constructed of the finest aluminum available, 6063-T832, a top quality alloy. All tubing is seamless extruded hard drawn. A 20 meter element consists of a 12 ft. section of 1 1/2" OD .058 wall center section, two six ft. pieces of 1" OD .049 wall middle section, and two six ft. pieces of 7/8" OD .049 wall end sections. Reflector has two additional 2 ft. end sections of 3/4" OD .035 wall. 15 meter elements use 1 1/8" and 1" tubing. 10 meter elements use 1" and 7/8" tubing.



## 1972 LMRE Convention

by H. R. "Duke" Ellington, W6OZD

OLE! LA PAZ!! That was the theme for a large group of U.S. - Southern California and Arizona hams and their wives -(members of the "Colegas y Amigos" Radio Group) who gathered at the Long Beach Airport terminal on Thursday a.m., June 1, and boarded a Greyhound charter bus to the Tijuana border with a final destination of La Paz. The event -- the annual convention of Mexican amateurs sponsored by the Liga Mexicana de Radio Experimentadores.

When our group reached Tijuana, we were met by Eliseo Garcia A., XE2NR, of the Ensenada Radio Club and escorted via commuter bus to the Tijuana airport where we joined our many ham friends and wives from San Diego, Ensenada, Tijuana and Mexicali. We boarded a chartered DC-6 and headed for La Paz. The two and a half hour flight was a smooth and scenic one. When our plane load of 65 people landed in La Paz we received the red carpet treatment complete with a mariachi band, many abrazos, handshakes, etc. Sr. Jorge Mendoza C., XE1SH, President of the Liga was the official greeter.

After checking into the Continental, California and Guaycura Hotels, the next event was registration and an informal reception on the terrace of the Continental Hotel.

Registration continued on Friday a.m. in the lobby of a very beautiful "Casa de la Juventud", a secondary school. Many of the pupils there practiced their English with us and we practiced our Spanish in return.

The first formal session took place in the air conditioned school auditorium. A welcoming speech was delivered by Lic. Angel Cesar Mendoza Arambura, Secretary General de Government, representing Ing. Felix Agramont Cota, Governor del Territory.

Additional talks were made by Sr. Jorge Mendoza C., XE1SH, President of the LMRE; John Griggs, W6KW, Southwestern Division Director ARRL; Ing. Luis Valencia, Chief of Department of Frequencies for Department of Telecommunications, Mexican Government.

Presiding over the ceremonies was Sr. Ismael Arriga E., Presidente Radio Club Sud California, A.C. La Paz. A very interesting session of questions and answers took place between the representative of the Department of Telecommunications and the Mexican hams.

At the end of the "sesion de trabajos" (work session) all attendees were transported to a luncheon at the Mutualista Sociedad Union Hall where everyone enjoyed a delicious menu consisting of seafood cocktail, baked chicken, cerveza, soft drinks, more mariachi music and friendship.

Friday evening we were all escorted to a resort south of town called the Playas del Coromuel for a beach party with more food, drink, music and the most spectacular fireworks display this side of anywhere. Saturday morning was "free time" except for those who went deep sea fishing.

Many of us worked ham radio using the XE2 calls which the Mexican government had extended to 32 ham members of the

"Colegas y Amigos" group during the four-day convention. Tom Copeland, WA6YYN, of Long Beach, packed along a Swan 270, 20 meter vertical and 40 meter dipole. He had the rig set up in his room at the Hotel Guaycura where he and other U.S. hams made many good contacts.

On Saturday p.m. we were taken to another beach resort further south of town for another fiesta with still more food, swimming, sunshine, music and good fellowship. We all enjoyed the final ball and ceremonies on the terrace of the Hotel Continental that evening. During the ceremonies the Liga President, Sr. Jorge Mendoza, presented brotherhood diplomas (Service to Humanity) to several Mexican hams and to John Griggs, W6KW, and "Duke" Ellington, W6OZD.

Sunday morning dawned bright and clear, as did every day during our stay in La Paz, but most of us had no time to enjoy the weather as we knew it was nearing departure time and we had to bid farewell to our many good friends in Mexico.

The final event was another luncheon complete with steaks and the drawing for the raffle prizes (tombolas). Then to the bus for the airport and the flight back to the U.S.A. Adios La Paz y hasta pronto todas amigas.

At a business meeting of the LMRE, the officials decided to hold next year's convention in either Acapulco or Puerto Vallarta. Everyone is looking forward to the next convention and those who attended the one this year in La Paz will never forget the special grade of warm hospitality and friendship experienced south of the border.

## Amigos

by Rod Jensen, WB6WKC

At the moment you are reading this, 200 young volunteers-some no older than 16-are living in many of the remotest villages in Latin America.

The Program: Amigos de las Americas (see 17 January WORLD RADIO). This immunization program has been sending high school and college age volunteers to Latin America for eight years, and has grown to some 600 volunteers per summer project.

They live, eat, and work with the villagers, often living on beans and tortillas for their three week term. The "vital necessities" of electricity, bathtubs and even latrines are often non-existent. Yet if you were to be there now, you could not tear them away. It is a very good way of personal contact, unlike many impersonal aid programs. Here is a run down of this year's projects that are now in progress:

GUATEMALA-The Amigos' programs largest project, Guatemala this year had (14

32 villages in the area surrounding country headquarters in San Marcos. This is in western Guatemala, not far from Quetzaltenango. The area is extremely mountainous and cool, owing to the elevation. Bill Skeen, WA6KJW, is on staff there. Interpreters are being used, as the area is largely Indian.

HONDURAS-This year the Honduran project is probably the most difficult in Amigos history in this country. Working out of two headquarters in Marcos and Lempira, 15 villages are being served in the remote border area near El Salvador. Four-wheel drive trucks are serving to deliver supplies to about half the villages, and the other half are accessible only by mule or foot. The area is mountainous and cool, with frequent and heavy rains. The area is politically touchy-being only a few miles from the disputed border of El Salvador and Honduras that brought on the 1969 war. Chris Johnson, WA5ZMF, and Rod Jensen, WB6WKC, are portable HR5 at each of the head-

quarters. Rod and Chris are both in their third year with Amigos.

NICARAGUA-Ten villages will be served out of Matagalpa. The area has a mild climate, and beautiful scenery. Doug Alexander is operating as a YN9 there, and is also Assistant Country Director-number two man for Amigos in Nicaragua.

COLOMBIA-Central Colombia is being served near the cities of Pereira and Armenia, where Amigos are headquartered. Part of a government project, a one vaccine campaign differs this program from the many-vaccine clinics in most other countries. The area is mountainous, with most villages in large valleys around 4500 feet, with a cool climate. Joe Hutcheson, WA5SXR/HK6, is not only a radio operator, but is Country Director, in charge of all operations in Colombia. A freshman at Williams College in Williamstown, Mass., this is his fourth year with Amigos.

PARAGUAY-A new project this year, (Turn to 28, please)

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Genuine elephant hide Billfolds \$7.98  
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The elephants were killed by rangers of the Dept. of Wildlife for specie protection.



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# FM: West

Occuring in the middle of California's grape country, FM: West started Friday night, June 2, with a Champagne Party.

The first of what is expected to be an annual event drew about 150 participants to Fresno. FMers were treated to the exhibits of several manufacturers, a swap shop, technical talks, films, and the in-person meetings with many who are on the other side of the repeater.

A meeting of the California Amateur Relay Council was also held in conjunction with the event.

At the dinner the main speaker was Wayne Green, W2NSD/1, publisher of 73 magazine. Wayne's comments centered around "Saving 220". He said that the 220 MHz band is at a crossroads and possibly the CBers will take it away unless we do something. The outspoken editor told that manufacturers think there is an enormous market and many are already tooling up to manufacture amplifiers for CB use on the band and they are "suffering delusions".

Wayne said he has been to Washington recently and reported that the Electronic Industries Association is alarmed at the progress of the hams in saving the 220 band. As to the CBers getting part of 220 "Never Say Die" stated, "The FCC is not in favor of opening another can of worms."

Green said the unofficial FCC position is that they "have given up on 11". They find it much more pleasant to deal with the hams because "hams answer citations and CBers don't."

The ARRL came in for some praise from Wayne when he said they "had done well" in their reply to the FCC on the possibility of giving part of the 220 MHz band to another service. He said that the next step is the FCC will make a study.

As to saving the band for amateur use, Green advocated getting 500 repeaters on the band by late this year. He said that would furnish enough ammunition to fight the EIA lobby.

Wayne, a ham since before WW II, said that today 2 meters is the most occupied ham band with more hams on that band than any other. He termed the FM growth "spectacular" and said it will continue. Mentioned was the fact that there are 100 repeater channels available on 220.

He told of an organized symposium held in the east in February in which 40 groups were represented. He said at the meeting standards were developed and what frequencies to be used were decided upon.

At the Dayton Hamvention, in April, a midwest repeater meeting was held and according to Wayne, they voted to go on 220 as soon as possible. There was also a call for standardization so the same crystals would be useful over the entire country, which would be helpful to the traveler. Keeping in touch with the manufacturers, he was able to say that more 220 equipment was coming on the market and he showed units by Clegg and TPL. He also predicted that in a few years frequency synthesizers will come built in the rigs.

Wayne predicted that if a few things are done FM will be even more popular. He told that in New England there are only

two closed repeaters and no remote bases. He told of repeaters that have input on 6 meters and output on 10 meters and that there is now work on a cross link to come out on the ECARS frequency. He said he looks forward to the day that with a 2 meter meter handi-talkie one's eventual output would be on 20 meters and you could work DX with a handi-talkie.

It was his opinion that a Technician licensee's responsibility stops at his antenna and it was perfectly proper for his signal to go through a repeater and into the General portion of the band. He said the FCC has been giving amateurs a hard time, mostly by inspectors "who have nothing better to do in life".

Wayne's theme at recent appearances has been that FM is fun, lots of fun, and we're going to have even more. He says FM provides more fun than anything we've ever had in ham radio. And he told of using SSTV on 2 meters.

Speaking of SSTV he told of taking a cassette tape recorder on his DXpedition to Navassa and sending out SSTV signals by holding the speaker up to the mike. He recorded the incoming signals on tape and looked at them when he got home to New Hampshire.

On a bit more serious note, Wayne told of his pet project of helping develop Amateur Radio in developing countries. He said that countries seem developed in about the same ratio to the number of hams in the country. He said, "you can't develop without communications, if you don't have hams-you don't have technicians, installers, etc."

He told of talking with King Hussein of Jordan, (JY1) two years ago, which has resulted in ham radio stations in the high schools and increased technical education.

Green said when King Hussein came to the U.S. recently he was invited to come and meet with the king. From that meeting came another invitation to visit Jordan. Green said that it would "cost \$600 for a round trip ticket-my wife wants to go also and that means the trip would cost \$6,000".

W2NSD said he was most surprised one day to get a letter from the king with two round-trip first class tickets on Royal Jordanian Airlines.

After the trip, he said, he will prepare a paper which will be sent to all emerging nations. The message to be-how it was done in Jordan, with further suggestions, and outlining the need for amateurs in schools.

Wayne said we must get governments to appreciate Amateur Radio.

Wayne also mentioned the arrangements for the 73 European tour and his soon to be released SSTV book.

Also on the program was Michael Van Den Branden, WA8UTB, Editor and Publisher of "rpt" (The FM Magazine). Mike also stressed the need to retain 220 and quoted from an electronics magazine (non-amateur) an article attacking the amateurs "for not wanting to give up any of 220". Mike went on to say that we must back the League and Wayne in the fight to retain 220. He also delivered quite a humorous talk on the launching and continuation of an amateur radio publication.

Sunday morning, Pacific Division Director J.A. "Doc" Gmelin, W6ZRJ, and ARRL Handbook Editor Doug Blakeslee, W1KLLK, conducted the ARRL forum.

They told of the League's position of opening the entire 2 meter band to Technicians. Doug told that any amateur can write in to the League with a technical question and they receive from 100-200 such questions a week. He also told that QST VHF editor Ed Tilton, W1HDQ, (one of the real VHF pioneers) would be retiring September 1. Gmelin told that the League President and General Manager recently spent two days at the FCC. He said the main conversation centered around jamming on WCARS-ECARS-MIDCARS and that the FCC says they are too short-handed to go after jammers and yet cite for minor infractions. Gmelin said that the FCC has gone to Congress to ask for more money and that they want a U.S. Marshall to accompany FCC teams in the field so as to make immediate arrests.

Gmelin also suggested that groups from local clubs call on known "jammers" and attempt to reason with them.

From the floor the discussion touched on a suggestion that electronic stores not sell gear to anyone until a license was shown which would allow operation on the portion of the spectrum the equipment was manufactured for. Mentioned was eye-witness accounts of stores selling ham gear to non-hams.

One complaint from the floor was that FCC Field Engineers were citing on infractions on which there had never been a formal rule making. When asked to see on what rule the violation was based the Engineer would not make the "memo" or whatever, public.

Gmelin commented on an aspect that he called "dangerous" -DXers not talking to traffickers-repeater buffs not talking to DXers, etc. and the League being referred to as "they". He said "Ham Radio is us".

Many Fresno area amateurs worked very hard on FM: West but special mention should be made of the efforts of Berge Bulbulian, WB6OSH.



The August issue will have a major feature story on one of ham radio's great humanitarians, Fred Hargesheimer, WØEBG-VK9FH. Fred, a P-38 pilot was shot down over the island of New Britain in 1943. After wandering alone in the jungles for 30 days he was found by natives who protected him for eight months. In 1960, Fred was instrumental in giving the primitive area their first school. Fred is now on a leave of absence from UNIVAC and is teaching at the school and operating as VK9FH. Don't miss this major picture story. Another top visual report will be on the role of amateurs in furnishing radio communications for the Baja 500 Off Road Race in Mexico, June 8-9.



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## FEATURE ITEM

### 50 MEGAHERTZ LOW COST COUNTER



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- 50 MHz six digit counter, using line frequency as time base, complete except for cover . . . \$97.50
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A complete calculator kit, complete with self contained power supply and case. Indispensable in the home, office or school. Simple enough for a child to build. Some of the features of the calculator are as follows:

- MOS integrated circuits (extra large scale integration) reduce the number of components to a minimum, for easy assembly
- Displays eight digits on large size seven segment displays.
- Full function complement keyboard features addition, subtraction, multiplication, division, alternate display, multiplication by a

constant, clear all, clear entry, and decimal point set. • Sixteen digit entry and sixteen digit results are possible with alternate display key. • Leading zeroes suppressed • Chain operation • All integrated circuits and displays are socket mounted and replaceable.

So reliable and simple to build, we can make this guarantee: If for any reason you cannot succeed in getting your calculator to function properly after completing construction, for a flat handling fee of \$10.00, B and F will repair and ship back your calculator anywhere in the USA. This applies regardless of the age of the assembler, barring gross negligence or the use of acid core solder in construction.

Through our efforts to sell off our large quantity of hi-voltage supplies it seems like we have cornered the market. Each time a salesman comes in with a new supply, its better than the last one. These supplies cost upwards of \$300.00 and should sell for \$40.00 surplus, but do to the large quantity on hand, we are selling these for \$10.00.

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	-5.0KV@.1ma		
15	2-10.7KV@.1ma	2WHVPS	\$10.00
	2-7.5KV@.1ma		
10	+10KV@.1ma	CHVPS	\$10.00
	+5KV@.1ma		
10	+10KV@.1ma	PCHVPS	\$10.00

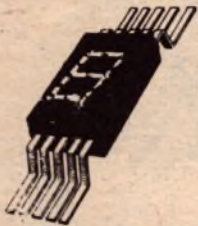
#### KEYBOARDS

Three keyboards are available, as illustrated. 20 key calculator keyboard, 40 key alphanumeric, and 12 key touch tone. All have separate contacts brought out to edge connector.

- Touch Tone Keyboard . . . \$ 9.50
- Calculator Keyboard . . . \$14.50
- Alphanumeric Keyboard \$29.00



### LIGHT EMITTING DIODE

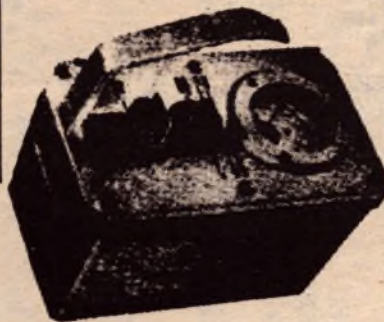


This display is excellent for small portable electronics, such as DVM's, calculators, etc. Equivalent to Monsanto MAN 3A. Operates from 5 volts, 20 milliamperes, with 47 ohm dropping resistor.

- 3.25 each ~~\$3.95 each~~
- 10 for 27.50 ~~10 for \$35.00~~
- Complete counter kit, 7490, 7475 latch 7447, printed circuit board, led readout . . . \$9.50

Last minute special !!!  
Extra large size MAN-7  
\$4.50 each, 10 for \$40.00

### RADIATION METER ("Geiger Counter")



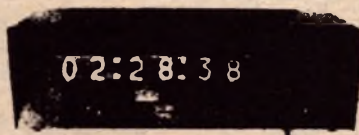
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- Radiation Meter . . . \$9.50 + \$1.00 postage & handling

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a complete etched and thru-plated circuit board, all integrated circuits, complete power supply, display tubes, I.C. sockets and a nice front panel with polaroid visor. We have never seen anyone offer this kit for less than \$100.00 before. Includes BCD outputs for use as with timer option. May be wired for 12 or 24 hour display. Indicates hours, minutes, seconds.

- Clock Kit, complete less outside cover . . . \$57.50
- Aluminum blue or black anodized cover (specify) . . . \$ 4.50

### READOUT SPECIALS

- Low current readout, in dual-in-line package. Plugs into 16 pin integrated circuit socket. Ideal for miniature battery powered instruments current is 8 milliamperes at 5 volts. Life is rated at 250,000 hours. Works fine from 7447 decoder Driver. \$3.25 each, 4 for \$11.00



- Complete counter kit, above readout with 7490 decade counter, 7447 decoder-driver and etched printed circuit board. \$8.00 each.

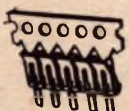
- Extra large size readout, in glass envelope package with wire leads, draws 20 milliamperes at 5 volts, works from 7447 driver, 100,000 hours rated life. \$3.50 each 4 for \$12.00

- Counter kit, 7490, 7447, P.C. board as above . . . \$8.50 each.
- On either of above kits, add \$2.00 for, 74192 Up/Down counter option, \$1.50 for 7475 latch.

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- Stancor P6378, 24 volts at 4 amps, 12 or 6 volts at 8 amps, include shipping for 5 lbs. . . . \$ 7.50
- Dektronic, designed for Sanken amplifiers, 48 or 62 volts D.C. at 2 amperes, include shipping for 5 lbs. . . . \$ 7.50
- 17 volts center tapped at 3.25 amperes plus 170 volts at .050 amperes. Makes excellent supply for TTL logic and Nixie or Sperry readouts. include shipping for 5 lbs. . . . \$ 7.50

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sizes: 10 watts RMS (20 watts music power), 25 watts RMS (50 watts M.P.) and 50 watts RMS (100 watts M.P.) per channel. 20 page manufacturers instruction book included. Sanken amplifiers have proved so simple and reliable, that they are being used for industrial applications, such as servo amplifiers and wide band laboratory amplifiers.

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# How and why KS6 lost its rare DX label

The story of  
education and  
change in the  
smallest United  
States Territory

American Samoa, a series of seven small tropical islands, is located six degrees south of the Equator in the South Pacific Ocean. Shown here is the western end of Tutuila, the largest and most populated island.

Not many years ago American Samoa, or KS6 land, was if not rare at least "unusual" DX. In 1954 there were only two licensed radio amateurs. From 1954 to 1964, with the coming and going of different government administrations, the ham population fluctuated but never grew to the point where KS6 calls were common on the bands.

Today all this has changed. Samoan KS6 is no longer rare. From three amateurs in 1954 to sixty in 1972 is a big gain. All but one or two of the amateurs live on the main island, Tutuila, which has about 43 square miles. Local QRM can and is often a problem.

The rapid growth in the amateur population is the direct result of the establishment of a unique educational system, the basis of which is educational television. It would be quite accurate to say that the new system came about in large measure through the efforts of a pioneering and dedicated group of men and women, many of whom were radio amateurs.

American Samoa, located some 2300 miles southwest of Hawaii, has been a U.S. territory since 1900.

The inhabitants are Polynesians and closely related to other people of the central and eastern Pacific. They form a part of the family which includes the Hawaiians, the Tahitians, the Tongans and the Maoris of New Zealand. They are a friendly, warm and generous people. Their culture is rich in ceremony and tradition.

America's first interest in Samoa was directed at the naturally beautiful, deep water port at Pago Pago (pronounced Pongo Pongo). It became the site of a naval coaling station. During World War II an air strip was built and the islands served as a staging and training area for U.S. Marines.

During these early years nominal health, educational and governmental services were established. The U.S. had agreed to respect and protect the individual and family rights of the Samoan people and to make no changes which would damage or destroy the cultural or family life. Thus progress was slow and for 60 years Samoa remained virtually isolated from the mainstream of modern civilization.

In 1961 Samoa gained a new governor, H. Rex Lee. (This same Lee is now a member of the FCC). Upon his arrival, Governor Lee found that standards prevailing in the school system did not in any way enable Samoans to compete on an equal footing with their youthful counterparts elsewhere in the world.

Village schools were ramshackle, equipped with castoff U.S. textbooks and staffed with Samoan teachers who were often inadequately prepared for their important positions. Governor Lee, a far-sighted individual, was well aware of the problems he faced and the enormity of the task ahead. He determined to make drastic changes in the educational system and to bring Samoa and its youthful population into the 20th century in a hurry.

After months of study, aided by a government grant, educational television was chosen as the quickest and most economical answer to the educational problems. Television was not to be just a supplementary tool but the core on which all instruction was to be based. It was an all new idea never before tried on so large a scale.

Governor Lee provided the driving force and the vision. The U.S. Congress provided the money. A group of teachers, administrators and engineers provided the willing hands and enthusiasm to get the project off the ground.

The first group of education pioneers arrived in the islands in 1963. Their number included several radio amateurs. Amateurs were among the men who scaled the 1600 foot sheer face of Mt. Alava to erect the transmitter towers. Amateurs were among the first engineers who arrived to put the television recording and broadcast equipment into operation. Among the first teachers, research writers, administrators and producer-directors were more radio amateurs.

From the beginning, the U.S. personnel worked directly with the Samoan people. Young Samoans were recruited, all of whom had never seen television, much less the sophisticated equipment used to produce programs. To many, telephones and even electricity was a novelty.

Working side by side with their new friends, these Samoans quickly learned the jargon and skills necessary to become TV cameramen, transmitter assistants, set repairmen, video tape technicians, control room assistants and antenna installers. Introduced to electricity and long distance communication, a number decided to learn theory, so it was only natural for the KS6 amateurs to share their enthusiasm and to help the young Samoans obtain their own licenses.

New school buildings had to be built on five of the islands, so more Samoans were hired for construction work. The island teachers had to be retrained with television as a major instructional tool. In all, it took a year of concentrated work to get the new and altogether unique system on the air. Total expenditures were 2.8 million dollars. The first telecast lessons were broadcast on October 5, 1964. Now nearly seven years later the basic formula of TV and in-class instruction continues.

by

Joan E. Griffis,

WA7SOK-KS6DJ

In those first uncertain days communications between Samoa and the U.S. mainland were sketchy. The phone system was "out of order" much of the time. Air flights were once per week. Boat mail took a month or longer. So messages were handled by early Department of Education hams like: Leo Jordan, KS6AL; Emil Lohrke, KS6AY; Ronald Manning, KS6BT, and Bud Perry, KS6BV. They helped to keep the channels of communication open and to speed the progress of the developing system. When parts or material were needed, appeals were put on the air and the requested items arrived on the next flight from Honolulu.

The Samoan community quickly recognized the value of the service offered by the amateurs. Countless times emergency messages crossed the thousands of miles between Pago Pago and the U.S. mainland.

Once the educational project was successfully underway, the amateurs turned their efforts to other activities. The first of these was the construction of a club station, KS6CY. Located now in an air-conditioned trailer and utilizing a 90-foot tower and a beam, the station was originally in one corner of an elementary school classroom. This project was the dream of Vince Sullivan, KS6CG. Vince recognized the real need for emergency radio facilities, so he mobilized the other KS6 amateurs and sold the local government on the need for emergency communications. Thus, KS6CY is a major link in the Civil Defense network in Samoa. KS6CY is on the air daily, handling routine and emergency messages between Samoa and the world.

Another very major contribution by amateurs to Samoa is in electronics education. Code and theory classes have been taught by KS6CG and Jake King, KS6CQ. At least eight Samoans have earned their licenses under their tutelage.

Through the enthusiasm of the new Samoan ops a second club station has been activated at one of the high schools. Several young men began their careers in electronics with on-the-job training. Some have gone on to U.S. colleges and trade schools for further study. Course in basic electronics and radio and television repair are now offered at the Community College of American Samoa. Often an amateur assumes the teaching role as instructor.

The ETV system in Samoa is still the largest and only one of its kind in the world. During the regular school day, the television lessons are broadcast on six VHF channels. Schools on five of the seven islands receive the telecasts. Children view television for 20 to 30 percent of the school day. In the classrooms are Samoan teachers who reinforce what the students see and learn.

One aim of the project is to assist the Samoans to maintain and expand their own educational programs. In the years since the new system was inaugurated more and more Samoans have assumed positions once held by Americans.



ector for

Joan Griffis, KS6DJ/WA7SOK, (l.) was a television teacher in Samoa from 1956 to 1968. Here she discusses the design of some drawings for one lesson with a graphics artist (seated).

Today there are Samoan producer-directors, television teachers, artists, photographers, principals, administrators, videotape engineers, transmitter assistant engineers and college teachers. The Department of Education employs over 800 people, less than 100 are U.S. personnel.

Has the experiment worked? Yes, definitely. American Samoa is rapidly on its way to full status as a member of the world community. Next time you hear a KS6 on the bands you can be almost sure that he or she is an active and vital part of that experiment... advancement of education where hams had a hand.

Joan Griffis, WA7SOK, has been a teacher since 1960. In the spring of 1966 she completed a M.A. degree in instructional materials and television at San Jose State College. As a result she was asked to join the staff of the Dept. of Education in American Samoa as a television teacher.

From 1966 to 1968 she taught English to 1300 high school students via television. In the summer of 1968 she transferred to the teacher training college as an instructor. There Joan was involved in teaching teacher education courses and supervising student teachers.

As her father, George Griffis, is a ham, she had been around Amateur Radio for a long time. But she didn't get interested until going to Samoa. Through a number of KS6 hams she was able to maintain weekly contacts with home. As she puts it, "after two years of this the fellows got tired of handling all my traffic and collectively decided I should have my own license and station. By then, I had caught the bug and agreed with them. So, after many long hard months of studying I finally got my own call, KS6DJ. I don't know who was the happiest, the other KS6's, my dad or me!" She was on the air for about eight months from KS6 land.

Joan belongs to ARRL, YLRL, ISSB, Air Force MARS and participates in a number of nets.

# TEN-TEC Argonaut.

*New  
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*in  
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Radio...*



**FIVE BANDS-FIVE WATTS  
SSB - CW  
SOLID STATE  
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# TEN-TEC Argonaut

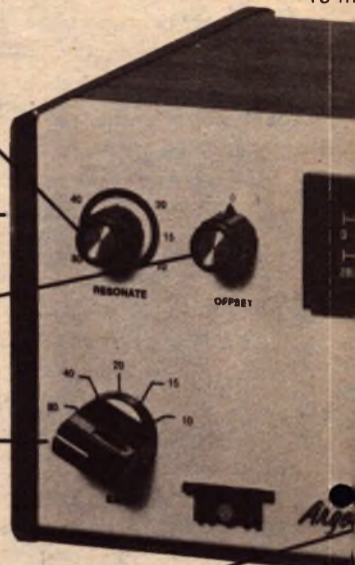
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## The New TEN-TEC Argonaut



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**GENERAL:** Frequency range in MHz 3.5-4.0, 7.0-7.5, 14.0-14.5, 21.0-21.5 and 28.0-30.0. 9 MHz crystal filter. 2.5 kHz bandwidth. 1.7 shape factor at 6/50 dB down-points. Automatic sideband selection, reversible. Completely solid state. All circuits are permeability tuned. Circuit boards except PTO and rack tuning are plug-in. Tuning rate is 25 kHz per revolution. Direct frequency read out in kHz. Dial accuracy  $\pm 5$  kHz (slightly more on 28 mHz). Upper horizontal scale indicates band segments. Constructed of aluminum and cycolac molded end panels.

Size: HWD 4½" x 13" x 7", approximately 1/5 cubic foot. Weight: 6 lbs.

**RECEIVER:** Sensitivity less than ½ uv for 10 dB S + N/N. Dial backlash negligible. "S"-Meter. Automatic Gain Control, fast attack, slow decay. CW side tone, volume adjustable. Offset tuning (clarifier). Separate RF and AF gain controls. Frequency response: 300-3,000 Hz. Distortion less than 2%. Built-in speaker. Output for headphones.

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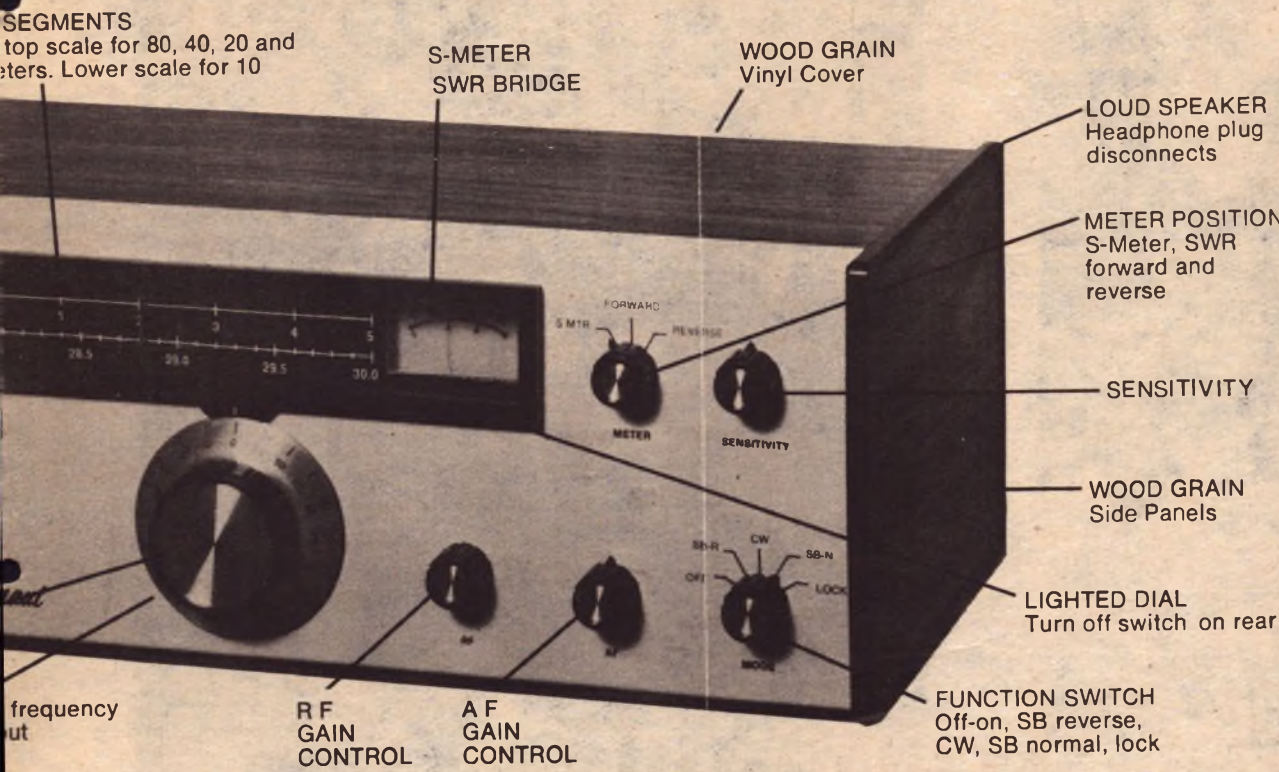
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When out of reach of commercial power—or if it should fail—the Argonaut will operate for days with a 12 volt lantern battery.

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# Fun

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6 1/2" Model S20-220 Price \$39.95  
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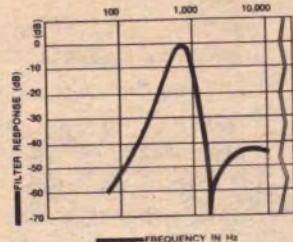
Measures forward and reflected power down to 1/4 watt.

Model AC4-104 Price \$14.95

### CW FILTER

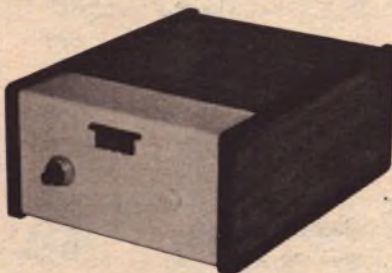


An outboard cw filter for insertion between a receiver and high impedance headphones. Passband is 400 Hz with negligible insertion loss. Response curve shown below. Adjustable attenuation allows the operator to retune the receiver as the filter is applied so the received signal will not be lost. Plugs into headphone jack. HWD, 2 1/2" x 4 1/2" x 6"



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### POWER SUPPLY



Extremely well regulated for providing power for POWER-MITES, the Argonaut or any other device of similar nature. Input voltage 115/230V ac. 50-60 Hz. Output 12V dc @ 1 A. HWD, 2 1/2" x 4" x 6"

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### ANTENNA TUNER

Matches unbalanced output of 50-75 ohms, (TEN-TEN transceivers), to balanced feed lines, random length or long wire antennas. Open construction. Works up to 10 W.

Model AC5-205 Price \$8.95

*fun*



## Tommy and his friends learn about ham radio

by Geri Mc Glynn, WA6CNW

This is an account of a day at the QTH of this ham, Geri, WA6CNW. It is far from earth shaking, there are no records of great deeds of life saving, it is not a record of rare DX or of winning contests. It is just a sketch of a stormy Spring day when ten physically handicapped children in braces, wheelchairs and walkers came to see what ham radio was all about.

Volunteer workers and neighbors lifted and carried them from their bus into our home. One beautiful little girl was, for safety's sake, securely tied in her wheelchair with strips of cloth.

Tommy, who has had rheumatoid arthritis for some years was carried in by his dad. Eric, who had cerebral palsy and who has been the most reticent about entering into the activities of the group forgot his shyness and was the first to talk on the mike.

Bonnie became so eager that she threw her crutches to one side and crawled quickly on her hands and knees and stayed there talking to W1HWK.

I have had my license for 15 years and have enjoyed many exciting hours on the bands but this one day was the most emotion packed and satisfying of them all.

This was not written for any "glory" or credit, but in hopes that QSL cards might be sent to the Ellis-Highlands School. These will be of educational benefit to the children, encouragement to their dedicated teachers and perhaps encouragement to other hams who might like to try the same thing.

"Tell me again, what are those letters you say, when you want to talk to someone?" asked Tommy, age 10 and then quickly, "Oh yes, I remember, its CQ, CQ, CQ." Tommy's school chums listened quietly as Geri, WA6CNW, explained some of the "Q" signals and "Call Letters" to them.

Tommy is an experienced "rag chewer" because in February he had talked to his sister who lives in KZ5 land. Through the courtesy of Mel Meyer, KZ5HW, Tommy enjoyed a phone patch to the Canal Zone. Later he told of this exciting experience to his classmates, all pupils at the Ellis Highlands School for the Orthopedically Handicapped in Lafayette, California.

One of their teachers, Mrs. Penny Broatch, called and asked if the class could visit and learn about how ham radio reaches out to many people and to all parts of the world.

A day was planned and the boys and girls in age from 10 through 16 arrived at the QTH of WA6CNW in their school bus.

"What does the word "HAM" mean?" "What turns the beam?" "Which box does the voice come from?" "How far away from here can you talk?" These and many other questions came quickly one after another.

At 1800 GMT on 21.420 MHz, "Father Dan", W1HWK, was heard calling for his sister, Geri, WA6CNW. Realizing that his voice was coming all the way from Boston to Walnut Creek gave as great a thrill to the children as a rare DX would to many veteran hams.

One clapped his hands, another giggled and all smiled happily at this new exciting day. All, too, had mike fright.

Between the two operators, there was the usual exchange of signal reports and weather conditions between W1 land and W6 land. There was much laughter when W1HWK reported that Boston was warm and sunny and WA6CNW had to report that Walnut Creek (Sunny California) was rainy and blustery.

A "Break" from Marie Laub, WA6HSQ, who was just starting on a cross country trip in her VW Camper showed them that hams can visit from their cars. Then Joe Caseli, WB5FNP/MM, in the Gulf of Mexico broke in. The children were ecstatic by this time. Another fine contact with

Rocco Sarlo, K5KXW/MM, off Cape Hatteras told of the voyage his ship was making. Then "Pete" Peterson, W6LGW, and his XYL, Jean, from Alamo came on the air and Pete told them to listen to the difference in his signal strength as he turned the beam antenna in different directions.

Soon the nervousness of making their own contacts began to diminish. When they saw their principal, John Hayden, take the mike and casually and calmly talk to all these unseen friends, their own new found courage covered them like warm sweaters and they all wanted a turn in giving their name and asking questions.

To W1HWK-"My name is Eric. What do you do?" W1HWK(Fr. Dan Linehan)-"I am a seismologist and I am in an observatory in Weston, Massachusetts which is near Boston. Here we have machines called seismographs and these measure the magnitude of earthquakes. You people in California have the earthquakes and we record them."

Tommy - "Do you think that California is going to slip into the sea?"

W1HWK - "No, I don't, so you children don't have to wear bathing suits anymore when you go to bed at night."

There was hearty laughter at this response and now they knew only that friends were wanting to hear their voices.

"My name is David." "Hi, David." "My name is Kim." "Hi Kim, how are you?" Eric wanted the mike again. Now a real ham and up until this morning he had been the quietest one of the group. "My name is Bonnie", and Bonnie with long blond hair and blue eyes smiled happily at her turn to ask questions. Lauri, in her wheel chair, gave her greeting too softly for the mike to pick up but her eyes carried her message anyway. Teddy was serious and businesslike with his contact and then left his phone number so that he could be called to come again someday. Patty, Craig and Jeff all had their turns at the mike.

Then Pete, W6LGW, and his wife drove from their QTH over to see the children in person, keeping in contact via a 2 meter repeater. Great guessing games were enjoyed as the children tried to match Pete's voice with his physical build. "Is he short and round?" "Is he tall and skinny?" Some one asked, "Do you have gray hair?" "I would have," replied Pete, "if it had stayed with me." That answer brought much laughter again.

Soon Pete's car stopped in front of the QTH and the QSO on 2 meters was over. There was some suspense as all waited to see who was closest in his description of W6LGW. "I was right, I was right", cried a couple of the children. "He is tall." "Not really thin though" said another.

"Say, I think we had better sign off with W1HWK, so why don't we all do it together" suggested WA6CNW. A hearty chorus of "GOODBYE" easily found its way through QRM, QRN, QSB to Boston and the response from W1HWK of "WOW, you sent me spinning across the room" left the children laughing at what they had done to him.

Refreshments, souvenir QSL cards from Pete, W6LGW; Geri, WA6CNW, and her OM, Andy, WA6CNV, were received by the children when they boarded their bus for the return trip to school

Sincere thanks are offered to all hams and non-hams who helped us with this venture and we wish that all could have personally experienced the excitement, love and the appreciation of these physically handicapped children and of their principal, teachers and volunteer workers.

All hams who would like to add to the happiness and education of these children may send their QSL cards to:

Ellis-Highlands School  
3180 Quandt Road  
Lafayette, California 94549  
% John Hayden, Principal

Tommy, who is a collector of U.S. and foreign stamps was named for his uncle, the late Tom Gill, W8KWF, of Grand Rapids, Michigan.

Ellis-Highlands School for the Orthopedically Handicapped is operated by the Contra Costa County Department of Education. It provides for the education of children with orthopedic or other physical handicaps, such as cerebral palsy, birth defects, muscular dystrophy arthritis, or handicapping cardiac conditions.

Some of the students are profoundly involved and can barely move or speak; others have comparatively minimal problems with locomotion or fine motor coordination.

There are two classrooms. Mrs. Pape teaches ages 3 years through 9 years and Mrs. Broatch teaches 10 years through 21 years.

As early as age three, the youngsters may begin attending the nursery class, and they may continue at the school up to age 21.

Along with regular school work, speech, occupational and physical therapy are provided to help each individual make the most of his abilities and to prepare him for possible integration into regular schools or employment.

## Ham Radio and foreign languages

Gabriel Gargiulo, WA1GFJ

We hams have a rare privilege. By picking up a microphone we can talk with people almost anywhere in the world. Few can afford to travel abroad, but we can all afford to visit in the living rooms of foreign hams, by the magic of Amateur Radio.

What we say on the air can make someone's day a bit happier, or it can make it a disappointment. What goes out through our antennas can affect what many people think of America.

Most Europeans think that Americans are loud, rude, free-spending and ignorant of any language other than English. They have gotten this impression from Americans they have seen. For the most part, those who visit Europe are loud, rude, free-spending and ignorant of any language other than English.

Those of us fortunate enough to enjoy ham radio can do a lot to create a good impression of our country and go a long way in achieving peace. We can learn the other fellow's language and talk to him in it.

By learning someone else's language we take the first step in opening our mind to him, and in communicating with him. A language is not just a way of saying things. It represents a person's whole culture, his heritage, his way of thinking, even his religion. When you learn and use his language you are saying: "Your way of life, your culture, your values are important to me. I want to be closer to you."

English is not the only language in the world. It happens to be the dominant one

only because the United States is the dominant world power, and because Americans and Britons refuse to learn other languages.

English is dominant on the ham bands because most hams are Americans, and they will not learn a foreign language.

If you decide to learn a foreign language, here are a few pointers.

1. Choose a language. It may be one you had in high school, or the language your grandparents spoke. Try to pick one you are likely to hear on the ham bands, such as Spanish, French, German or Italian. Choose one you can learn easily. There are many materials available for learning Spanish, French and Italian, but few for learning Albanian or Flemish. The best choices seem to be Spanish, French, German or Italian.

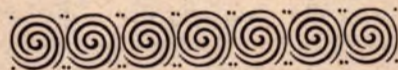
2. Then learn a little. Get a hold of tape recorded QSOs (advertised in ham publications), language records (Dover Publications, New York) or take a course at any one of many language schools ready and waiting for you.

3. Use what you know. You can always fall back on English. But remember, English is a foreign language for the other fellow. Why should he speak your language and not you his?

4. Don't be a perfectionist. Unless you can live in the country more than three or four years, you will probably never speak the language like a native. So speak as correctly as you know how, but speak to be understood.

5. Ask your contact for help. Few will refuse to coach someone making an effort to learn their language.

In just a few month's time you'll have learned to speak a foreign language, advanced international relations and added many hours of enjoyment and warmth to your hamming. Which language will you learn?



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We're all interested in the technical aspects of our hobby, but WORLDRADIO is trying to complete the picture with insight into the people who are making our hobby the unique and fascinating international service which it is today.

*newspaper  
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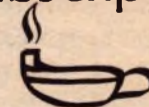
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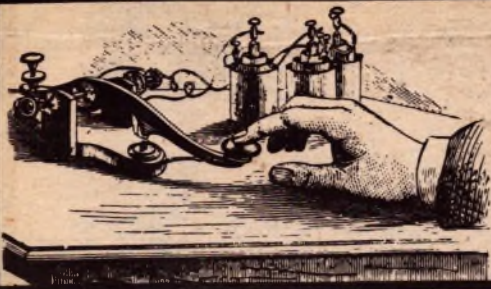


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# REPORT TO THE READERS



## CONGRATULATIONS TO YOU!!!

Usually when a new publication makes it to the one year mark (most don't) the occasion is marked in print with much self-congratulation. Such is not our "bag". It was indeed through your interest, your support, your help, that **WORLD RADIO** got to this mark. We here feel that you may take some pride in your accomplishment. You made a publication come to life and sustain itself.

Letters have been coming in saying that we have come a long way since the first few issues. The only reason that we have what we are presenting now is because of you. You made it what it is.

At hamfests readers have asked how we started **WORLD RADIO** and have been curious about the beginning. Here is the story.

After a lifetime in journalism we felt that a publication was needed that devoted itself to the more intelligent, creative and useful pursuits in Amateur Radio. Notebooks filled with research. Then a flyer was sent out describing the purposes of the new publication. The flyer was sent out to 5,000 carefully selected amateurs. We imagine a good number of those were skeptical about the survival of a new amateur radio publication for in the six week period prior to the issuing of the first issue (28 June '71) we received 135 subscriptions. But what a 135 they were! From this small group of "real people" came the material that made up the first few issues. The mailing out of sample copies of each issue to more carefully selected amateurs brought in more subscriptions and articles and we started to grow.

Growth was not easy for a publication of this type appealed only to a certain element. We found that its appeal was to the brighter, usually rather successful, people who had developed to the point that they were concerned with abstract concepts such as friendship and helping others.

The publication "Barron's" once said that nothing takes the time and money that publishing does. They were quite right. Soon the savings of a lifetime were gone. A good portion of the salary from the job was being pumped into it. Then trouble of another sort struck.

It had been hoped that, due to the nature of the publication, that the hams in Sacramento would take an interest in the paper and a little pride in the fact that it was coming from their town. We had felt that from the thousand or so hams in the area a few would be interested enough in the philosophy of the paper to come over one night a week, or one night every two weeks or a few hours on a weekend and lend a hand. But such was not forthcoming. And we had a tiger by the tail. We were faced with a dilemma. There just wasn't the time available to put out the paper and we had an obligation to our subscribers. The dream of a community sharing in the fun, satisfaction (and work) of putting out a pub-

lication dedicated to the best in Amateur Radio and people, had faded. The picture in our mind's eye of a bunch of hams coming to the house and sharing in this effort proved to be an unrealistic one. But what to do? **WORLD RADIO** had become the very reason for existence. We felt we could not dissappoint the many wonderful people who had written in letters of encouragement and those who said "Amateur Radio needs this publication".

At an age when most people are beginning to enjoy the fruits of a lifetime of labor, Helen Louise Noble, my wife, found her standard of living sharply curtailed when her husband, refusing to let the paper die, decided to devote full time to the publication. Times got very rough. To keep the paper going radio equipment was sold, (a transceiver met the print bill one month) our professional photographic equipment went (that met the postage bill) and insurance policies were cashed in. And from her school teacher salary money was pumped in to the paper and the payments to the foundation were met. What a woman. The pioneers crossing the country in the covered wagons would have done well to have someone like her.

The growing pains were sharp and deep. One savior was Phil Hays who violated the printers first commandment which is don't extend credit to new struggling publications. Phil printed issues #11 and #12 on the cuff. We were oozing into debt. A statement from the bank one month showed a balance of three cents. But we kept working all day and all night and all weekend on the paper. We were on the razor's edge. But all the time letters from readers were coming in "hang in there" they would say.

Due to the heavy losses there was a sizable income tax refund, which went to pay the back bills. One time we had the papers printed and no money to mail them. They sat here for a couple of days. Those were tortured days. Then a beautiful check for a great number of gift subscriptions came in from Phil Pector, W9LDX, the check went to the bank and the papers went to the post office. Phil has saved us a couple of times now. Another savior has been Darleen Magen, WA6FSC, (formerly Souligny), during her world-wide travels she would treat a large number of her hosts to gift subscriptions. Many other hams in the U.S. were treating their overseas friends (and those in this country) to gift subscriptions. What a help they were! A most touching thing was the number of people who just sent in "something for the kitty"

Then advertisers took an interest in the paper. They knew that our circulation was not huge, but they liked the kind of people that were reading the paper. Doug Murray of Amrad Supply said "The content of **WORLD RADIO** is essential to the future of Amateur Radio" and Amateur - Wholesale Electronics said "WORLD RADIO is the most interesting, literate publication we have encountered in 25 years as an ama-

teur." Remarks like those tend to keep one going. And the money from ads goes to pay the back bills. (Bless those advertisers.)

While we have made it to the one year mark we are not out of the woods yet and the struggle continues. The fact that this is a combined June-July issue is testimony to that. It gave us much professional and personal pain to miss an issue and combine them but there was no other solution.

In the midst of this struggle it just about brings a tear to one's eye when people like Dave Flinn, W2CFP, and Phil Pector, W9LDX take out lifetime subscriptions at \$50 each to give us a boost when we need it most. Another source of encouragement was the many who renewed their subscriptions for two years, we took that as an act of showing faith and wanting to help. We have learned a great deal about what heights the human spirit can reach.

At present we have 950 paid subscribers, each month we send out about 3,000 sample copies in an effort to obtain more readers.

We know why there are not more subscribers from an incident that occured when we were dropping off some papers at the local ham store. When we were putting them in the rack one customer said, "Oh, that's the paper about all the do-gooders. I don't want to see my hobby used as a rescue service". You kind of feel a little sorry for a guy like that and for his family and co-workers.

Do-gooders? You bet! A person has three choices in life: Do bad; do nothing; do good. Which is preferable?

And what is the definition of a do-gooder? I suppose it is easy for the grumps to mock someone that comes to the assistance of someone else. But what if someone comes to your aid when you find yourself in the deep mudd? Does the grouch say, "get out of here you do-gooder" or do even then the gruff become grateful. Disasters are not limited to the remote regions of the world, they don't just happen to "someone else". Do the victims of the Los Angeles earthquake or the Rapid City flood refer to those who helped them as "do-gooders"? If a disaster should strike your city and through ham radio a boat pulls you off your roof, or a doctor is able to save your life, or that of your wife, is that ham to be dismissed as a "do-gooder"?

We monitored the flood traffic on 14 MHz for several hours and were quite disturbed to hear one ham say "Everywhere you go there is a Rapid City net, can't find a clear spot for a QSO." (They had two frequencies.) It must have stuck in his craw that hams were doing something magnificent.

We were gratified and proud to hear so many calls of **WORLD RADIO** subscribers handling traffic from their areas.

"Do-gooders"? -- You bet. We'll take 'em every time. Sure beats doing nothing!

As we head into our second year we hope for a few more volunteers to give Stu, Ken, Sid, Dan and George a little help. Hopefully a retired person that would like to feel needed and useful would move to Sacramento.

We hope this next year will be an exciting one for you and your paper. We're going to do our best to spark your creative uses of Amateur Radio. And we hope that your actions, reported here, will serve to inspire and motivate others. We have enjoyed serving you this past year.

Armond, WB6AUH



# Vic Olacke

E  
3 by Ed Steer,  
operator VE8ML

## International Gentleman

.....and a real character too. Victor N. Olacke, or just plain "Vic" to most people who know him is one of Canada's best known hams. Vic hails from Sarnia, Ontario and pokes a pretty fair signal into all corners of the world. His voice is one of a kind, if you hear it once you'll never forget who it belongs to; even with poor signals or QRM you might not copy too well, but you know who it is.

When I first met Vic, rather when I first heard of Vic, I was just a beginner in radio. Everywhere I pointed that antenna I heard someone mention him to me or heard someone talking about him. If rare DX was involved in the QSO I was having, Vic's name would invariably appear. After four months of operating I came to the conclusion that Vic's name went hand in hand with DX because where the DX was, Vic was.

This was the whole truth. By asking around I found out that Vic is a very keen DXer and also good at organizing scheds, preparing lists for DX stations and overseeing a DX station with a pileup problem.

I finally caught up to Vic, introduced myself and proceeded to get to know him better. He was very helpful, answered all my questions about rigs, propagation, DX, and even helped me work a few new ones. His advice was good and I followed most of it and ended up a much better ham. His last piece of advice was -quote-"get a haircut", although I fail to see how this will improve the performance of my rig, hi hi!

At this point I'd like to set the record straight on one thing, and give Vic credit where credit is due. To all you lucky hams who have a 3B9 QSL card you never had until last fall, you can thank Vic because he was the one who persuaded Darleen, (WA6FSC) to go on the DXpedition to Rodriguez and from there the rest of the rare countries she went to, followed.

After talking with Vic quite a few times and becoming good friends, he invited me out to his place. When I got out of the Arctic I took him up on the offer and out I went.

Vic is no different off the air than when he is on. He is a hard working family man and has a wonderful XYL. His son is presently taking his Masters degree at the University of British Columbia and Vic is justifiably proud. But most important of all he lives up to his own call sign; he truly is... an International Gentleman. You'll find him on 14.170 MHz almost any evening.

KZ5SD - Eddie Dollar, if you check your KZ5 list I'm sure you'll find him on it. His friendly drawl can be heard coming from the Canal Zone almost any time and frequency. Ed works on a dredge on the Panama Canal and is usually very busy.



Vic Olacke, VE3IG



OA8V - Paul Wyse, was host for Darleen and myself when we were in the Peruvian jungle. Paul, originally from Stateside, works at a translation school where the native tongues of the many jungle tribes are translated into written word. He has a very interesting story to tell if you are fortunate enough to work him. His QTH is outside Pucallpa at a place called Yarinacocha, about 450 miles NE of Lima.



9Y4PA - Phil Atteck, between him and 9Y4RB they made sure I saw and did everything possible during my two short weeks there. Phil is a native of Hong Kong but has lived in Trinidad for many years. He is an advertising manager for one of the better known radio stations in Port-of-Spain. He is also a first rate magician.

9Y4RB - Rus Barrow, a congenial host and a great fellow as well. Born and raised in Trinidad, he is a doctor. He runs Heathkit across the board and is most active after 2200Z around 14.175 MHz.



Aug. 5-6....Mich. State, Sault Ste. Marie

Oct. 14-15..Pacific Division, San Mateo

Oct. 20-22..Hudson Division, Tarrytown

Oct. 20-22..SW Div., Santa Maria

# MARN News

Fortunately for the meeting of the MARN Net on 30 April, Toni Delson, W4KJE, and her OM, Lu, W4JV, were vacationing in Guayaquil, Ecuador. Conditions that morning were very poor and Moe Pallotto, W9-BOX, was having difficulty operating as NCS. The 15 meter band was simply not "right" for him. Toni, operating as W4KJE /HC2 took over as NCS and things began to happen. As Moe put it, "She took over the net and did a beautiful job. If it had not been for her, the net would have had to fold up. Boy, she can really handle a net." A great big hug and 88s from the members, Toni.

Chuck Grover, W6FM, was on-the-ball the evening of 28 April. The carrier Ticonderoga was steaming her on way to Hawaii after the successful pick-up of the astronauts. Capt. Ed Boyd wanted a "patch" to Long Beach and through K2GO who was on board, Chuck handled it. After the completion, Chuck signed off with Robert Jensen, W6VGQ, who was also in the "shack" on board the carrier. Excellent work, Chuck.

Lee Chapman, W5QLA, is in charge of all mobile communication, microwave and anti-corrosion activities for United Gas in Carthage, Texas. He wasn't interested, but because of his outstanding character in the community, he was asked to run as one of the city commissioners. The end result was that Lee garnered the most votes a candidate has ever received in the 124 years that Carthage has had city elections. No mere landslide, it was an avalanche.

Frank Phillips, W5QPH/4

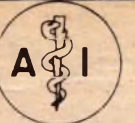
## communications

### Nobility Net

A local "Nobility Net" on the west coast meets Tuesday evenings at 2100 PDST and 2000 PST on 3930 Khz LSB. All that a Noble or Mason need do is check into the Nobility Net. Non-Masons who would care to assist in the philanthropy of the 22 Shrine Hospitals are welcome to join us.

Romayne Bantz, W6HUY

# AESCULAPIAN INTERNATIONAL NEWS



## SOME ASSIGNMENTS FOR PHYSICIANS AND DENTISTS:

### LONG-TERM

(Transportation, compensation, room and board are provided unless otherwise indicated.)

AI-302 - SURGEON for 18 months (min.) for Ivory Coast, West Africa hospital where many surgical cases must be turned down because of lack of a full-time surgeon. (Knowledge of French required.)

AI-304 - PEDIATRICIAN, CONSULTANT for 2-year contract with West Indies hospital. Several years experience in clinical, social and developmental pediatrics essential.

AI-391 - DERMATOLOGIST for 1 year (min.) for 200-bed hospital in Korea with strong outpatient outreaches into slums and rural areas, and a public health preventive medicine program. (Transportation paid for 3-year assignment.)

AI-398 - OPHTHALMOLOGIST for 1 to 3 years to work in two hospitals in India located 400 miles from Calcutta and 800 miles from Bombay.

AI-399 - GENERAL PRACTITIONER for 2 to 3 years in 145-bed hospital in one of the principal cities of Uganda, East Africa. (Residence and board provided at small cost.)

### SHORT-TERM

(Room and board will be furnished unless otherwise indicated.)

AI-315 - PHYSICIANS to work with teams of U.S. students for summer project of vaccination and emergency medical care in rural areas of Central America. Three-week terms start June 17, July 8 and July 29. Cost to doctors is \$175 round-trip from Houston, Texas.

AI-322 - PATHOLOGIST for 1 month (min.) needed by 644-bed hospital in Medan, Indonesia. (Much help is needed, but there is no money to help defray the expenses of volunteers.)

AI-337 - DENTISTS for 1-month (min.) assignments in Guatemala clinic, which provides dental and medical services in an isolated and poor area where no other facilities are available.

AI-370 - INTERNIST for 6 months or more to assist in 50-bed Nigerian hospital in West Africa built by the people of the community, who contributed labor, materials and money to put up the buildings and provide limited equipment. (Partial transportation expenses paid.)

AI-384 - GENERAL PRACTITIONERS, INTERNISTS AND PEDIATRICIANS for 3 to 6-week assignments during June, July, and August in Indian Health Service clinics on reservations in Montana, Wyoming, and Arizona. (Transportation, compensation and residence provided.)



## ACTION OVERSEAS

### SOME LONG TERM ASSIGNMENTS

(Transportation, compensation, room and board are provided unless otherwise indicated.)

AO-375 - SENIOR NURSE EDUCATOR for 2-year assignment to direct a newly-established School of Nursing in Botswana, Southern Africa. The Director will have full responsibility for nursing education at the school including curriculum development and supervision and in-service training of a teaching staff of six. Master's Degree in Nursing Education required, with some experience, preferably in a senior position on a nursing school faculty.

AO-379 - DENTAL LABORATORY TECHNICIAN for 184-bed hospital in Malawi, East Africa, to set up complete laboratory for 4 dentists and train Malawians to assist in running laboratory. Must be capable of performing all phases of dental and laboratory procedures.

AO-398 - X-RAY TECHNICIAN to work for 1 to 3 years in two hospitals in India, located 400 miles from Calcutta.

AO-399 - PHYSIOTHERAPIST for 2 to 3 years for 145-bed hospital in principal city of Uganda, East Africa. (Residence and board provided at small cost.)

### SOME SHORT-TERM ASSIGNMENTS

(Room and board will be furnished unless otherwise indicated.)

AO-360 - LABORATORY TECHNICIAN to assist for 3 to 6 months in 354-bed hospital which serves the poorer village people in Bandung, Indonesia.

AO-370 - REGISTERED NURSE for 6 months or more to assist in 50-bed Nigerian hospital in West Africa built by the people of the community, who contributed labor, materials and money to put up the buildings and provide limited equipment. (Partial transportation paid.)

Please send me more information. I am interested in assignment No(s) \_\_\_\_\_

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**RAPID CITY DISASTER**  
(from page 7)

When the property damage calls had been largely handled, calls for personal health and welfare started pouring in. At this time I decided to relocate my station. My wife and I had planned to leave on vacation Sunday, but the disaster kept me on the radio. Monday afternoon, however we left for Lake Poinsette, in northeastern South Dakota. Once there, I set up the radio, strung up an all band trap dipole antenna and was able to contact Rapid City from our cabin location.

At various times throughout the week I assisted in handling health and welfare messages, mainly as net control station for the operators in Rapid City. Some of the very dedicated operators whom I worked with were, on 40 meters: Elmer Mayer, KØCXL; Bill Lehmann, Sr., WAØUEN; Fred Bowker, Jr., WA1JIZ/Ø; Cliff Hall, KØOOU, and Gary Peterson, KØCKX.

Operators on 75 meters were Ed and Edith Gray, WAØCPX and WAØUFS, and there were many more Rapid City operators who spent endless hours receiving and sending messages. The cooperation was fantastic.

By the end of the week the flood's toll stood at over 200 dead, and again that many missing, and more than 1,000 homes destroyed. Today the gruesome task of recovering bodies from the tons of mud and twisted wreckage continues.

Western Public  
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GUYANA-USA  
(from page 3)

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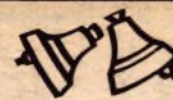
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# Wedding bells ring for Darleen & Joe



Many amateurs have been wondering about the romance between Darleen, WA6-FSC and Joe, HC2OM. Their curiosity was aroused after listening to some of the QSOs, romantic ones apparently, and suddenly the QSOs stopped. Why had they stopped? Because Joe and Darleen were married recently, May 18th to be exact, and after enjoying a wonderful honeymoon should be back on the air from the HC2OM QTH.

I guess you would like to know how this romance started and how it prospered. So, I'll give my friends the inside story. Upon my return from a DXpedition to the Galapagos Islands, Earl Lubensky, HC2LB, Consul General of the U.S. in Guayaquil, and his XYL, Anita, gave a dinner in my honor at their home in Guayaquil, Ecuador. One of the guests present was HC2OM, Joe Magan. You might say it was love at first sight. Subsequent to leaving Guayaquil, Joe and I managed to remain in daily contact via Amateur Radio from the various QTHs I visited all the way from Bogota, Columbia; Panama City, Panama; San Jose, Costa Rica; Honduras, Guatemala City, Mexico City, Fresno and Sacramento, California; as well as frequent exchange of correspondence.

After our first date in Guayaquil which was the evening of February 26th, I went on to Quito the following day with Helen and Ray Jones, HC2HV and HC2JX. The first thing Monday morning, there was a telephone call from Joe in which he indicated that he was sending me some phonograph records through his Quito office. Later that afternoon, three Ecuadorian phonograph records with Ecuadorian themes along with the album, "Sweetheart" by Englebert Humperdink, were delivered. Each time I talked to Joe on the radio the romance blossomed and got warmer. At the time I met Joe he indicated he would be coming State-side in May and wanted to see me. As his business commitments became final we made arrangements to meet when he arrived in Los Angeles on May 9th. We had managed to communicate our love and mutual feelings both via radio, as can be evidenced by many of our short-wave listeners and also by letter. That weekend Joe and I flew to Fresno where Joe asked for my father's hand in marriage and we made the necessary arrangements for this great and happy event. On May 15th we drove to Sacramento to share our good news with many of our friends there. We (28)

asked Helen and Armond Noble, WB6AUH, if it would be possible for them to act as our witnesses and they agreed to do so. I felt it only proper that Armond and Helen should be there since had it not been for Armond I probably would never have gotten my ham license which led to the subsequent developments in my life. (After my husband, Gene, WA6DKW, passed away in November, 1970, Armond tutored me with the theory preparatory to my taking my general license examination which I successfully completed on the first try in San Francisco, December 31, 1970. It was due to his patience and the endurance of his charming xyl, Helen, that I was able to surmount this hurdle and move up from novice.)

On Thursday, May 18, 1972 at 6:30 p.m. Joe Magan and I were married in the Chapel of the Bells, Reno, Nevada with Rev. George Flint, an old-time friend formerly from Lusk, Wyoming officiating. We had a lovely wedding dinner at one of the nicest restaurants in Reno. We started on our cross-country automobile trip the following morning and after having suffered considerable car trouble, finally made it as far as Kansas City, Missouri to visit with Karla Holmes, the ex-EQ2KH, now WB6PBY (You will recall from previous articles that I met Karla and her OM, Jerry, in Jordan last September when they were living in Iran.) Then on to Peru, Indiana to visit Joe's old-time friends who were married in Ecuador many years ago and to then attend the Indianapolis 500.

We stopped in Jackson, Mississippi to visit Ed Ransdell, W5SML, and his XYL, Irene, whom I met when Ed was operating KS6CZ, Tafuna, American Samoa several years ago. Then on to New Orleans where we were the guests of the New Orleans DX Club on June 2nd. We then drove to Jacksonville, Florida to visit Joe's parents and then to Fort Lauderdale to his Joe's brother and his wife before flying back to Guayaquil.

You may be interested to know how Joe happened to be in Ecuador, Joe was born in Connecticut but spent most of his early years in New Jersey, having gotten his ham ticket at age 16, with the call sign of W2BTT. Later he obtained his commercial ticket and spent several years aboard ship as radio operator.

It was through Amateur Radio that Joe came to Ecuador, where he has been living ever since. This came about when during a radio contact on 40 meter CW with HC2RL, during the depression, he learned that a radio technician was required in Guayaquil by a firm that imported radio receivers and could not give service to their customers. Joe was asked if he was able to repair radios and on giving an affirmative answer was contracted to come down to Guayaquil and work for this firm. Later, the firm had to liquidate and Joe went into business for himself doing radio repair, broadcast installation, theater installations and other electronic activities.

Subsequently, he was married to an American girl and enjoyed a happily married life until five years ago when his wife died of a heart attack. During this marriage, two children were added to the family, John and June. John is with Joe in his

business and June, age 18, is majoring in interior decorating at Catholic University in Guayaquil.

Joe is engaged in the manufacture of phonograph records, tapes, cartridges, and cassettes and is General Manager of the firm he helped to found over 26 years ago, Industria Fonografica Ecuatoriana, S.A.

I will be operating from Guayaquil, hopefully as HC2YL, and will be looking for all my friends over the air from this new QTH where I will be making my husband very happy. All QSLs for these new contacts from Ecuador should be sent direct to me, instead of VE6AKV, who has been my efficient QSL Manager for my trip around the world. The address to which these should be sent is P.O. Box 872, Guayaquil, Ecuador, South America.

NED CARMAN (from page 3)  
KØSAZ, of Austin, Minn. and by Rev. George Metcalf, WØJH, of Stillwater, Minn., was a striking example of the brotherhood of Amateur Radio.

Less than a month earlier, on May 6, to show their appreciation, the Handi-Hams presented Ned with an engraved watch, a red windbreaker jacket with the Handi-Ham emblem on the back, cash, and a huge cake signed by many of the Handi-Hams. New this year, Founder's Day was named as a time to honor the founders of the System for their contributions of time and effort. The ceremony was held at Camp Courage during the two and a half day May Convocation, an event at which interested handi-capped persons are introduced to Amateur Radio. More than 80 campers and another 20 or more visitors were in attendance.

Other awards Ned has received for his work in Amateur Radio are: 1967-WCCO Radio Good Neighbor Award; 1967 Rochester Chamber of Commerce Courtesy Award; 1968-Exchange Club's Book of Golden Deeds Award; 1970-Minnesota Amateur of the Year Award; 1971-Rochester Amateur Radio Club Commendation Award.

But, the Handi-Ham System, which is the true tribute to Ned, goes on as plans now proceed for the week-long Radio Camp to be held Sept. 6 through the 14th at Camp Courage. Handi-Ham students all over the state are studying theory and code in preparation. The highlight of this event is the appearance of the FCC radio examiners at the camp to give the Amateur Radio exams. (by Janice Robidoux, WØQXA)

AMIGOS (from page 14)

Paraguay has a small program in eight villages east of Asuncion. Because of costly air fare, the terms have been changed to four and a half weeks instead of three. Wayne Lauritsen, WA6CBG, (a pre-med student) will be working in a village clinic there on his second term.

Amateur Radio is once again the vital link in Amigos. The Amigos Net operates twice a day, seven days a week, to communicate between project leaders in Latin America and our national office in Houston. Bernie Paul, W5YVJ, is still at it for his seventh year as net control. And, if you hear a young sounding ham portable calling CQ phone patch--help him out. Thanks.

# WOW!

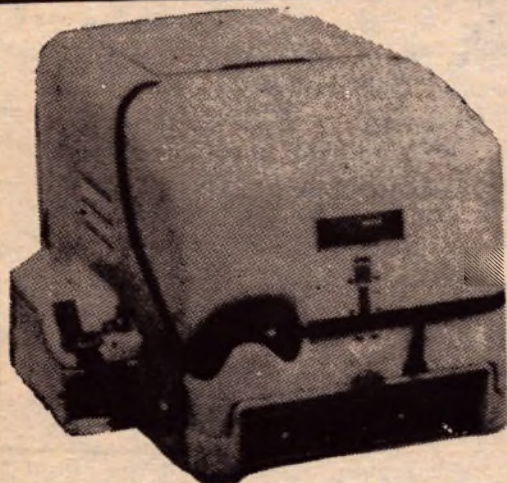
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LOOK!



# WOW!

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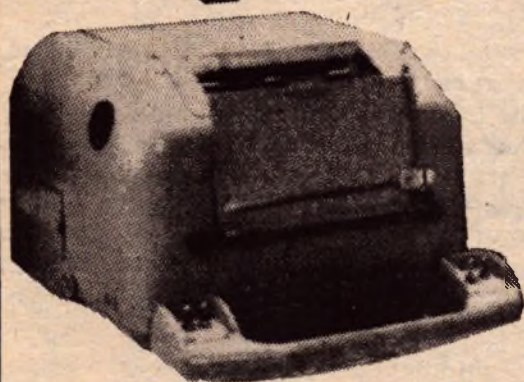


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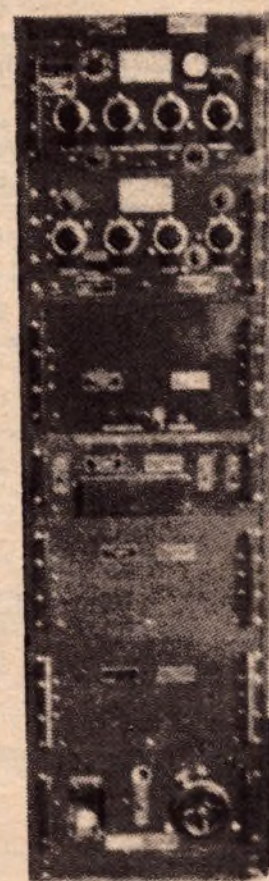
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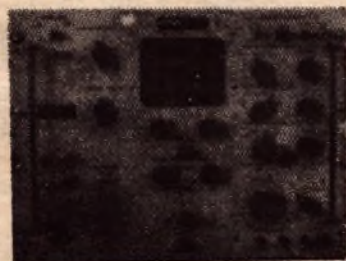
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### Spanning the Miles

Mrs. Jerry Lagomarsino, Mrs. Don Sledge and Mrs. John Lewis, left to right, talk by radio to their husbands in Sao Paulo, Brazil, where the men are participating in a two-

month Rotary International group study exchange program. The weekly conversations are supervised by North Hills Amateur Radio Club, including Louis Potter. (K6 VT)

(from "The Sacramento Union")



Rasheed Jalal, YK1AA, Damascus, Syria - "Effective July 1, the International DX Association will become W/K QSL manager for my amateur radio station YK1AA. Contacts with stations other than W/K will be handled by Nob, JA1KSO. I will retire at the end of 1972, and will be much more active than in the past. In the meantime I am active Fridays and holidays at 0300 GMT on 14.280 MHz (short path) and 1330 to 1600 GMT on long path for Stateside."

# The DX Den



by Dennis Scannell, WB6IXC



This column will depart from its usual format this month in order to comment on a matter of concern to the DX fraternity. We are saddened by the direction the DX world seems to be going. It was very well summed up in a letter to QST printed on page 88 of their June, 1972 issue. Larry Pfeiffer, WA9JCO, said, in print, "I'd like to know how many other amateurs turned off their rigs in sickening disgust after listening to the mob chasing the CEØ DXpedition stations.

"I've never heard such obscene language used on the amateur bands before in my life - not to mention the dirty name calling exchanged between U.S. and foreign amateurs.

"Way to go guys! I'm sure your actions did a lot for the U.S. amateurs' reputation along with such a great promotion of peace and good will!"

Larry put it quite well. The more I listen to what is going on in the DX world the more I am ashamed to have anything to do with them. It is getting rotten-the disgusting things the "operators" are doing is what I am talking about. The way I see it the DX world is out of step with the idea of international friendship. DXing is getting to be sort of the seamy side of Amateur Radio.

The question is why? It may well be that certificates are the worst thing to hit Amateur Radio. People, living, breathing, interesting people, are reduced to mere contacts (I got him). We trade their personalities for pieces of paper.

How many times have we heard, "Sure would like to talk to you but there are so many calling?" and the round of 30-second contacts start again.

Why do we need all these certificates? Isn't chatting with someone enough reward in itself? Why must we have papers on the wall to prove it? And it appears that the paper is more important than the communication itself.

If someone travelled to 100 countries, (certainly a greater feat and more illuminating than these bang-bang contacts) does he get a "certificate"? If someone visited every state, or talked to six people in Kansas City, does he get a "certificate"? Of course not.

Sure, I'll be the first to admit that the awards are an integral part of the hobby and they are a good indication of the ability of the operator and the efficiency of the station but it seems the quest for them has become a sick obsession.

Is there any other avocation that is so award crazy? Do, for example, stamp collectors get an award for acquiring 200 German stamps?

The way things are going now, with code wheels, tape recorders and computers we could eventually take the operator out of it and you could get up in the morning and see

who you had worked last night. Sound far fetched? Well, that system would have as much personality involved as the majority of DX contacts today.

Is there instead another side to communicating with people that could not be automated?

Is there another side that might possibly be more rewarding?

Are we throwing away all our education, reading, learning, knowledge and interest in the world around us and its people when we subjugate everything to holler like hogs at the trough at some DX station?

Have we evolved only so far as hams and people that all we want from someone is a bit of cardboard? There are some fascinating people out there in the remote areas of this world.

There has been talk of expanding the phone bands and it is common knowledge that the foreign stations are against such a move. Ever wonder why? Listen in the foreign section of the phone bands and you will hear those people talking to each other. They are communicating with other people and they don't want a pile of Yanks descending on them merely to find themselves obligated to fill out more cards.

Is there more to people than their card? Might not one gain a bit more with an actual exchange of ideas with the charming Japanese or the pleasant Australians or enjoyable conversation with people of many other lands? Radio signals were spanning oceans before the vast majority of DXers were born. It seems the sheer novelty of the idea would have worn off by now and we would be using it for something of substance. Are we "plugged in" to the world? rag-chewing with a US station and another US ham broke in. He asked the VK9 to listen while he cut it his new speech processor. The report back was "three db stronger" after which the ham said thanks and left. Now that we have the ability to fling our voices to every corner of the world what are we going to do with it? The ham with the speech compressor never asked the VK9 -what it was like in one of the most primitive areas of the world, how do the people react to him-what was he doing there, etc.

Ham radio was not a "window on the world" but merely a signal report.

We hear hams working other hams in, for example, Le Mans, France, does the US ham ask if he watches the auto races there? Do you think it would "turn on" the foreign ham if we showed the slightest interest in him or his country?

Do prefixes mean more to us than countries? Do contacts (soon to be forgotten) mean more to us than human beings?

Let me elaborate on that last question. Recently a U.S. Navy plane over an ocean, unable to communicate with military

facilities and in emergency, let loose with a "MAYDAY" on 20 meters. The response to that chilling cry was two DX'ers told them to move off the frequency as they were trying to work Europe long path!

Isn't that staggering? "MAYDAY" and two pretenders to human status say in essence, "We don't care if you die, we need another 5x9 report." Truly the quest for DX and cards, for those two, had turned to sickness. We wonder what the image of Amateur Radio is to those on that plane.

What different paths some people take. Many use Amateur Radio to make warm friendships all over the world and to others the idea of communicating with people takes a back seat to a 15-second contact with "Bat Guano Island".

Are we just going to keep doing the same old thing (proving the laws of radio work?) or will we broaden our horizons?

Does the DX world need a reappraisal? Does it possibly need a new form? Has the old way been a good one? Has it led people to a greater involvement with others or merely become a magnet for those who want to scream into a microphone? Do we need the hostility shown on the bands? And what is it that has caused people to be hostile towards each other? Is the blood pressure, the anguish, the immature behavior, the turning of our bands into bedlam, worth a scrap of paper?

What separates man from animal is the ability to reason, to question.

Our equipment represents something magnificent, the ability to talk to the people of this world that we co-inhabit. It is truly as Marshall McLuhan said, "The world is a global village."

Maybe it's not too late. Maybe we can turn it around and use our intelligence to get interested in the people that live in the many real "countries" of the world.

A step towards a better hamdom would be an end to this cult that worships four clowns that can't find anything better or more constructive to do with themselves than spend three days on "Armpit Island".

How much more fascinating it is to talk to the doctors, teachers, scientists, etc., who are engaged in meaningful pursuits in the less-populated areas of the world.

Have you ever found yourself explaining the present system of DX to a non-ham and when they ask you "what do you talk about?" and you tell that you told him how strong his signal was and they say "is that all?" Do you find it a bit embarrassing when they say, "is that all?"

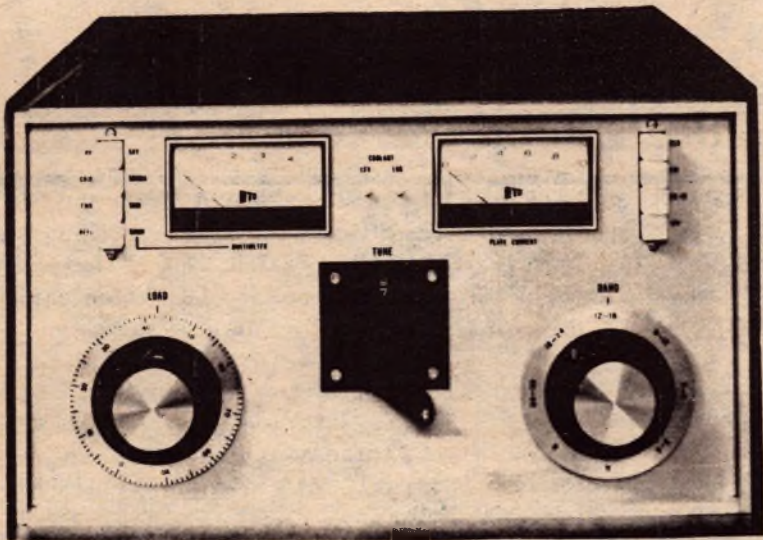
Another question comes to mind--are we capable of talking about anything else? How broad are we as people and hams? How far have we developed? Are we so involved in the communication nuts-and-bolts that we are unable to communicate? Or do those who snarl and scream have anything to say? Or is it that the competition for cards and certificates has led people to such actions? Are they otherwise rational?

It seems a little backing off may be in order. You know, all the countries are going to be there tomorrow, there will be hams there tomorrow. Let's chat with them a little. So someone else enjoys a conversation with him tonight and you didn't. So what? He'll be back in a few days, possibly sooner if he finds out that he can talk to people.

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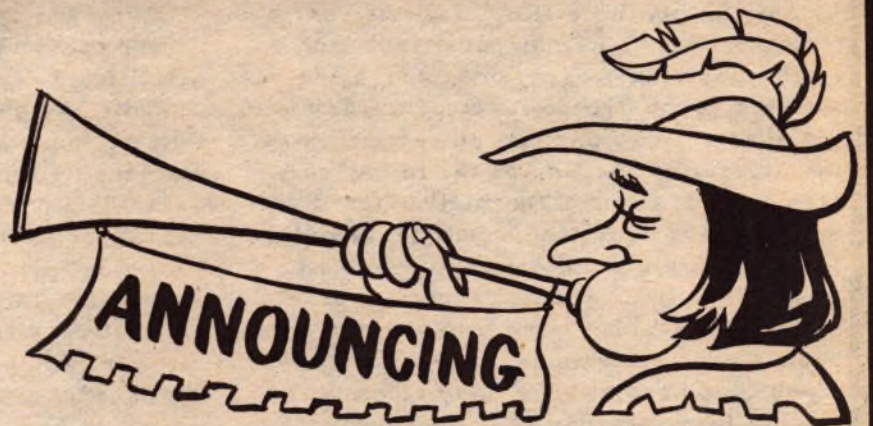
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by Sister Mary, WA5VBM



### IN MEMORIAM: A SILENT VOICE OF IMRA

Mary Webb, WB2QPP, died one year ago. It was Sunday and I was out making some final adjustments to my quad which had been lowered to the ground for repair the previous day. I was planning to raise it back into operating position on the following Monday, but being a "normal" Ham, I was out tinkering with it on Sunday. I came in to make sure I had a complete circuit on all the feed lines and as I tuned across 20 meters to the YL system I heard the announcement being made... WB2QPP, Mary Webb, had become ill Friday night, was hospitalized Saturday, and died on Sunday morning of cerebral thrombosis (a blood clot in the brain). It was June 20, 1971.

I was stunned by the news, as were all the IMRA members as they received the information either by radio or telephone. Our first concern was for Ed Webb, WB2OFZ, Mary's OM and Vice-President of the IMRA. We breathed a little easier when we heard that Brother Bernard, WA1FKE, (a very close friend of the family) was on the scene to help out where ever he was needed.

Friends from all over the country responded immediately and many made the journey to Yonkers to attend the beautiful funeral Mass at St. Casimir's Church with six priests concelebrating. We were all there in spirit and there was a short prayer read during the 1900 GMT Traffic Net Session in memory of Mary's service and dedication to the IMRA Net.

Mary Webb (nee Layman) was born in Yonkers, N.Y. on January 14, 1911 and lived there all her life. Mary was 5'5" tall, had blue eyes and brown hair, was Polish

through and through, and had the distinctive Yonkers diction. She married Ed Webb in 1935 and they had one son, Bobby, and two grandsons, Bobby and Tommy, ages 3 and 2. Ed worked for the Tidewater Oil Company up until his retirement in 1961 and Mary worked for Ward-Leonard Electric Company until a rheumatic heart forced her retirement.

Mary first became interested in Amateur Radio when her OM, Ed, was giving code instruction to a couple of boys studying for their Novice tickets. She had previously held a Citizen Band license, and she took to Amateur Radio "like a duck takes to water", Ed says. In 1964 she got a Technician ticket and two years later earned her Conditional license and the call WB2QPP.

Operating on 40, 20, 15, and 2 meters, Mary began her life of public service, specializing in phone-patches for the Missionaries... especially those from Yonkers.

It was Brother George Clay, WA2RRK, of Graymoor, Garrison, N.Y. who introduced Mary to the CMRA (now IMRA). In 1967, Father Dave Reddy, K2BUI/CEØAE, then president of the IMRA, asked Mary to take over the duties of Membership Chairman. Mary and Ed Webb jointly took over the position and held it until the summer of 1970, when Mary was advised by her doctor to give up most of her outside activities.

While she did eliminate most of her activities, Mary kept up the missionary phone-patching. Father Joe Moran, HR5JDC, says, "Mary ran an awful lot of traffic for us. Three to five patches every time we came on. She was a real work-horse, very dependable, and we really piled it on. I estimate she ran upwards of 200 patches just for us here in Honduras. She used to kid us a lot about coming to visit her when we got home."

Mary was well known on the YL System and held the ISSB #5767. Says Ellie Horner, K4RHL, "I first met Mary on the System six or seven years ago. She was one of our most active members. Always willing to help and a real good operator."

The IMRA lost something special when we lost Mary Webb's service and dedication. We hope that now that the Lord has called her from this service here on earth to His "total" service in the life hereafter, that she will remember us as we remember her.

### IMRA News

Don't forget the IMRA International Convention! August 18, 19, 20-Rochester, MN- for information write to Sister Alverna, Assisi Heights, Rochester, MN 55901.

Father Phil Pick, HR2FP, injured his arm and shoulder while loading equipment onto his truck in San Francisco. He drove the truck and equipment for the educational radio station in Honduras all the way to Miami (over 3500 miles) with one hand. He is

back in El Progresso, Honduras, now.

The ARRL official publication, QST is printing the IMRA Traffic Net reports, in the Public Service section. Look on page 75 in both the May and June issues.

Fr. Ed Schmidt, formerly OA6BU, of Arequipa, Peru, is now licensed as OA4-AAN, in Lima. Father Ed keeps regular schedule on Saturday at 2000 GMT on 28, - 605-21,435-or 14,210 kHz, depending on band conditions.

Silver Jubilees: For Father Jude Bradley, WA2YNO, on the 3rd of June and Father Paul Hart, WAØRIE, Sept. 10th. WB2ERC, Joe Agostinelli and XYL Dorina celebrated their 25th wedding anniversary in May. Ad multos anos!!

Chuck Grout, K7SML, was phone-patched into the IMRA Net via John Corbett, WA-KOT. Chuck does not have the use of his rig at his new QTH and would appreciate hearing from his old friends via the U.S. mail. His address is: Beverly Manor Nursing Home, 1856 E. Thomas Rd. Phoenix, Arizona 85016.

Father Brian Newman, VK9BN, at St. Fidelis College in New Guinea reports in a QSO with WA5VBM that he has received his newsletter and the information about the convention. He cannot come, but he will be thinking about the group as the meet in Rochester, Minn. in August. Fr. Brian and Fr. Ben have been working on their quad for 10 and 15 meters and hope to have that up soon. Anybody who would like to contact Fr. Brian can catch him on 14,325 kHz every Wednesday at 1130 GMT.

Father Barnabas Eib, TI5BE, has been trying to fool everybody by checking in from different stateside stations. So far, he has checked in from WB4JOB, WB4RBR, W4-RFA, W3FUS and WA2BPV. Welcome home, Father Barnabus. Hope to hear you on soon again... Meanwhile, back at the ranch... Father Stan is keeping the station, TI5BE, in Alajuela, Costa Rica, in operation as he promised he would.

Does lightning strike twice?? WA5YOI, Frank Savat, of Shreveport, La., hopes not. On March 17, Sister Mary, WA5VBM, Net Chairman, received the following telegram: Off the air due to lightning X IMRA needs a net control for Saturday at 1:00 p.m. CST X Sorry X Frank WA5YOI. A follow up explanatory letter arrived a few days later telling the horrible details. The lightning came into Frank Savat's house by way of the AC line, jumped his circuit breakers, and blew the fuses in the power supply of Frank's Galaxy V, Mark III. Frank, Jr.'s 6 meter rig was also damaged as was the FM stereo section of his amplifier. The damage to the Galaxy is repaired now (two capacitors in the RF amplifier, four transistors in the VFO, a diode in the power supply, and the power supply fuse) and Frank is back on the air with the same fine signal, but in Frank's words... "Bad news, that lightning."



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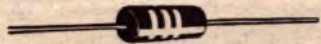
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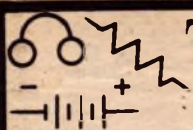
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# TWO HUNDRED METERS AND DOWN

*The Story of Amateur Radio*-By Clinton B. DeSoto-Courtesy of ARRL

(First published in 1936, "Two Hundred Meters and Down" is reprinted here, in serial form, so we may have a better knowledge of the vast and great history of Amateur Radio. This presentation is in honor of those who went before us and, through determination and hard work, gave us what we have today.)

\*

Continued from last issue.

In the United States at present time there are approximately 46,000 licensed amateur transmitting stations. There are perhaps 40,000 licensed amateur operators. In all the rest of the world there are something like 20,000 additional operators. This great disproportion is due in part to untoward legislative restriction in other countries, in part to the economic disparagement between the masses in the United States and other countries; perhaps even more, however, it is a manifestation of the spirit of progress in American minds, and the general diffusion of certain classes of culture through all strata of society that is so distinctively an American characteristic. Yet the fact that there is amateur radio throughout the world, and that amateurs are alike no matter where they may be, proves the depth and pervading fundamentalism of the appeal that is amateur radio's.

The amateur organization is a complex and highly developed affair. It is controlled in orderly fashion by international agreement and national law.

In common with other radio services, a unique system of identification has been worked out. In international communication, the stations of each country are designated by a prefix which has been assigned by the government in power under the provisions of the International Telecommunications Convention, signed in Madrid in 1932, or a prior convention. In the United States, in connection with amateur stations, this designation takes the form of the letter "W". The territorial possessions of the United States have been assigned the letter "K". In Canada the prefix used is "VE".

Amateur radio in the United States is regulated by the Federal Communications Commission, which derives its authority from the Communications Act of 1934, and which functions under the provisions of the Madrid International Telecommunications Convention and the appended General Radio Regulations. All stations are licensed directly by the Commission; operator's - license examinations and other field functions, are performed by Radio Inspectors at twenty-one field offices. In addition to the twenty-one Radio Inspection Districts, the entire country is divided into nine Call Areas. The call letters of each licensed amateur station contain, in addition to the national prefix "W", a numeral indicating the call area in which it is located; to those are added two or three letters for individual identification. Thus, W1MK is a United States station licensed in the first call area (which comprises the New England states.)

All U.S. amateur stations are limited to a power input of 1000 watts, or 1 kilowatt. Since amateurs have communicated half-

way around the globe with less than a thousandth of this power, the restriction does not hamper them greatly. Transmission of radiotelegraph signals is permitted within the limits of seven bands of frequencies as follows:

1,715 to 2,000 kilocycles or 175.00 to 150.00 meters - 3,500 to 4,000 kilocycles, or 85.70 to 75.00 meters - 7,000 to 7,300 kilocycles, or 42.86 to 41.10 meters - 14,000 to 14,400 kilocycles, or 21.43 to 20.83 meters - 28,000 to 30,000 kilocycles, or 10.71 to 10.00 meters - 56,000 to 60,000 kilocycles, or 5.36 to 5.00 meters - and all above 110,000 kilocycles or below 2.73 meters.

The 1715-kilocycle band, near 1500 kilocycles or 200 meters where nearly all early amateur work occurred, is now used primarily for local work, up to a few hundred miles. The 3500-kilocycle band is the band most used for domestic communication, and is especially good for moderate distances of 1000 miles or so. The 7000-kilocycle band is the most-used long-distance band, and is employed at night principally for transcontinental and international work; in the daytime it assumes the night-time characteristics of 3500 kilocycles. The 14,000-kilocycle band, in turn, shows much the same characteristics in the daytime that the 7000-kilocycle band does at night; either band is capable of providing communication with any part of the globe at the proper time and under the proper conditions. The 28,000-kilocycle or 28-megacycle band is occupied chiefly by experimenters, its utility for general amateur communication at the present time being limited by its unpredictability and unreliability; its performance, in general, corresponds with the long distance characteristics of the 14-megacycle band. The 56-megacycle band is used entirely for short-distance local communication, principally in municipalities where a large amount of amateur operation is concentrated; most work is over a few miles, although 100 miles or more can be obtained under certain conditions. Above 110 megacycles little actual work has yet been done, except by experimenters; these, however, have worked out a sufficient technique to indicate that general amateur population of the region near 110 megacycles will shortly ensue.

While the great preponderance of amateur work, especially in the handling of traffic, and more especially in long-distance communication, is done by means of radiotelegraphy, there are a large number of radiotelephone stations in operation. In actual distribution, radiotelephony represents 25 to 30 per cent of all amateur work. Interest in 'phone communication has received a certain impetus on the lower frequency bands recently, but it is on the ultra-high frequency at 56 megacycles and above that it predominates. The development of radiotelephone technique has been most rapid and effective during recent years. The sub-bands authorized for radiotelephone operation are as follows:

1,800 to 2,000 kilocycles, or 166.66 to 150 meters - 3,900 to 4,000 kilocycles, or 76.66 to 75 meters - 14,150 to 14,250 kilocycles, or 21.20 to 21.06 meters - 28,000

to 29,000 kilocycles, or 10.71 to 10.34 meters - 56,000 to 60,000 kilocycles or 5.36 to 5.00 meters - and all above 110,000 kilocycles or below 2.73 meters.

Operation on the sub-bands 3900-4000 and 14,150-14,250 kilocycles is restricted to holders of Class A amateur operator's licenses. Class B and Class C licenses enable the holder to operate with radio-telegraphy on all bands, and with radio-telephony on all but the two restricted bands.

Under this governmental outline and definition of their activities, amateurs engage in their several pursuits and the various branches of their hobby under the leadership, guidance, direction and aid of the national organization, and in turn the international organization, of transmitting amateurs. These organizations are shining examples of what may be accomplished with a fine degree of cooperation and attendance upon an altruistic end.

The American Radio Relay League, Inc., is "a non-commercial association of radio amateurs, bonded for the promotion of interest in amateur radio communication and experimentation, for the relaying of messages by radio, for the advancement of the radio art and the public welfare, for the representation of the radio amateur in legislative matters, and for the maintenance of fraternalism and a high standard of conduct.

"It is an incorporated association without capital stock, chartered under the laws of Connecticut. Its affairs are governed by a Board of Directors, elected every two years by the general membership. The officers are elected or appointed by the Directors. The League is non-commercial and no one commercially engaged in the manufacture, sale or rental of radio apparatus is eligible to membership on its board.

"Of, by, and for the amateur, it numbers within its ranks practically every worthwhile amateur in the nation and has a history of glorious achievement as the standard-bearer in amateur affairs."

The affairs of the League are managed by a Board of Directors, consisting of one director from each of the fourteen designated divisions of the United States, and the Canadian General Manager, representing the Dominion of Canada. These elect the remaining members of the board, the president and vice-president. There are, in addition, three paid officers who are not members of the board: the secretary, treasurer, and communications manager. The five officers constitute the Executive Committee, which acts between board meetings with restricted authority.

Supplementing this national executive control, insofar as communications activities are concerned, is an elaborate sectional field organization. The United States, its territories and possessions, and the Dominion of Canada are divided into sixty-nine sections, each under the control of a Section Communications Manager elected by the section membership. These local managers are assisted by a variety of appointive officials, including Route Managers, "Phone Activities Managers, Official Observers, and Official Broadcasting Stations. (Turn to page 38, please)

# THE NOBILITY NET

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

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medical aid, knowledge of how to secure these surgical services free of charge; aid in providing transportation for patients; setting up of blood-banks and creating good relationships between Shrinedom and the public who are not aware of this great philanthropy.

There is no initiation fee nor are there any dues. All that a Noble or Mason need do is to check into the Nobility Net which meets each Saturday at 1700 GMT, on 14.310 MHz.

(de International Coordinator W3FQT)

## MARN MOSAIC AMATEUR RADIO NET

The Mosaic Amateur Radio Net is an international, non-profit, non-commercial association dedicated to serving mankind and fostering international good will. It is an association of Masonic amateur radio brethren and members of the appendant Orders. Membership in the Mosaic Amateur Radio Net - better known by its acronym MARN - is open to all members of the Masonic order and those of the appendant Orders who possess any class of an amateur radio operator's license. There are no dues and the nominal membership fee is perpetual. Write for information.

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# Letters

I am in favor of having call letters commensurate with license class, although I agree with you on the Commission's misplaced priority. I see no "status seeking" for after all, what's wrong with an Advanced or Extra having extra prestige even if he is a janitor or a corporation president? ... Paul Schuett, WA6CPP

Congratulations on your editorial in May *WORLD RADIO*. When brought to the attention of the many, all approve your point of view. This switching of calls at the convenience of the FCC when the FCC feels it does not have the personnel to attend to the other problems, is a problem in itself. What happens to the awards, what many know me by, if I change my call? It seems that some at the FCC do not realize that many of the radio amateurs are unusually capable - and that we are not a group of kids who know nothing. Many of us hold commercial tickets, have operated for years in the military, have also been to schools and college, and have spent years in upholding the spirit and purposes of Amateur Radio... Walter Rogers, W1DFS

I am convinced that your objective is to serve Amateur Radio. Your effort shows a concern for the human aspects of our hobby. You are doing a job that needs to be done, and it would appear that you are getting the support you need to continue doing it. I'm sure that *WORLD RADIO*, with its accent on the friendly nature of the world radio body, is a force for good. I hope that you will be able to continue it as such. More power to you... Ed Tilton, W1HDQ, VHF Editor, QST

I would like to comment that you are to be commended for producing *WORLD RADIO*. I find it most interesting and it brings out the human side of the hobby. I believe that your paper will increase its circulation as more of us are exposed to it... Gary Belcher, KH6GMP

A really fb publication which I have been enjoying tremendously. Particularly like the pix of old friends... Bob Shaw, HR1RTS

There is a lot of interest in that paper... Bert Neilson, ZL2ANA

*WORLD RADIO* seems genuinely dedicated to amateur service... C.F. Rockey, W9SCH

There's nothing else like *WORLD RADIO*! Great! Keep up the good work... Dave Flinn, W2CFP

I must say that you are publishing the absolute best periodical in ham radio today. Having stayed some time in Central America, I am acutely aware of the many good things being accomplished by Amateurs, as well as many of the areas yet to be covered by them... G.L. Black, WA5GFS/YN1GLB ex XE0GFS, YS1LAE

I think you are doing a fine job filling a need that has long existed for the serious ham... W. Clark Robinson, WA6PCI

In the 38 years that I have had a ham ticket, it has only been through reading *WORLD RADIO* this past year that I have learned of the "good things" being done in Amateur Radio... Ev Taylor, W6DOR

Congratulations on the obvious progress that you have made in your fine endeavor. Bill Orr (W6SAI) and I have watched the growing health of *WORLD RADIO* with interest and admiration for what you and your associates are doing... Stu Cowan, W2LX, Radio Publications.

I am pleased with the format of your publication, the page size, large print and general air of friendliness conveyed... Ben Lewis

Thanks so much for a year of fine reporting. *WORLD RADIO* has done much to inform the public of the good work hams do for others... Sister Mary Carolyn, WA6CCR

Fantastic! ... Diego Garces, WA6IPX, ex HK5SG

Find the magazine enjoyable... Ed Jay, K6LOM

*WORLD RADIO* certainly exemplifies the public interest, convenience and necessity principle. Amateur Radio needs a publication like this... Winthrop Owen, WA6CBJ

Everytime *WORLD RADIO* comes on my desk, the world really goes open and I have to congratulate you on the interesting articles. It gives me, and I do hope lots of other hams, a better insight into the world of ham radio and specifically the world they live in. A short contact for DX is nice, but it does not tell you very much about the man or woman, girl or boy behind the receiver and transmitter... Julius van Dongen, WA6FOX

I enjoy reading your paper. It reminds us of the fact that Amateur Radio can be used as a public service... Stan Kasper, W3ZGG

It certainly fills a void... Jan Williams, K2PLT

An outstanding Radio International Newspaper and should be highly commended for your efforts and results... Guy Dennis, W6CR

Congratulations on the growth of your very wonderful publication, Glenn Baker, W6-JZG

The paper has sure come a long way since it was first started, and I am enjoying it more with each issue... Wallace Leland, K7WL

*WORLD RADIO* is bound to be a winner, Colonel D.W. "Win" Titus, K6ART



## Musicians

The International Music-Hams Club (IMHC) was started several months ago by Torben Elmde, OZ5LZ, solo trombonist with the Sjellen Symphony Orchestra (Denmark) and Jan Williams, K2PLT, Percussionist and member of the faculty of the State University of N.Y. at Buffalo.

The membership is open to any musician who is a licensed ham and at present has a membership of 60. The majority are from the US but several European countries, Canada and South Africa are also represented. The membership fee is \$2.00 (US)

A newsletter is sent out several times a year which lists all members and tells of some of their activities as well as the IMHC activities, which include nets, and an award.

Interested hams can write to Jan Williams, K2PLT, 63 Anderson Pl., Buffalo, N.Y. 14222 for further details.

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## Airmen's Memorial School

Located on the island of New Britain, off the coast of New Guinea, the school was the first education for the children of Ewasse Village. It is a non-profit foundation project of Fred Hargesheimer, WØEBG, of White Bear Lake, Minnesota. The area's natives nursed Fred through illnesses and protected him for eight months during 1943 after his P-38 crashed. Fred, an electrical engineer, is currently on a one year leave of absence from UNIVAC and is teaching math at the school. He is operating as VK9FH.

## S.S. HOPE

Amateur radio has always been a part of the journeys of the HOPE as she covered the world treating the ill and serving as a teaching hospital. The HOPE also maintains permanent medical facilities in Peru, Ecuador, Nicaragua, Colombia, Ceylon, and Tunisia.

## Amigos de las Americas

Working in Guatemala, Honduras, Nicaragua and Colombia, the nondenominational group administers immunizations, teaches hygiene and reading and helps in many ways. The volunteers go down for three week tours, paying a large share of their own expenses. Many amateurs are involved in the project.

## International Mission Radio Association

The organization furnishes communication for those in remote areas of the world such as missionaries and Peace Corps workers. Funds are used to purchase radio equipment for missionaries of all faiths.

## Colegas y Amigos

The Southern California and Mexico Amateur Radio Mobile Group has as its primary aim the promotion of international good will. They assist an Old Folk's Home and a Girl's Orphanage in Ensenada, Mexico. The group also works with the Flying Samaritans - the pilot-doctors who fly into remote areas of Mexico to give medical assistance.

## Handi - Hams

A group in the Midwest (WØ) who teach the blind, handicapped and bedridden persons to become amateurs. The organization also, through donations, gives radio equipment to the handicapped.

## Radio Amateur Invalid and Bedfast Club

The club, based in London, helps blind and disabled amateurs in Britain, Australia, New Zealand, Canada, South Africa, Finland and the U.S.A. Equipment is repaired, antennas are erected for the disabled, and amateur radio literature is distributed to the handicapped.

## Minh - Quy Hospital

Located at Kontum in the central highlands of Viet Nam, the hospital is staffed by an American woman doctor from Seattle, Dr. Pat Smith, and two nurses. The facility, which attends to the illnesses and injuries suffered by civilians, also receives help from a Swiss medical team. Assisting the hospital is a continuing project of Sgt. Steve Olson, W6EQM, who was stationed near the hospital with the Special Forces. He is now in Fresno, California.

## Hadley School for the Blind

The school, located in Winnetka, Illinois, operates an amateur radio correspondence course, given without charge to the blind. The course has over 150 blind students (and a waiting list). Students are located in the United States, Australia, New Zealand, India, Hong Kong, Scotland and other countries. Volunteer chairman of the program is Byron Sharpe, W9BE.

## Reserve

A reserve to be used for emergencies, grants, purchase of equipment to be loaned to hams engaged in humanitarian projects and to implement suggestions from readers of Worldradio.

All expenses and clerical time necessary to operate the Foundation will be donated by the publication and its staff. On a quarterly basis, a record of disbursements will be reported in Worldradio.

"I believe in the family of mankind"...Mark Twain

# participants *Worldradio subscribers*



This listing is provided to facilitate your acquaintance with others of similar interests.

(Continued from last issue)

Ruth Paez, HK3BLD, Bogota, Colombia  
Ginny Collawn, WB8LSW/HK3, Bogota, Colombia  
Jim & Ann Carnett, TG9UZ-TG9KE, Guatemala City, Gtmla.  
Carlos & Guita Blau, TI2CG-TI2GI, San Jose, Costa Rica  
David Church, WA2HZR, North Syracuse, New York  
A.S. McLean, W1JQ, Wellesley, Massachusetts  
Walter Rogers, W1DFS, Melrose, Massachusetts  
Dr. Edward Schaefer, W4KGO, Columbia, S. Carolina  
Richard Rowe, K2BK, Woodstock, New York  
Ed Holz, WB9FVG, Chicago, Illinois  
Howard Jackson, WØSDV, Sioux City, Iowa  
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(Continued next issue)

"All that is necessary for the forces of evil to win in the world is for enough good men to do nothing."

Edmund Burke

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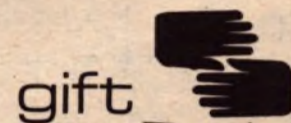


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200 Meters

(Continued from page 34)

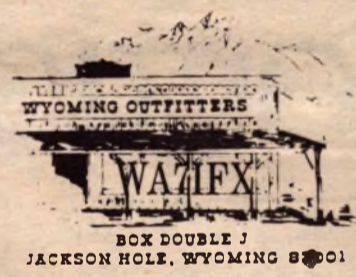
A selected group of stations, representing the cream of amateur activity, are awarded certificates designating them Official Relay Stations and Official 'Phone Stations. All in all, this field organization, under the control of the League's Communications Manager, embraces approximately 1800 licensed amateurs, an appreciable percentage of the active element in the amateur ranks.

The International Amateur Radio Union is a federation of twenty-five national amateur societies. The American Radio Relay League has been selected, by international vote, as the headquarters society, and its officers are those of the Union. In the societies represented by the Union are numbered nearly all the organized radio amateurs of the world. The Union is primarily a political organization, and has little direct connection with communications; it represents amateur radio at international conferences, aids member-societies in the solution of their internal problems, and, in general, exists primarily to present the united front of the art to the rest of the communications world.

Perhaps the principal activity of transmitting amateurs, and certainly the one which is of most significance in their internal organization, is the handling of messages by relaying from point to point. More than a million personal and friendly messages are handled annually by American amateurs. Their principal value lies in the operating instructions and training afforded the amateur operators who handle them; yet this is not the sole advantage, for many times these messages are of great intrinsic importance. The messages are of many

kinds. Some are merely conventional greetings, but many are of the highest value. Expedition traffic is of the latter type. Since 1923, more than one hundred expeditions have been dependent upon amateur radio for contact with the outside world. MacMillan was the first explorer to make use of the enormous possibilities of amateur high-frequency radio communication, and in the succeeding twelve years many millions of words have been transmitted by amateurs on behalf of exploration parties. Floods, hurricanes, earthquakes-disasters of all varieties provide a large part of the amateur message total in the form of emergency traffic. Amateurs almost invariably form the last line of communication in time of natural emergency; this has been true in more than forty major and a large number of minor disasters in the past twenty years. Tragedy... drama... human interest incidents of all kinds, provocative of both laughter and tears, have all been logged in these hard-worked amateur radio stations.

(Continued next month.)



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be around to show them the ropes when they arrive. Now sit back and wait. With any luck, you may soon be showing them America as you see it. But better be prepared for one surprise. You may soon also be seeing America as they see it—rediscovering it through their wide and startled eyes.



Look!!

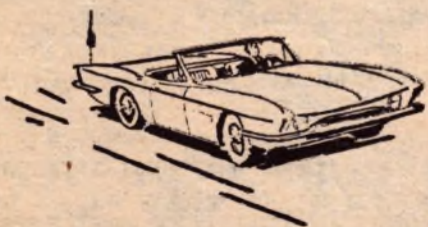


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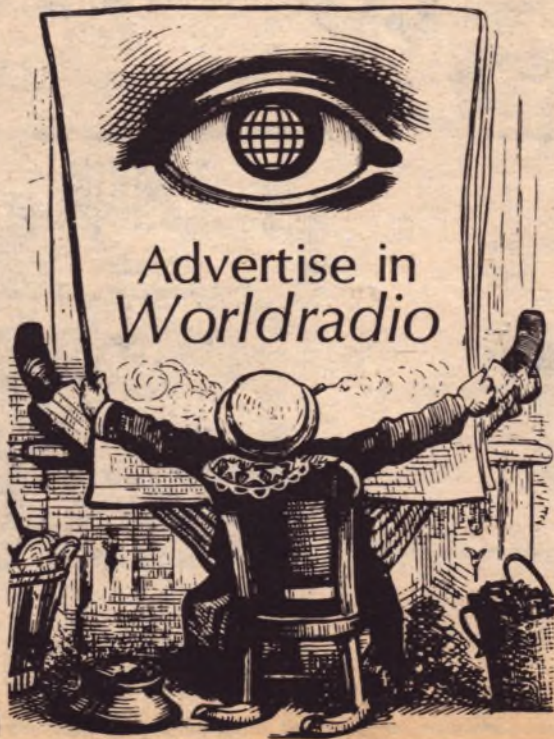
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