

HAM HUM

Published by AK-SAR-BEN RADIO CLUB, INC. - Omaha 1, Nebr. Post Office Box 291 - Downtown Station SAR-BOZ RADOCLUB

Vol. XV No. 10

October 1965

NOVEMBER MEETING

November 12th - Friday - is the next meeting date of the Ak-Sar-Ben Radio Club, Inc., to be held at the 4-H Building, Ak-Sar-Ben Field, at 8:00 P.M.

Program will be given by Frank R. Parsons, WØEMS, who will talk on 2 meter activity. Frank has been a 2 meter enthusiast for a number of years and over a period of time has worked a great many states on 2 meters. As far as record is concerned, he has started over three times as he first started to accumulate states from Iowa, then Southeast Nebraska, and finally from Omaha, and can frequently be heard on 144.1 megacycles, CW or Phone.

Make plans now to attend this meeting as we are sure Frank's talk will be most interesting.

Editor - HAM HUM

Important AREC Networks in Nebr.

Nebr. AREC CW Net (NACN)	3782 kc	8 p.m. CST	Sat.
Nebr. State AREC Net	3982	8:30 a.m.	Sun.
Sarpy Co. CD Net - WAØLLQ	50,550	8 p.m.	Mon.
Sarpy Co. AREC Net - WAØFHH	50,478	8 p.m.	Tues.
Sarpy Co. AREC Net - WOWRT	145,350	9 p.m.	Thurs.

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The Daily State nets at 7 and 11 p.m. on 3525 and at 7:30 a.m. and 12:30, 6:30 and 7:30 p.m. on 2 always appreciate all possible c.ck-ins, especially from the more populated eastern areas of the state. All stations interested

in public service should prepare their emergency power and mobile equipment.

> Larry Abbott KØJXN/WØHYD Nebr, SEC

HAM HUM is the official organ of the Ak-Sar-Ben Radio Club, Inc., of Omaha, Nebraska, mailed monthly to all members and to others upon request.



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Editorial

ACCURACY

A lot of hobbies require accuracy in design, construction. and operation. Consider the amateur telescope-maker, or the scalemodel machinist, or the boat builder. These people have at least one trait in common: accuracy. Usually, we think of accuracy only in measurement of parts being fitted together, for if they are not individually accurate, the final assembly will be out of tolerance or may not even go together. To get this accuracy of dimension, we have to have a parallel accuracy of operation of the tools. And regardless of how nicely the device is built, we require accuracy of unit operation.

We can draw very close parallels in amateur radio: if it's not put together well, you can't expect really good operation; conversely, even though you may have the full blow from Cadillac Rapids, you won't get even poor results if you don't operate accurately.

Do you occupy 20 kc? Do you know just what is your main spurious frequency? Does your VFO drift? Do you need receiver muting? Is your final operating with correct voltages and currents? Is your antenna tuned somewhere in the band?

In the last few months, I've heard stations with the aforementioned troubles, and most of the operators actually admitted that they had trouble, but still stayed on the air. Yesterday's mail brought a club paper wherein one was told not to worry over a 5:1 VSWR since its effect would be swamped out by the large transmission line losses! Same philosophy as playing the Beatles while driving without oil.

Now that everyone is (was) stirred up over incentive licensing, let's get on with accurate amateur radio: accurate construction, operation, and measurement. Twenty-five words per minute out of a 10% efficient transmitter into a 5 VSWR certainly doesn't look extra good to me.

WØIKQ

de Bandspread, Cedar Rapids, Iowa

OCTOBER MEETING

At our October 8th meeting we enjoyed a talk by Harry Snyder, WØNVE, of Fremont. Harry gave us the story of the VLF transmitter in Maine, operated by the Navy. He did not bring us any classified information: however, the portion which is standard transmitter and radio technique is not classified. The colored slides he brought were outstanding and added to his word picture. This transmitter is so large as to be almost unbelievable, and I am sure that each of us went home to look at our own transmitters with the realization that they are really not as big as we thought they were. Of particular note were his comments regarding the ability to work DX from the mobile unit he had with him due to the tremendous ground system of the antenna of the VLF station. Needless to say he did not attempt operation when the transmitter was on the air. HI (in this case ham interference.)



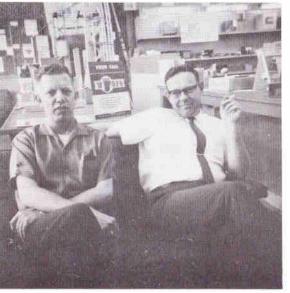
Harry Snyder, WØNVE



(Continued from Page 3)

Our many thanks to Harry for bringing us this story of VLF and even though the accomplishments of this station are classified we can well imagine what can be done with it. We are particularly appreciative in view of the fact cameras are not ordinarily permitted on the transmitter site and there are only two such sets of slides in existence.

We did not meet in our regular room at the 4-H Building because of some misunderstanding. Ak-Sar-Ben opened a room in the Coliseum for us. Not quite as convenient as our regular room but novel, to say the least, in that it is the only time our Club has met in a threecornered room with a door on each corner.



Millard, WA6VZZ (ex WØNRT) and AI, WØJJK. (Photo by John, WØWRT.)

Dick:

Relocated 2 years ago. Moved into our own home this fall. Am putting up a Thunderbird 6 and inverted "V's" for 40 & 80. Will be looking for the Omaha gang. New address is: 1306 White chard Lane, St. Louis 41, Missouri.

Harlan Bercovici, KØBHT

ADDITION TO ROSTER

David L. Byers, WAØHWO 2622 Jaynes Street Omaha, Nebraska 68111 Phone: 455-0876

Enclosed is a picture of two of our old friends, Millard Edgerton, WA6VZZ formerly WØNRT, and Al McMillan, WØJJK. Millard was here in Omaha early in August and we took a trip over across the river to visit WRL. The two are shown here reclining near the coffee urn and talking over SSB. Millard is currently working for Precision Instrument Co. in Palo Alto, California. They are manufacturers of precision tape recording systems. Anyone wishing to write Millard may address letters to 245 College Ave., Apt. B. Palo Alto, Calif. 94306. How ab sending us a rundown on the amateur radio activity, club etc. out there Millard?

John, WØWRT

I have read much and heard much, particularly this last little while, on the operation of ARRL. Unfortunately we hear most from 'se who like to sound off and are unwilling to do anything about it. ARRL, in common with many organizations, is operated by the members, for the members. To assist in the operation an individual member should know the rules. As thousand people cannot decide all of the details of operation we, the members of ARRL, have adopted a Constitution consisting of Articles of Incorporation By-Laws. The Constitution and By-Laws in this case have determined that the affairs of the organization shall be governed by an elected Board of Directors, one from each of the Divisions of the United States and one from Canada. These Directors having been elected by the members are charged with the responsibility of using their good judgment on behalf of the members of their Division.

It has been suggested in this magazine previously that your Director is greatly interested in your views on any subject related to amateur radio so that he might be in a better position to know the desires of our members.

It is now time for each of you to take the next step in performing duties of your individual membership. You who are members in the Midwest Division have received a ballot. If you have not already done so, now is the time to mark it properly, following the instruct-

tions, and mail it without delay as the ballot must be in the hands of Headquarters by November 20th.

Along with your ballot, Headquarters sent an election circular with an extract from the By-Laws regarding the nomination and election of the Director. The nominations are in, and we have two men who have been nominated. On the back of your ballot you are given the vital statistics about these men, and you have an opportunity to choose between them. This is your responsibility as if you do not vote at this time you are permitting those who do vote to choose the Director.

If you did not receive a ballot it probably means you forgot to pay the dues or perhaps you have never joined ARRL. It is too late now to join for this election but do join for the next one. The annual membership entitles you to a subscription to QST and this alone is worth the \$5.00. Should you wish to join indicate so on the card enclosed and an Application for Membership will be sent to you immediately.

8:00 P.M. (CST) Sundays, 145.2 Mc., the Sioux Two (someone said it should be spelled "Sioux Tioux") Net, Sioux Falls Amateur Radio Club, Inc. Maybe someone down there will want to try for a QSO, altho we're using vertical polarization.

73, De WØRRN, Tony

WHY A FILTER? de Resonator BTL-Whippany Radio Club

The purpose of this paper is to inform TV viewers and their service technicians why TV interception occurs and how to correct it.

Mr. William L. Kiser, Radio Engineer, Federal Communications Commission, N.Y.C. discussed sources of trouble to radio and TV reception in an article "TV I.F. Interference" which appeared in February 1952 RADIO-ELECTRONICS. Information from Mr. Kiser's article was reprinted by the American Radio Relay League, an organization of radio amateurs. Some of this information is from A.R.R.L. bulletin C-163.

Federal Communications Commission Bulletin 762-A, September 1956, referring to reception of amateur radio signals by receivers states, television "Experience has shown that this condition, when it exists, is in general attributable to the basic design of the receiver in guestion - the result of an engineering design compromise inherent in many present day television receivers." And in another portion of the paper, "The Commission will require that the amateur comply with its rules and regulations...but whenever the fault is at the receiver only, and not at the amateur station, the interference can be eliminated only at the receiver." (By the installation of a good high-pass filter.)

The present day television receiver is a wonderful example of American ingenuity, design and construction developed over a long period of years to its present state of perfection; however, as is true with much mass produced appara it still leaves something to be desired. One inherent shortcoming of most present television receivers including the relatively expensive color receivers, is their ability to receive a strong local radio signal instead of rejecting the signal, These unwanted signals which the receiver permits to slip through, may cause lines or streaks either light or dark to appear on the picture screen or, in varying degrees, remove the picture - or replace, in part or completely, the sound of the television program with some other sound or voice thus reducing your TV viewing pleasure - and WHY? Because the TV receiver is not designed or constructed to handle this situation.

Although there are many types of television interference, the type with which we are most concerned at this time is that which is believed to be caused by radio transmitters whether they be fire, police, civil defense, Citizen's Band, wireless phonographs, garage door openers, amateur, commercial, etc., or other operating in the radio apparatus spectrum including diafrequency thermy machines, induction heating equipment or electronic ovens to name a few. Actually, in well (r ninety per cent of these cases this is not TV interference but rather TV interception inasmuch as the receiver is intercepting a radio signal which it was not designed to receive.

In over seventy per cent of these cases the interception can be eliminated by the proper installation of the correct HIGH PASS FILTER on the TV receiver. In another fifteen per cent of the cases two or sometes three inexpensive additional cases are required. ONE WORD OF CAUTION: There are many high-pass filters on the market but not all filters will eliminate interception of radio signals between 44 and 52 megacycles.

Many people have been told by their service technician that nothing could be done about their particular case of TVI. This is not necessarily so. In practically all cases something can be done. A filter installed at the antenna terminals of the TV receiver will usually stop the interception of unwanted signals. TV manufacturers have been cooperative in supplying free filters to be used with receivers of their design. The installation is quick and easy - out of the way in the rear of the TV receiver, anyone can do it. Some TV manufacturers send their local service men to make the installation.

(Some manufacturers will supply filters. Through the courtesy of W2JLX and W2DAC the following addresses have been gathered and can be used by the TV set owner to request a Drake H.P. 300 or equivalent filter. Be sure to give model and serial number of your

Admiral Distributors
497 New Jersey Railroad Avenue
Newark, New Jersey
Attn. Service Department
201-242-5400

Cape Hart Service Parts Division
 Ampere Parkway
 East Orange, New Jersey
 Attn. W Spengler
 201-673-8930

3. CBS TV
Hygrade Electronics
9216 Church Avenue
Brooklyn 36, New York
Attn: Mr. Roberts
212-495-4100

Dumont or Emerson
 Emerson Radio Corporation
 W 23rd Street
 New York, New York
 Mr. H. Bernstein
 212-924-9100

General Electric Company
 Washington Street
 Bloomfield, New Jersey
 Attn: Mr. McCarthy
 201-748-0400

6. Magnavox Company 2131 Bueter Road Fort Wayne, Indiana Attn: Mr. M. Harvey 219-743-9721

7. Montgomery Ward 30 Division Street Somerville, New Jersey Attn: Mr. W. H. Sallada 201-722-1222 8. Motorola

c/o Cooper Distributing Company
1197 Central Avenue
Newark, New Jersey
Attn: General Service Manager
Mr. J. Middleton
201-643-0866

9. Olympic Radio & TV Corporation 34-01 38th Avenue Long Island City, New York Attn: Service Manager Mr. A. Adler

516-392-5200

7

10. Philco Corporation 940 Newark Avenue Elizabeth, New Jersey Attn: Mr. Mauro 201-354-3555

 RCA Sales Corporation 600 N. Sherman Avenue Indianapolis, Indiana Attn: Consumer Relations

Mr. P. W. Cook 317-636-5311

12. Hot Point TV Handled by G. E.

13. Sears Roebuck and Company Garden Park Union, New Jersey 201-687-5500

201-687-5500
14. Sony Corporation
514 Broadway
New York, New York
Attn: Mr. C. Mauer
National Service Manager

212-581-0100

 Sylvania Electric Products, Inc. 700 Ellicott Street Batavia, New York

Attn: Mr. C. J. Borlang 716-343-3470

 Zenith Radio Corporation
 5801 Dickens Avenue Chicago, Illinois

Attn: Parts Sales Department Mr. R. T. Wielzolewski 312-421-7476

OFFICIAL BULLETIN NR 27 FROM ARRL HEADQUARTERS NEWINGTON CONN OCT 1 1965 TO ALL RADIO AMATEURS BT

The ARRL Executive Committee met today to examine nominating petitions filed by members for league directors and vice directors. By reason of nomination of but one eligible candidate the following were declared elected, the Canadian Division Director Noel B. Eaton VE3CJ, Dakota Division Director Charles (Compton WØBUO, and the Southeastern Division Director Charles J. Bolvin W4LVV.

Also declared elected was Canadian Division Vice Director Colin C. Dumbrille VE2BK, Dakota Division Vice Director Charles M. Bove WØMXC, Great Lakes Division Vice Director Charles C. Miller W8JSU, Midwest Division Vice Director Sumner H. Foster WØGQ, Pacific Division Vice Director Ronald G. Martin W6ZF, and Southeastern Division Vice Director A. L. Hamel K4SJH.

Wherever the committee found valid petitions naming more than a single candidate for these offices and the candidates meeting the requirements as to league membership and freedom from any commercial radio connection, ballots were ordered mailed to full members concerned covering contested offices. Such candidates by divisions are as follows:

Atlantic for Director, Crossley W3YA, Van Dyke W3ELI.

Atlantic for Vice Director, Bieberman W3KT, Breiner W3ZRQ, Van Duesen W3ECP.

Delta for Director, Cassen W4WBK, Spencer W5LI W5LXX.

Delta for Vice Director, Arnold W4WHN, Goggio W4OGG, Singer K5YMM, Swanson W5PM. Great Lakes for Director, Cartwright W8UPB, Siringer W8AJW, Vorhees W8EGR.

Midwest for Director,
Denniston WØNWX, Schmidt WØOZN.
Pacific for Director,

Engwicht W6HC, Reed W6CTH.

As soon as ballot returns have been counted in late November, results of all these elections will be given in a further bulletin from this station AR

THE PRESIDENT'S CORNER by Marv WAØHRX (Gering, Nebr.)

'I have always wanted to be a ham but I don't know anything about getting started.' 'How do you learn all that theory?' 'Sorry OM, I am new on the air, don't understand it all yet.'

How many times have you heard these or similar comments? There are always new people wishing to join our ranks. We may not know all the answers to all the questions but if each one of us could take just a little time to help the newcomer we could all enjoy more contacts and some of the problems we hear on the air would be eliminated.

Why chase the person with a "signal ten ke wide" off the air, when a little help would be apprecated and probably make room for once more QSO's.

Remember.....the helping hand is the hand of a friend.

de Condensor

During the past summer, I had the misfortune of breaking one of the 1/4" aluminum rod elements on my 6 meter Telrex Spiralray, Now this element happened to be a continuous length of rod 98 1/2" long and it surprised me that I found it impossible to get a new length of this rod in a large city like Omaha. Most companies that I phoned were not much interested anything less than several hundred dollars worth of material. I mentioned my predicament to Don Bohlsen, our Instrument Maker at the University of Nebraska College of Medicine and he immediately suggested the Metal Goods Corporation in North Kansas City, I sent the company an inquiry and they advised that they could supply the needed rod and in small quantity.

So this isn't intended as a "commercial" but only as a possible aid to any other ham who runs into this same headache. The address of this company is: Metal Goods Corp. 1300 Burlington Ave., North Kansas City, Mo. 16. Incidentally, an excellent grade of aluminum rod for antenna contruction or replacement is 6061-T6. In my case, this grade of rod appeared to be superior to the original and Mr. Bohlsen says it contains a percentage of chromium in the alloy. There are many different grades of aluminum and some are either too hard or too soft to ever stand up in antenna service.

John, WOWRT

Howdy,

I just read the new Ham Hum and was, as always, glad to catch up on what the old gang is doing.

Say, I need a bit of help, I'd like to get in touch with a Lincoln station that could handle an occasional fone patch for me. I have not yet had the luck to run into one on the air. My operating time doesn't let me check into the Nebraska net, so I thought maybe one of Ham Hum's readers might be able to help. If anyone can give me a hand, drop me a line and we'll work out the details by mail. I hold weekly skeds with Omaha, so Lincoln shouldn't be a problem, once I find a station.

Local ham activity here is picking up. When I was transferred here I was the only ham in Hansford County. Now there are four active hams on, and two Novices that I just tutored for their tickets. Maybe we'll challenge you for Field Day next year.

73 Dick Reimund, W5KTI Box 13 Spearman, Texas (ex WØLFM)

WANTED TO BUY

Used antenna tuner suitable for use with DRAKE TR-3. No linear used. About 300 watts PEP. Phone 456 or write.

> E. A. Stenberg, KØORM Tekamah, Nebraska

OFFICIAL BULLETIN NR 25 FROM ARRL HEADQUARTERS NEWINGTON CONN SEPT 16 1965 TO ALL RADIO AMATEURS BT

The United States has entered into a temporary agreement wh the International Telecommunications Union in Geneva, Switzerland, permitting the handling of third party communications between amateur station 4U1ITU and amateurs in the U.S. during the period September 1, 1965 through February 28, 1966. The messages must be relatively unimportant personal involving communications, pecuniary interest AR *********

W-18-38-30, (W) (W) (W)

FOR SALE

HA-10 SX100 DX60 EICO 730 VFI - VFO.

First money order for \$400.00.

O. J., KING, Jr., K4SZY Box 803 Liberty, N.C. 27298



"Hey, Pop. Have you seen my roller skates anywhere?"

PINK TICKET---A SLAP ON THE WRIST?

The words "pink ticket" used to send a shudder through any ham. In we were first licensed, nothing more horrifying than a "Grand Island QSL." And they were horrifying, believe me! If you transgressed from the amateur regulations you received a notice which was a DIRECTIVE, stating in no uncertain terms what the violation was, and that:

- You should state the reasons for the violation taking place, indicating what conditions caused the violation;
- You should state what corrective action had been taken by you to make certain that the violation would not be repeated; and
- 3) You should state WHY YOUR AMATEUR LICENSE SHOULD NOT BE REVOKED!

Furthermore, to make the cheese more binding, you had to send a copy of your reply to the F.C.C. in Washington; a copy to the District Inspector of the Inspection District in which you lived; and a third copy, as we recall, to the Inspector in charge of the monitoring station that sent you the violation notice. In short, you were building up a "lid file" on yourself in three places whenever you got a "pink ticket." (Incidentally, these violation notices were then printed pink paper stock; hence the name. also seemed that the Grand Island, Nebr, monitoring station did most of the hamband work; hence the second

title of "Grand Island OSL."

Today we hear some hams complaining that changes in the licensing rules won't bring about much improvement as long as the F.C.C. uses the "selective answer" type of examination, which is considered a high-class guessing contest. Admittedly, anyone who knows the psychology of selective examinations has a head start when he takes one. It is our suggestion that if the F.C.C. would return to the ancient violation form, and require the offending amateur to state and explain IN HIS OWN WORDS what his trouble was, and what he did to correct it, there would be a necessary educational process on the part of the violator.

If a ham were cited for splatter, or an excessively broad SSB signal, wouldn't it be better for him and for the whole amateur service if he were compelled to explain to the F.C.C. what caused the trouble? Frankly, we think most hams who cause splatter don't know the why of it! Many of them haven't the vaguest concept of how modulation takes place in their rigs. If they had to find out, report to the F.C.C. what their trouble was, and what corrective action had been taken, there would surely be some self-improvement - or else there ought to be some incompetent hams leaving the air.

One precaution would probably be necessary. If written explanations were required of the sort mentioned above, as well as reasons why the license should not be revoked, those amateurs who buy and use all commercial gear, and have the seller of the gear set it up and service it when required, would no doubt turn over the violation notices to some competent person to put together a satisfactory answer. The answer to this problem would be to require a verification of the reply, under penalty of perjury and license revocation, setting forth that the licensee had written the answer himself, and without assistance of any other person.

We aren't crying for the "good old days," but we'd like to see F.C.C. re-adopt some of its most effective tools in handling amateur rules violations.

George H. Goldstone, W8MGQ. de Auto-Call

OFFICIAL BULLETIN NR 30 FROM ARRL HEADQUARTERS NEWINGTON CONN OCT 21 1965 TO ALL RADIO AMATEURS BT

All amateurs who participated in the ARRL Simulated Emergency Test on October 9 and 10 are urged to make sure that their part was included in reports submitted by their Emergency Coordinator, or net manager, and that said reports were actually sent in to ARRL Headquarters. Amateurs who participated independently are requested to send their individual report by mail or radio directly to ARRL Headquarters, 225 Main Street, Newington Connecticut 06111 AR

SENECA XMTR. TIPS

Replacing the 6146 P.A. stage tubes with the newer and more rugged 6146-B type, adds greatly to tube life and increased. power input capacity. Replacid bus wire ground return leads on the 6146 tube sockets, with 1/4" wide strips of flashing copper, improved stability 100% and made neutralizing completely effective on both bands. Greater grid drive on 2 meters was secured by replacing the bus wire leads on the 2E26 drive plate tank, with 1/4" wide strips of flashing copper. (lead between switch and plate cap, & between tuning capacitor and switch assy.) With these excellent modulation changes. results if the xmtr. is loaded to 200 Ma. in the CW position. 4.5 ma, as recommended by the manufacturer seems to be the optimum grid current value to the P.A. stage, for best modulation characteristics. In areas where TVI is not a problem, operating the unit with the top open, greatly reduces VFO drift on 2. A properly tuned and operated Seneca, is a VHF powerhouse. de VHFer

de vnrer



DEFINITIONS:

ANTENNA: A bird roost faced the opposite way you want to transmit. BARGAIN: Something cheap you buy without any plan for its use.

With rows of dots you can't read.

DIODE: A thing you got one of and put in the circuit backwards.

EFFICIENCY: What you don't have if you talk across town with a KW. FRIEND: Anyone who'll climb your antenna in winter while you direct. GROUND: The thing you are when you touch B plus.

1: Little used term for "we."

JACK: Different from any plugs you have.

KILOWATT: An electrically heated basement.

De SPLATTER, Yellowstone RC

FROM ARRL HEADQUARTERS
NEWINGTON CONN SEPT 23 1965
TO ALL RADIO AMATEURS BT

The 32nd ARRL Sweepstakes will take place the middle weekends of November with full rules soon to appear in November QST. Phone, November 13 and 14, and c.w., November 20 and 21, will be held on separate weekends with 24 out of 30 hours of operation permitted. The exchange infornation will follow that used last year. Newly designed log forms and Operating Aid Nr. 6 to avoid duplicating QSOs are now available without charge from the ARRL

Communications Department, 225
Main Street, Newington Connecticut 06111 AR

If we could see ourselves as others see us, we wouldn't believe our eyes.

TRY THESE FOR SIZE de "Chewed Rag"

- Transistors are a current-operated device. TRUE FALSE
- The lower IF frequency, the higher the selectivity and gain.
 TRUE FALSE
- For making code signals audible, the BFO should be set at the same frequency as the IF frequency.
 TRUE FALSE
- 4. When one RF frequency modulates another RF frequency, the process is called heterodyning. TRUE FALSE 5. The frequency of a crystal may be lowered by grinding. TRUE FALSE 6. Screen-grid tubes cannot be cut off with bias unless the screen is operated from a fixed-voltage supply. TRUE FALSE
- 7. Key clicks, chirp, and backwave are all keying faults. TRUE FALSE 8. Bleeder resistors in a power supply offer some voltage regulation, as well as being a safety device to discharge filter capacitors. TRUE FALSE

Well how did you do???

From the Delta Division - W5LDH, Director

Hurricane Betsy was a terrible experience! She came to the New Orleans area around midnight on September 9th with 125 mph winds, followed by flood water in some areas up to 12 feet. She left us with a communications breakdown, the likes of which probably haven't been equaled in our history.

The area hams did a magnificent job. Cooperation with all official agencies was excellent. With 90% of the telephones inoperative, with AC power cut off for days in some areas, with only one broadcasting station operating the need for communications became vital. At the request of the City Health Officer a group of us organized a medical emergency net to enable the Health Officer to speak with doctors located in schools and shelters to supply the medical needs for the thousands of evacuees. Within a matter of a few hours after the call was put out on the local b.c. station to the thousands with transistor receivers, we had fifteen ham mobile units in operation at fifteen different shelters. In some cases this was the only means of communication for three days and nights.

There was a team of Texas amateurs who brought 7 1/2 k.w. generators and a complete mobile radio van which set up in front of the police hqs. to help out. Some who were fortunate to own generators handled hundreds of messages for the Red Cross, C. D.,

police and fire departments. Even as this letter is written, welfare traffic is still being handled. So many are deserving of credit that I would not begin to list calls.

As could be expected, some errors were committed. A report we put out nationally, attributed to a ham operator, that there were 250 dead in Plaquemines Parish (County). This was not true and a letter from the Coroner later corrected the story, but this was not given out to the national press.

The emergency again proved the absolute necessity for preparedness: The need for generatorsgenerators-generators. The need for messages to be in writing and signed by the proper official. The need for nets and discipline. All who participated should send in a report to their S.C.M.

ANOTHER FIRST by Amateur Radio

Doctors Jim Hirschman K4TCV and Tom Baker WA4JTS of Miami scored a significant medical first on July 14th, 1965 when they successfully received an electrocardiogram on a 15-year-old African boy from 4,300 miles away on the Hospital medical ship "Hope" W7HH/MM.

Gloria Hammond, the EKG technician aboard the Hope said the patient, Sylla Alli, was wired up and ready for the experiment.

On the Hope was a spect Tele-Scribe transmitter which changed EKG heart beats into shrill audio signal tones. It comes thru the receiver and is routed into a Tele-

Scribe received at Dr. Hirschman's home. There it is converted into electrical impulses and fed to the second EKG machine where a two-inch wide tape starts moving at 25 millimeters a second.

After the experiment the African boy was given the microphone. He said in French "good afternoon and thank you," and then giggled.

Dr. Baker (WA4JTS) served six weeks a year for the past three years on the Hope teaching in Peru, Ecuador and Africa. He said it may be a milestone in amateur radio and medicine.

Dr. Hirschman, whose idea it was, "I knew that EKGs could be transmitted by wire, so why not by radio?" He experimented, sending EKGs between his home and another amateur Dr. Arthur Schiff, in Miami. It worked. Then he sent on to Mexico City where they tape-recorded it and transmitted it back to him at his home.

Drs. Hirsch and Baker, members of the Dade County Medical Association, said the success of the technical experiments proved the possibilities of future radio transmissions of EKGs from remote places on the Globe or from emergency situations and ships at sea.

de Florida Skip

OFFICIAL BULLETIN NR 28 FROM ARRL HEADQUARTERS NEWINGTON CONN OCT 7 1965 O ALL RADIO AMATEURS BT

Attention DXers. Announcement is hereby made of the addition to the ARRL Countries List of St. Peter and St. Paul Rocks. Located some 600 miles Northeast of Natal, Brazil, St. Peter and St. Paul Rocks is territory belonging to Brazil. Acceptance of this territory is in accordance with point 2(a) of the criteria, see July 1963 QST DXCC note. Confirmations for contracts with St. Peter and St. Paul Rocks may be submitted for DXCC credit starting January 1, 1966. Confirmations received for this listing before January 1, 1966 will be returned without credit \overline{AR}

OFFICIAL BULLETIN NR 29 FROM ARRL HEADQUARTERS NEWINGTON CONN OCT 15 1965 TO ALL RATIO AMATEURS BT

In recent vears, amateurs have been electrocuted and others have suffered injury, caused by the failure of bypass capacitors in the primary circuit of AC power supplies. This type of accident can be avoided by the use of a common ground system linking all equipment chassis to a water pipe or other good ground connection. If you will send a stamped self addressed envelope with a note to ARRL reporting the bulletin station copied, you will receive a copy of the Safety Code and Safety Supplement, Address your request to the ARRL Communications Department, 225 Main Newington, Connecticut 06111. Switch to safety and stay alive AR (Editor's Note: Tell Headquarters you read Bulletin No. 29 in Ham Hum.)

NOBODY

CAN BEAT OUR ANNIVERSARY

SPECTACULAR TRANSCEIVER SPECIAL

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