



HAM HUM

Published by

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



Vol. XVI
No. 3

March 1966

NEXT MEETING

The next meeting of the Ak-Sar-Ben Radio Club, Inc. will be held at the 4-H Building, Ak-Sar-Ben Field, at 8:00 P.M. on Friday, April 8th, 1966.

We will have two films:

"Plane Talk" - An informative documentary which gives the viewer a "ride" beside the pilot of a jet airliner which takes him to major airports and reservation centers. It shows him the tremendous variety of communications used by commercial air carriers to get passengers confirmed reservations, airborne, and safely to their destinations.

"The Conquest of Light" - This is an explanation of the laser that helps separate fact from fiction. This film gives the viewer a better understanding of this fascinating light-harnessing device which describes its vast potential in atomic research, welding, surgery and communications.

We will have discussions of Field Day and general eyeball QSO, followed by the usual refreshments.

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.



Published by
AK-SAR-BEN RADIO CLUB, INC.
Post Office Box 291
Omaha 1, Nebraska

Editor: Dick Eilers, WQYZV

Phone HOME: 391-2255
BUSINESS: 342-1402 - EX. 327

Associate Editor: John Snyder, W0WRT

Phone HOME: 536-1538
BUSINESS: 951-0669 - EX. 317

AUCTION

The auction at the March 11th meeting of the Ak-Sar-Ben Radio Club was very successful. Many members participated by bringing their surplus ham gear to be auctioned. Doors opened at 7:00 P.M. so everyone had an opportunity to look over the gear for sale. A short business meeting was conducted and the auction program for the evening commenced. A vote of thanks to all who helped with the Club activity. Special service was rendered to the widow of silent key WQCQX, by bringing his gear to the auction so she could realize a monetary value out of it. Many enjoyed the eyeball, coffee, doughnuts, and opportunity to exchange surplus gear or add to their respective radio shacks.

See photos on page 3.

Erv Heinz, WAQEEM

(Editor's Note: What Erv did not tell you about is the fine work done by the auctioneer who was none other than Erv Heinz himself. The article should not go in, however, without a special thanks from the Club to Erv

for the fine job he did. Credit for photos of the auctioneer is given to Bud Smith whereas Erv, who is our usual photographer, did bring the camera and had it pretty well set up and ready to go. Bud Smith took the picture. We are still indebted to Erv for the processing.)

WANTED

Do any of the oldtimers have a Type "E" Baldwin receiver cap? I have the headset I purchased in 1921. Mica diaphragm. They made type "C" but only type "E" can be used.

Hollis S. Banning
Union, Nebraska 68455

SILENT KEY

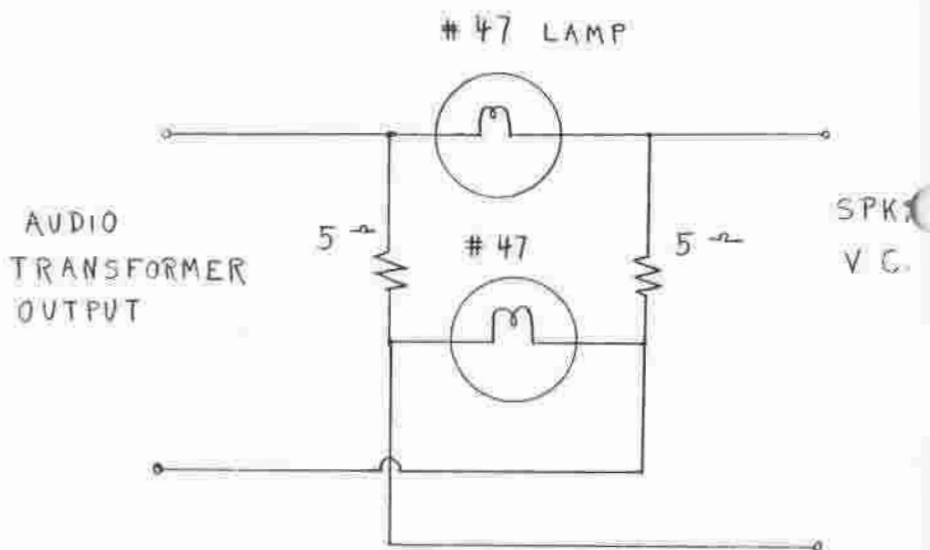
Lyman Ray Henderson, K0LJS
Morrill, Nebraska

February 15, 1966



Photos by Bud Smith, WAØICK





WQVEA

Dayton Phifer, WQVEA, sends in this circuit which he recommends for those super-regenerative receivers presumably such as the Heath 2'er etc.

The circuit is called the bridge squelch - installation of the bridge cuts down the rip-saw buzz of a super-regen receiver o.k. and opening the volume control about three-fourths there is a null, just barely any hum audible, but even a weak signal will break the squelch. Some volume is lost, but the decrease of noise more than compensates for this. If you use sockers for the lamp bulbs, try changing bulbs, different ratings etc. There is often an improvement.

Also, for easier loading, more stability of the Heath 2'er, squeeze

the three turn coil in the final instead of wide-spacing it. If you squeeze it too much as I did, when you replace the ceramic capacitor, wind a four turn. Sure does load easier, works very fine.

WQVEA, North Platte,
Nebraska

WE NEED HELP!

Our school radio club needs help. If any of you have any extra parts, text books, or equipment that you would like to give away, please send to the Lewis & Clark Amateur Radio Club in care of Randy Whiting, 1022 North 63rd Street, Omaha, Nebraska 68132.

The Lewis & Clark Radio Club

Armed Forces Day Communication Tests Saturday, May 21, 1966

(received from R. E. Mickley,
Lieutenant Commander, USNR)

In appreciation of the United States amateur radio operator's loyalty and patriotism the Department of Defense through the Departments of the Army, Navy and Air Force, annually sponsors a military-amateur radio communications program on Armed Forces Day. This year's program will be conducted on Saturday, May 21, 1966.

The Radio Amateur's contributions to communication training, international goodwill, military morale and emergency services are recognized by every echelon of the military services. The Armed Forces Day Communication tests are designed to be a tangible demonstration of the firm and long standing Department of Defense policy to encourage and support amateur radio activity. On this seventeenth observance of Armed Forces Day, all radio amateurs are invited to participate and demonstrate to the world the close partnership and mutual respect that U.S. amateurs and U.S. military enjoy.

This year several military radio stations are scheduled to participate in the communication tests which include military-to-amateur cross-band operations and receiving contests for both continuous wave (CW) and radioteletypewriter (RTTY) modes of operation. Special QSL cards will be forwarded to those

amateurs who establish two-way contact with the participating military stations. Certificates will be awarded to those who aptly demonstrate their operating ability and technical skill by receiving a perfect copy of the Secretary of Defense originated "CW" and/or "RTTY" message(s) transmitted during the receiving contest portion of the communication tests. Interception by short wave listeners (SWL) will not qualify for a QSL card. However, anyone who has the equipment and abilities may copy the Secretary of Defense messages and receive a certificate.

MILITARY TO AMATEUR TESTS

Washington, D.C. area military stations WAR, NSS and AIR will be on the air from 211400 GMT (1000 EDST, 0600 PST) to 220245 GMT (2245 EDST, 1845 PST). NPG (Navy, San Francisco) will be on the air from 211800 GMT (1000 PST) to 220801 GMT (220001 PST). The military stations will operate cross-band by transmitting on spot frequencies outside the amateur bands and establish radio contacts with amateurs in the appropriate sections of the amateur bands. This is a test of crossband operations and contacts will consist of a brief exchange of locations and signal reports. No traffic handling will be permitted.

Amateur contacts from NPG (Navy, San Francisco) will be discontinued from 220245 GMT (211845 PST) to 220400 GMT (212000 PST) during the Armed Forces Day "CW" and "RTTY" receiving contests.

<u>STATION</u>	<u>MILITARY FREQUENCIES</u> KCS unless otherwise noted	<u>EMISSION</u>	<u>APPROPRIATE (MCS) AMATEUR BANDS</u>
WAR (Army Radio Wash., D.C.)	4001.5	CW	3.5 - 3.65
	4020	CW	3.65 - 3.8
	6992.5	CW	7.0 - 7.1
	7325	CW	7.1 - 7.2
	14405	CW	14.0 - 14.2
NSS (Navy Radio Wash., D.C.)	3269	CW	3.5 - 3.65
	4012.5	RTTY	3.65 - 3.8
	4015	CW	3.65 - 3.8
	4040	SSB/AM	3.8 - 4.0
	6970	CW	7.0 - 7.1
	7301	CW	7.0 - 7.2
	7380	RTTY	7.0 - 7.2
	13992	CW	14.0 - 14.2
	14385	SSB/AM	14.2 - 14.35
	14480	RTTY	14.0 - 14.2
	*143.820 MCS	RTTY AFSK/AM	144 - 145.5
*Provided it is consistent with operational and training commitments, this frequency will be keyed from a U.S. Navy aircraft flying between Washington, D.C. and Boston, Massachusetts during the major portion of the time allotted		for military to amateur crossband contacts. The flight path will be over Baltimore, Philadelphia, New York City and Hartford, Connecticut. The call sign NSSAM will be utilized from the aircraft.	
AIR (Air Force Radio Wash., D.C.)	3347	RTTY	3.5 - 3.8
	3397.5	CW	3.5 - 3.8
	4025	SSB	3.8 - 4.0
	6997.5	CW	7.0 - 7.2
	7305	SSB	7.2 - 7.3
	7315	RTTY	7.0 - 7.2
	13995	CW	14.0 - 14.2
	14397	SSB	14.2 - 14.35
149.980 MCS	CW/SSB	50.0 - 54.0	
143.950 MCS	CW/SSB	144 - 148	
NPG (Navy Radio San Francisco)	4001.5	RTTY	3.65 - 3.8
	4005	CW	3.5 - 3.65
	4013.5	SSB	3.8 - 4.0
	4016.5	CW	3.65 - 3.8
	7301.5	SSB	7.2 - 7.3
	7332	RTTY	7.0 - 7.2
7375	CW	7.1 - 7.2	

NPG (Navy Radio San Francisco)	13975.5 14385 49.692 MCS 143,700 MCS 148,410 MCS	SSB/CW CW AM RTTY AFSK/AM AM/FM	14.0 - 14.35 14.0 - 14.2 50 - 54 144 - 148 144 - 148
-----------------------------------	--	---	--

CW RECEIVING CONTEST

A "CW" receiving contest will be conducted for any person capable of copying International Morse Code at 25 words per minute. The "CW" broadcast will consist of a special

Armed Forces Day message from the Secretary of Defense addressed to all radio amateurs and other participants. The schedule for this broadcast is as follows:

<u>TIME</u>	<u>TRANSMITTING STATION</u>	<u>FREQUENCIES (KCS)</u>
21 May 1966 220300 GMT (212300 EDST) (211900 PST)	WAR - Army	3347, 6992.5, 14405
	NSS - Navy	3269, 4015, 7301, 13992
	AIR - Air Force	3397.5, 7315
	AGUSA - Army Radio San Francisco, Calif.	6997.5
	NPG - Navy Radio San Francisco, Calif.	4001.5, 4016.5, 7301.5

RTTY RECEIVING CONTEST

A radioteletypewriter "RTTY" receiving contest will be conducted for any individual amateur or station possessing the required equipment. This is a test of the operator's technical skill in aligning and adjusting his equipment, and serves to demonstrate the growing number of amateurs becoming skilled in

this method of rapid communications. The "RTTY" broadcast will consist of a special Armed Forces Day message from the Secretary of Defense to all radioteletypewriter enthusiasts. The message will be transmitted at 60 words per minute in accordance with the following schedule:

<u>TIME</u>	<u>TRANSMITTING STATION</u>	<u>FREQUENCIES (KCS)</u>
21 May 1966 220335 GMT	WAR - Army	3347, 6992.5, 14405

(212335 EDST) (212135 CST)	NSS - Navy	4012.5, 7380, 14480
	AIR - Air Force	7315
	AGUSA - Army Radio San Francisco, Calif.	6997.5
	A5USA - Army Radio Fort Sam Houston, Texas	4025
	NPG - Navy Radio San Francisco, Calif.	4001.5
	AG6EA - McClellan AFB California	4580, 7332
	AG3HQ (Scott AFB, Ill.)	4590, 7540

SUBMISSION OF COMPETITION ENTRIES

Transcriptions should be submitted "as received." No attempt should be made to correct possible transmission errors.

Time, frequency and call sign of the station copied as well as the name, call sign (if any) and address of the individual submitting the entry must be indicated on the page

containing the text. Each year a large number of perfect copies are received with insufficient information, thereby precluding the issuance of a certificate.

Completed entries should be submitted to the Armed Forces Day Contest Room 5B960, the Pentagon, Washington, D.C. 20315 and post-marked not later than 31 May 1966.

CENTRAL NEBR. AMATEUR RADIO CLUB

ANNUAL STEAK FRY

July 24 1966

Victoria Springs State Park

Send Registrations to:

Club Secretary

Lawrence Lindly - WQIRZ

Anselmo, Nebraska

DEVELOPMENTS IN CRYSTAL FILTERS

The 20 September issue of ELECTRONIC NEWS announces an important break-through in the design of crystals for filters. By careful design of the size and weight of plating to which the electrodes are fastened, unwanted modes of response are reduced by 40 db.

de Splatter (St. Paul)

LEARN C.W. NET OPERATION

Editor's Note: We are happy to present a series of articles by top-notch CW operator and route manager for Eastern Florida Section, Charles W. Hennessey, W4LUV of Orlando, Florida. If you have ever wanted to check into a CW Net, here is your chance to learn how it is done. Read the following carefully and give it a try. We feel sure it will be a new and exciting experience for you in Amateur Radio.

PART V

Now let's go down the alphabet and see how the "QN" signals are used on QFN.

QNA Answer in prearranged order.

Sometimes the NCS uses this signal instead of, or in addition to, QNI. If he simply sends QNA, he wants stations having traffic to QNI first, stations QRU to QRX until he finds out just how QRL his session will be. If the NCS sends QNA 4RN, or otherwise specifies the order of QNI, he wants only those stations from 4RN, or other nets as indicated, to QNI. There is no roll call on QFN.

QNB Act as relay between (Call) and (Call).

This is a request for a third station to help out when two stations cannot copy each other.

QNC All stations copy.

Precedes all bulletins and instructions destined for all stations on the net, including you.

QND The net is directed.

The net is in session. Transmit only when and as directed by the NCS.

QNE Entire net stand by.

Don't call me, I'll call you.

QNF Net is free.

The net session is ended. Stations are free to leave, rag-chew, etc.

QNG Guard net frequency.

The NCS uses this one to ask another station to take over net control.

QNH Your net frequency is high.

Come down to 3651, OM.

QNI Report into net.

Invitation to join the gang; indication that station is reporting in.

QNJ Can you/I can copy (Call).
(Self-explanatory).

QNK Transmit messages for (Place) to (Call).
(Self-explanatory).

QNL Your net frequency is low.
Come up to 3651, OT.

QNM You are interfering with the net.
(Self-explanatory).

QNN Who is NCS? (Call) is NCS.
Use this one if you didn't get the call letters.

QNO Going/gone out of net.

Used to indicate station is leaving net and won't return, or to indicate absent station.

QNP I cannot copy (Call).
(Self-explanatory).

QNQ Move to (freq.), find (Call), wait for him to finish handling traffic, then send him messages for (Place).

QNR Receive messages for (Place) from (Call).

(Self-explanatory).

QNS The following stations are in the net.

After the first call-up, the NCS does not acknowledge each QNI individually. Instead, he transmits QNS and a list of the stations he acknowledges. If you QNIed and do not hear your call in this list, QNI again.

QNT Permission to leave the net temporarily.

If you have to make a fone call, but intend to return to the net, this is the signal you use to ask permission. It's helpful to add a number to indicate how long you'll be gone (QNT3 means "I'll be gone 3 minutes"). Remember, you never leave a QND net without permission of the NCS.

QNU The net has traffic for you. (Self-explanatory).

QNV Establish contact with (Call) on this frequency.

If okay, move to (freq.), send him messages for (Place). This one is an alternative for QNQ when conditions are poor.

QNW How do I route traffic for (Place)?

This is a handy one for asking if traffic for (Place) goes to 4RN or RN5. Also could mean "Where are Ft. Drum, Micanopy, Bokeelia, Kenansville? etc."

QNX I wish to be/you are excused from the net.

QNY Please shift your frequency to exchange traffic or to stop QRM to net members.

(Self-explanatory).

QNZ Zero beat your signal with mine.

Very important, especially when you first QNI. Some NCS have very sharp receivers, so if you expect to be heard, zero beat the NCS.

Well OM, if you've stayed with these articles this long, you've got a pretty good idea of how QFN runs. You've studied our language and customs. You're ready to enter our domain. The welcome mat is out. The natives are friendly. QNI. QFN!

73 de Chuck, W4LUV
de Florida Skip

Gentlemen: Brother Amateur K0UWK George Botsford of Ainsworth, Nebraska, has done it again! For many hours during the recent blizzard George stayed on to be anchor man for many contacts between blizzard torn South Dakota, Western Nebraska, and all points east, handling phone calls or any other request made of him. As a Nebraska Net member I would like to thank him.

Matthew G. Beha
W0LFJ

There's nothing the matter with a fellow who uses WE when he means I--who uses THEY when he doesn't know what he's talking about--or says "It's cold, ISN'T IT?" when the temperature is zero. It's just a HABIT he can break.

--NVARC QRM

Ham Hum:

I sent this one to QST, but it has not been printed yet---

At the Denver Convention, a young man, carrying a very small baby, was looking over the exhibits, sort of humming, dah di dah dit di dah dah dah di dah dah di di dit dah etc. Asked him if he was studying the code, and he turned around sort of surprised and said no, he had his ticket, but he was teaching the baby CW, "You don't think it is too soon do you?"

Did You Ever--hear a 599 signal tuning up, for five minutes, then call CQ about a 339?

Did You Ever--hear a code practice station on a clear channel?

Did you ever tune up on a "dead band," call CQ, get a comeback at 349, tighten right up for some DX, and then learn it was the guy across town?

Did you ever hear of the Novice who called CQ, got so many comebacks he could not read them, just pulled the switch and got out?

We are getting some 2 and 6 meter action here, WQBLM, KOYRL, WQPIU, WQVEA, and a few others are working at it.

73,

Dayton L. Phifer

WQVEA

East Tryon Route

North Platte, Nebr.

A generation ago most men who finished a day's work needed rest; now they need exercise.

REFLECTED AND DIRECTED

George H. Goldstone, W8MGQ
1010 Burnham Rd.,
Bloomfield Hills, Mich.

SOME AWARDS THAT DON'T EXIST - BUT OUGHT TO!

Once upon a time, the United States Government contracted with private printers for the production of both postage stamps and paper money. That day is long past, and the only paper money floating around these United States that isn't government issue will double as a ticket of admission to the penitentiary. The printing and engraving firms that lost Uncle Sam's work managed to pick up a little cash here and there by printing and engraving the postage and legal tender of various foreign governments. With the frequency of revolutions in Latin America, this must have once been a whiz-bang business, but today, we suspect they specialize in the printing of stock certificates -- and just plain blank certificates for people who just HAVE to certify something or other, complete with engraved cutliques around the edge, plus a gold seal in one corner.

Now, this gold seal bit has an interesting history. The gold seal was at one time the mark of the Crown's authority; and to use it without the king's go-ahead could lead to the loss of your right hand. Even today, a batch of gold seals applied to some legal document that is being sent to an European

country will attach an air of reverence to an ordinary thing like an affidavit taken before a notary public. So we are not at all surprised to see some meaningless certificate framed in engraved scrollwork, and glistening with a gold seal in one corner.

The matter of so-called "awards" in amateur radio -- that type that you can get by working so many stations of the certifying club -- has been pretty well exposed in this publication and in others. The issuing organization reminds us of the little boy swinging from a tree, shouting, "Lookit me! Lookit me!" No one particularly cares whether or not he works 10 members of the Polar City Radio Club; but the P.C.R.C. figures it can get some publicity by issuing a "Gin-Fizzle" award (?) and so it goes.

But why not more awards for something meritorious? Like designing a new antenna that is used by thousands of hams? (e.g., - HC1JB and his Quad). Or designing and describing in print a grounded grid amplifier? (Romander, W6CH, Sept. '33 QST); or, speaking again of antennas, the double extended Zepp (also by the same Hugo Romander, June '38 QST). Then there is the TVI problem, tackled analytically by Phil Rand, W1DBM, as well as others. SSB has its helpful pioneers, but it may be too early to assess the merit of particular systems and designs.

We certainly need some public service award that differs in degree with respect to the service rendered. The ham who sits out a flood and

tornado while maintaining radio communication from some courthouse tower is several cuts above the ham who sits in his air-conditioned shack and takes half a dozen messages off the hook of his brother ham down in that flood!

Awards can be an incentive for improvement; improvement of both the amateur OPERATOR, and improvement of his station. We think that operating privileges to those earning them constitute an excellent award. Most of the other suggestions we've heard of have an aroma of exhibitionism about them; special call signs, and all that sort of thing. Now that we have license fees, maybe F.C.C. could reduce the renewal fee of \$4 to a mere \$1 for those who showed special merit in some manner measurable by the F.C.C. without attendant expense. Ideas, anyone?

de Auto-Call

Did you ever "R R OK, solid, but please repeat?" Did you ever, get a report that your harmonics were too close together to copy? Did you ever hear a novice bragging about how well his long wire got out, no couplers, just forty feet of wire to a pole, loads on 80, 40 15, ok, check that one out, find he had made a loop or so around the eaves trough, explain to him that he was loading the entire downspout, eaves trough system by induction. "Impossible, that wire is insulated."

73

Dayton, W0VEA

LET'S PLAY IT SAFE

In case you didn't realize it, it is against the State Law to attach anything to a utility pole. This not only creates a hazard to the lineman, but there is a definite hazard to you. Suppose while you were operating your rig, your guy wire or antenna snapped and flipped into the high voltage lines. Not only would you have flattened your final, but you would be flattened, and, if still among the living, you would be missing some teeth or your jaw if you had your mouth in contact with the mike and there would be missing fingers on your operating hand.

Is your antenna and supporting structure in conflict with the power lines? Being in conflict means, could they fall into the power lines? If they could, then check the guying of your antenna. Make sure that your guy wires are terminated in a thimble eye of the proper size to avoid sharp corners. If you use the U-bolt (Crosby type) clamp, be sure the U-portion of the clamp is on the short end of the loop. If you use $\frac{1}{4}$ " guy, use the clamps spaced $2\frac{1}{4}$ " apart.

Now you are going to install a new antenna system. What are some of the things you are going to check? Naturally you are going to check the location of the power lines. You are going to "LOOK UP AND LIVE." When you are going to get some help, invite your buddies in for an old-fashioned raising party - something like the old-fashioned barn raisings. Take your time, do it

tight, and remember at all times "LOOK FOR OVERHEAD LINES." By all means use a safety belt if you climb the tower.

You are thinking that being a ham operator is risky business. It need not be if you think, LET'S PLAY IT SAFE: LOOK UP AND LIVE, LOOK FOR OVERHEAD WIRES!!!!

from The Loudspeaker
San Gabriel Valley Radio Club

HEARD ON THE PARTY LINE

Charles Vorderberg, W0CCT
2711 Washington St.,
Davenport, Iowa

An expert says we're headed for another ice age in about 15,000 years. Doubtless you'll find some "nut" putting up an antenna about that time.

Alimony is the same as paying monthly installments on your transmitter--after the final has gone soft.

Most TVI is circumstantial evidence.

Band Openings: What you wait months for, complain about when they arrive, and wonder where they went after they're gone.

Recently a story told about a chap who suffered a burned hand when lightning hit his umbrella. Holding a newspaper over your head is safer in a rainstorm. No antenna!

MEGAHERTZ COUNTRY

A fiftyish XYL, whose husband was overly attentive to a YL on the band, explained to a neighbor: "He's like a puppy running after cats. He doesn't want to catch one-- just wants to bark at them a little."

A sure sign of old age is when the OM makes as much effort to talk to another OM as he does a YL.

Ever notice that there are very few operators who can afford to have a daughter in college and a ham rig? Others say, having a daughter in college these days is like being wiped out in the stock market.

We heard a K7 tell a W3 that it is no wonder the Indians are mad. They are the only ones ever conquered by the United States who didn't come out ahead.

One of the reasons the Ten Commandments are so well worded and to the point is that they were given direct and not passed as traffic.

Sounds We Hate to Hear.

"You're not even moving my S-meter."

"You sure took a dip. I hope you're copying me okay."

"Nice carrier, but no modulation."

"You're chirping."

"Your signal is breaking up."

"QRX one, the land line."

"Sorry, I'm getting the chow call here."

"You're out of the American phone band."

de Signal Report
St. Petersburg, Fla.

This is the first in a series of articles on various phases of VHF communications. As amateurs, we should be interested and curious about as many facets of our hobby as we can spare the time to participate. Let's start with the assumption that you are merely curious about VHF and wonder if you would like to give it a whirl. What are some of the attractions? At two meters a beam about the size of the average TV antenna can represent 8 to 10 db gain. A pair of these can raise this to 12 to 14 db gain and can easily be rotated by the garden variety TV rotator. Although high power has its place in VHF, the average rig is in the 5 to 15 watt category; AM is still the predominant mode of operation on the upper frequencies; so the rigs can be simple. FM is becoming quite popular in some areas and there is an abundance of commercial gear available on the surplus market that can be modified for the ham bands. There is still a lot of wide-open space at 50 Mh and above and that is hard to find on the lower bands. Amateur TV is allowed on 420 Mh and above. In other words, the VHF bands offer an excellent place to conduct the ancient art of experimentation that marked the ham of yesteryear. It also offers an excellent area in which to set up the local nets that bind the hams to community service and as a by-product to themselves. Curious enough to

go on? OK. Let's get some VHF texts and do a little reading. Frank Jones, VHF Handbook is a good start. ORR & Johnson's VHF Amateur is also a good one. I have not read it yet, but understand the new

ARRL publication is good. See what you can find on VHF equipment and antennas and browse through it. Next month we will discuss a starting point.

de Ventura Co. A.R.C.
Oxnard, Calif.

**OFFICIAL BULLETIN NR 52
FROM ARRL HEADQUARTERS
NEWINGTON CONN MARCH 25 1966
TO ALL RADIO AMATEURS BT**

Now is the time for individuals as well as clubs and groups in the ARRL Field Organization to begin formulating plans for the ARRL Field Day, June 25 and 26. This annual test of emergency gear should prove particularly challenging this year. For the first time, a Spirit of Field Day bonus will be offered for furtherance of at least two of the basic objectives of accurate traffic handling, good public relations and complete operation under emergency power. Full reporting forms are now available without charge from the ARRL Communications Department, 225 Main Street, Newington, Connecticut 06111. Please state the number needed AR

HAM OPERATORS get blamed for many things, but this tops them all:

A Seattle woman complained repeatedly to Congress and FCC about TV interference from a ham station. She alleged the ham caused the house to vibrate, plaster to fall and crack the TV screen, interference on the telephone and also caused her internal "jiggling." FCC remedied her TV set but asserted that her vibrations were beyond federal jurisdiction. She hired a geophysical expert who concluded only that when she complained of tremors the ham usually was not on the air.

de Cedar Valley A.R.C.
Cedar Rapids, Iowa

**OFFICIAL BULLETIN NR 50
FROM ARRL HEADQUARTERS
NEWINGTON CONN MARCH 10 1966
TO ALL RADIO AMATEURS BT**

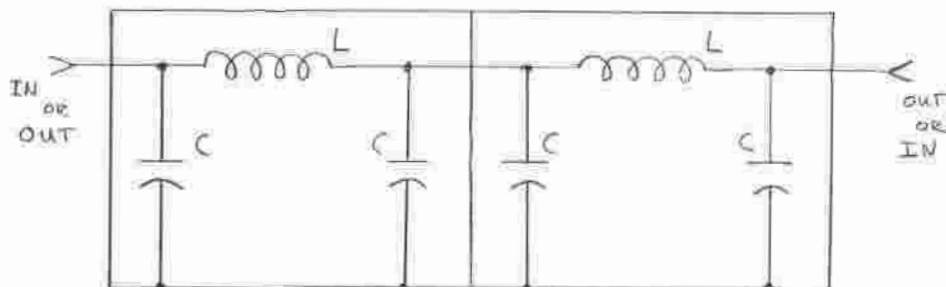
U. S. authorities in Viet Nam point out that the operation of K1YPE/XV5 by Deputy Ambassador Porter is a special exception to the otherwise complete prohibition of amateur radio in a country at war. No other applications for licenses are being considered. Additionally, U. S. military regulations prohibit any operation by servicemen amateurs stationed there except through MARS on military frequencies. Further details will appear in the May issue of QST AR

REPORT FROM BOARD OF HEALTH

TVI is less a problem than SWI. I got a particular pain concerning a flashing sign somewhere around Marion which will have to be tracked down and destroyed...sorry, I was thinking out loud. I mean it will have to be tracked down and action taken to cure it. A touchy TVI problem involving FCC action has been cured and two others have been investigated and cured. One TVI complaint made two weeks ago remains to be looked into as soon

as the complainant and I can be in the same place at the same time but no one is mad at anyone on this particular complaint. I had a 6 days interval involving Channel 2 and my 10-meter second harmonic which was cured by a half-wave filter. I understand there are hams who are QRT because of this and it is not necessary since the filter will provide at least 30db attenuation and is simple to build.

$$\text{Voltage rating of } C = \sqrt{2P \times Z_0}$$



C = 100pf mica or ceramic dogbone, 500v- up to 500w PEP.

L = 5 turns 3/4" diameter self-supporting wire or tailor-made coil stock - leave partial turn for knifing. Dip to 20.6 mc.

Box = 2-1/4" x 2-1/4" x 5" (more or less) with center partition you make yourself.

Note: Make a little hole through center partition but don't use a feedthru bypass.

Ray Stellhorn, WA0NEA
Cedar Valley ARC, C. R., Iowa

FCC's 31st Annual Report

The Federal Communications Commission indicates there are now more than five million transmitters licensed. Radio today is an invaluable tool for service and for scientific endeavor now including relaying services by satellites. The seven FCC Commissioners appointed by the President, under the provisions of the Communications Act regulate all non-government radio operation and the inter-state and over-seas communication common carrier services. At the close of fiscal '65, FCC had 1541 employees. In 4½ million station and operator authorizations (page 16 table) the number of amateur operators is given as 256,237 (6-30-64) and 258,881 (6-30-65), an increase of 2644. To advise and assist in its defense communication planning FCC (under Executive Order 11007) set up a National Industry Advisory Committee (NIAC) with regional state and local counterpart committees making studies and recommendations. The studies extend to each of the different services representing various communications systems and arrangements for emergency use.

FCC states the vital requirements for international cooperation and that it is required to work closely with ITU and other world and regional groups in tele-communications matters of common concern. The primary allocation of frequency bands is determined by international treaty, and assignment of individual channels within those bands to the indicated services

made by the member nations of ITU accordingly. FCC reports its important conference responsibilities in connection with treaty making and international agreements. Also that in '64 Congress enabled FCC to authorize amateur operators of other countries to engage in amateur work while in the U.S.A. under reciprocal agreements.

The Amateur Radio Service is mentioned in most detail in FCC's report in the section by the Safety and Special Radio Services Bureau which handles our matters: "Amateur operators entered the Space Age by orbiting their own communication satellite. In view of the fact that Oscar III was made available to amateurs in any country, without cost, on an equal basis, this satellite was hailed as the first truly free multiple-access communications satellite to be orbited. Thus amateur radio continues its significant contributions to the art of electronics and radio communications. The important role of amateur stations was also continued in Civil Defense, RACES systems in each state providing essential radio air in natural disasters and for Civil Defense emergencies."

Bi-lateral agreements for reciprocal operations (under Public Law 88-313) had been consummated with seven foreign nations and negotiations entered into with 23 additional countries (at the end of the fiscal '65). It was reported that Docket 15928 for an incentive licensing program to improve the amateur

licensee structure had been put forward and that the numerous comments were being evaluated. Excising more information (from tables) we note the number of stations (6-30-65) as Amateur, 266,007, Disaster 374, RACES 13,962. 85% of these Disaster Communications Service licensees are held by Civil Defense organizations and 76% of these also use RACES.

On the violation notices sent amateurs, the report is not very specific...so we apparently fared quite well, at least compared to others. The Field Engineering Bureau reported that rule violations by Class D citizen licensees reached an all-time high. The new CB rules were expected to alleviate a situation requiring 6,000 violation notices (and with 5,000 on-the-air infractions noted) during the fiscal year. A small boat radio inspection program was intensified as the bureau made some changes in its operations and physical facilities in fiscal '65. Tables of investigations and monitoring statistics unfortunately do not show a break-down to the amateur service exclusively. The FCC report sums it up this way, "On a number of occasions the Commission took disciplinary action against operators by suspending licenses. Suspension was for such violations as transmitting profane language, improper operating procedure and cheating in examinations. This transmission of profane language by radio is always a problem and the FCC is hitting it hard. The field staff is responsible for locating the offending radio station and assisting in collecting evidence to support prosecution or issuance of warning

18

letters for violations of U.S. Code 1464.
de ARRL Affiliated Club Bulletin

COSTS OF CALL LETTER LICENSE PLATES

A good many states charge an extra fee initially, with only just a few states charging a special and or renewal fee, beyond that for standard plates. Alaska, Maryland, Oklahoma and Virginia require radio equipment to be installed in the vehicle. Initial fees run from \$1.00 to \$10.00. The initial fee is the only one in most cases.

The most popular initial fee is \$2.00 and this is required in Arkansas, Connecticut, Indiana, Iowa, Michigan, Minnesota, Oklahoma, South Dakota and Texas. A \$1.00 bill is all you must have to get that first call-plate in Alabama, Georgia, Louisiana, Missouri, Nebraska, North Dakota, Ohio and Wisconsin.

Fees are higher, \$3.00 in Alaska, Arizona, California, Illinois, Nevada, Pennsylvania, Utah, and Virginia. \$5.00 is necessary in Delaware, Maryland, Montana, Oregon, Vermont and West Virginia and a full \$10.00 in Maine. This fee is not recurrent there or in most other states. There is an annual fee of \$5.00 in New York, \$3.00 in California and Illinois, \$2.00 in West Virginia and \$1.00 in Georgia and Texas. Only New Jersey and Kentucky are hold-outs but if FCC ever complicates the business of calls and prefixes, Amateur Radio will probably lose out on this possible display of call identity in some of these states, since there would be lots of changes as well as perhaps longer designations.

ARRL Affiliated Club Bulletin

Rotten Radio

You don't need a license to listen, at least in the USA, and conversely, the Big Ticket seems automatically to allow one to transmit without listening.

Occasionally I spend some time listening on the 3.6 to 14 mc bands, just to get the general impact that any SWL gets -- it's terrible! Yeah, I know, the bands are crowded, but they're crowded in lumps and pile-ups especially during so-called DX contests. "Dog Xray" occupies a position on my "I-hate-ham-words" list almost even with "Fine Business" and "See you down the ol' log." The VFO has made the bands worse instead of better; apparently the thing to do is to slide right into the mess and then emit about one to two dozen CQ DX's while the other two (or more) guys are yelling at one another in vain. Even better, give a long string of calls to one of the stations now talking; certainly he is equipped to work full duplex!

Another dandy I hear is the full power tune-up right on frequency. The real expert saves his call for some future date, and holds us spellbound with some 1-3/4 dozen assorted bird calls, followed by an equally long string of "Hell--ooh's." Sideband is barely tolerable but on ancient modulation he takes a real chunk out for his private test area.

Then I hear considerable discourtesy, the foregoing not withstanding. Lots of downright mean talk, some profanity, quite a few

comments with double meanings not disguised at all.

The so-called contest is a real gas. I believe the sport is to confirm as many other stations per contest time-span as possible. Most non-contest contacts consist of a short recital of local equipment, a request for "handle," and plea for a QSL, but the contest exchange is really a marvel of fraternal conversation: "You are Number Zipteen in the Iowa Section, WØXXX calling CQ contest." So you "worked" a new country? Did you find out anything at all about the other fellow--what he does, how did he get into amateur radio, whether you could do anything for him radiowise? No, but you certainly "worked" him!

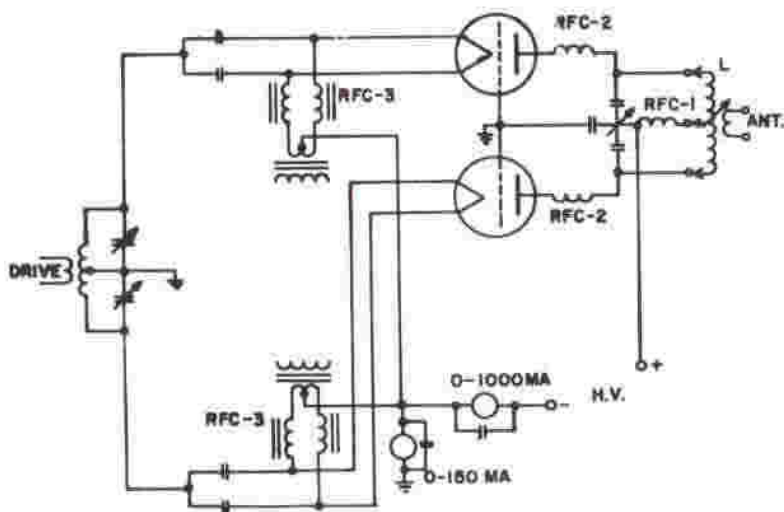
And then the "busted equipment" fellow is heard most any time. He has known defects, has been told by other operators, but continues to slop about until total failure occurs. "Yeah, old man (or old woman), I know I got 10:1 SWR but don't have time to fix it"--or, "My linear is a bit on the Class C side of ABz but I got so many contests and skeds that there's no time to fix it"--and so on.

Amateur radio being what it is, it won't be long before the VHF bands will resound to these transmissions of good will and scientific interchange.

de Cedar Valley A.R.C.
Cedar Rapids, Iowa

SIMPLICITY OF PUSH-PULL LINEARS

By George Clark, W5JKK



Push Pull class "B" Linear

Any old plug in coils left over from AM days? Most of us have some of the 500 or 1000 watt plug in coils as well as the 75 watt 5 pin plug in variety still in the junk box. Two split stator capacitors, a small hand full of by-pass capacitors, suppressor chokes, filament transformer high voltage power supply, tube sockets, plate caps and you are in business. Not quite as something new creeps in that was not used in AM and that is the bi-filar wound filament chokes. For push-pull two are needed. A couple of meters, some hook-up wire, a chassis and we are ready to start the assembly process.

When the idea of a Push-Pull linear was first conceived it looked like a very simple process to convert the old PP 811's from class "C" to grounded grid class "B." It was

simple, but first the whole chassis was stripped and started all over again. Also by placing another 811 tube beside each of the present ones, push-pull parallel is possible. The result is twice the power as power is measured by Ex1, and four tubes will draw twice the current of two.

It isn't necessary to use two filament transformers as the circuit shows but it is necessary to use two bi-filar wound filament chokes as the cathodes are driven 180° apart. The circuit is simplicity in itself and is very easy to drive to full output. The static idling current is 84 mills with 1250 volts and will peak to 600 mills. This gives approximately 750 watts DC or 1500 watts PEP. By increasing the plate voltage and adding bias, 2000 watts PEP is an easy reality.

ASK A SILLY QUESTION

by

A NONNY MOUSE

Dear A. Nonny:

My OM is an extreme optimist. No matter how dismal things look he always sees a bright side of events. How can I get him into a world of reality?

Signed - Anti Optimist

Dear Anti: - He sounds like the guy who is always looking for the larger strawberries in the bottom of the box. Be cheerful about it, maybe when the cuckoo comes out of the clock he will search for a golden egg and find it.

Dear A. Nonny:

My OM has mediocre everything but is always expressing himself that the world is his oyster. With an old house, old car, old furniture and everything else old, how do you cope with such self-satisfaction?

Signed - Old Wife

Dear Old: - The resigned attitude toward the realities of life are wonderful but remember his Oyster is a fish that looks like a nut.

Dear A. Nonny:

My XYI and myself are perplexed by the teen-age rebellion going on these days, especially with ours and other children's attitude toward their parents. What's it coming to?

Signed - Parents anonymous

Dear Par: - We are living in a time of ever changing speed toward progress. Best explanation of a

parent I've heard is an invention that gives children things they want so they can have something to ignore.

Dear A. Nonny:

Time is an ever fleeting space in our life span. It sometimes takes me 30 minutes to find a parking space when I go downtown. Are we in an era of automobile population explosion too?

Signed - Parking happy

Dear Park: - A parking space is a place 15 feet long on the other side of the street that quickly disappears when you make a U turn.

Dear A. Nonny:

At a ham dinner the other night my entree was all covered with that horrible tasting green stuff. What is that stuff?

Signed - Untasty

Dear Un: - The horrible tasting stuff was probably parsley which is a garnish usually pushed aside so you can see that to eat.

* * * *

DEFINITIONS:

PASSION: - Where culture, religion, romance and restraint give away to IMMEDIATE DESIRE.

from Signal Report

St. Petersburg, Fla.

ABBREVIATIONS FOR STATES

Along with the ZIP codes another change was made by the Post Office Department that has been little publicized. This is the use of two letters only for abbreviations for the states. While they will not be too useful for the small mailer, they assist greatly in making a large mailing. Here is a list of them:

Alaska - AK	Kentucky - KY	Ohio - OH
Alabama - AL	Louisiana - LA	Oklahoma - OK
Arizona - AZ	Maine - ME	Oregon - OR
Arkansas - AR	Maryland - MD	Pennsylvania - PA
California - CA	Massachusetts - MA	Puerto Rico - PR
Canal Zone - CZ	Michigan - MI	Rhode Island - RI
Colorado - CO	Minnesota - MN	S. Carolina - SC
Connecticut - CT	Mississippi - MS	S. Dakota - SD
Delaware - DE	Missouri - MO	Tennessee - TN
Dist. of Col. - DC	Montana - MT	Texas - TX
Florida - FL	Nebraska - NB	Utah - UT
Georgia - GA	Nevada - NV	Vermont - VT
Hawaii - HI	N. Hampshire - NH	Virginia - VA
Idaho - ID	New Jersey - NJ	Virgin Islands - VI
Illinois - IL	New Mexico - MN	Washington - WA
Indiana - IN	New York - NY	West Virginia - WV
Iowa - IA	N. Carolina - NC	Wisconsin - WI
Kansas - KS	N. Dakota - ND	Wyoming - WY

The Post Office Department recommends that the above two-letter abbreviations be adopted for all mail, along with the ZIP codes,
de Signal Report

OFFICIAL BULLETIN NR 51 FROM ARRL HEADQUARTERS NEWINGTON CONN MARCH 17 1966 TO ALL RADIO AMATEURS BT

A new manual on Amateur Radio Public Service Communications is now available free of charge from ARRL Headquarters. The new publication on emergency and traffic operations discusses the Amateur Radio Emergency Corps, the National Traffic System and the Radio Amateur Civil Emergency Service. This twenty-six page publication is available from the ARRL Communications Department, 225 Main Street, Newington, Connecticut 06111 AR

For those who like to read the mail and have general coverage receivers, these frequencies may interest you: 5.259 mc; 7.579 mc; 10.643 mc; 15.016 mc. News services, Cape Kennedy recovery ships and helicopters and the Houston Space Center use these frequencies; get the low-down on the higher-up affairs... (an apology to whoever I stole it from...I lost my record of the source).

(We stole it from
Yellowstone, Splatter)



WORLD RADIO LABORATORIES DEPT. QST
 3415 WEST BROADWAY, COUNCIL BLUFFS, IOWA / 51504

Ship Special Package ZZM088 — \$199.95
 Ship Duo-Bander 84 — \$159.95
 Send information on other Duo-Bander Packages
 Quote attached Trade
 Send Free 1966 Catalog
 Check or money order enclosed F.O.B. Council Bluffs, Iowa

Name _____ Call _____
 Address _____
 City _____ State _____ Zip _____

INTRODUCING WRL'S SENSATIONAL COMPACT 300 WATT DUO-BANDER 84 FOR IDEAL SSB TRANSCIVING ON 80 AND 40 METERS



INTRODUCTORY OFFER UNTIL MAY 10TH

\$159⁹⁵ \$8.00 MONTHLY

WIRED

NOT A KIT! THE PERFECT FIRST OR SECOND — MOBILE OR FIXED STATION — TWO BAND TRANSCIVER

COMPACT — 80-40 METER SSB TRANSCIVER. A LOW COST RIG — WITHOUT SACRIFICE OF POWER AND PERFORMANCE. INCLUDES BUILT-IN SPEAKER AND GIMBAL MOUNT! E Z TUNING WITH BANDPASS EXCITER DESIGN — JUST PEAK OUTPUT FOR SMALL QSY. Illuminated VFO dial with 2 kc calibration. High impedance mic. input with push-to-talk operation. Combination S-Meter/Output indicator. Smooth vernier (12:1 slow and 2:1 fast) VFO tuning.

300 Watts PEP/SSB input, covering 3.8-4.0 and 7.1-7.3 mcs. (LSB-80 and 40 meters). A pair of proven 6HF5 final tubes. Separate, relay switched, tuned RF receiving stage, 1/2 uv. sensitivity at 10DB S/N. Rugged printed circuit boards, combination tube/transformer circuitry for best performance. Stable solid state VFO and balanced modulator, zero regulated. Selectivity 2.5 kc @ -5DB receiving and transmitting with a 4 crystal filter. Carrier and unwanted sideband suppression - 40DB. 1 watt of audio with built-in speaker. Fixed 50 ohm input/output impedance. Excellent AVC. **COMPACT SIZE: 5" high, 11 1/4" wide, 10" deep, less power supply. Net weight 10 1/4 lbs. Shipping weight 15 lbs.**

DUO-BANDER 84	\$8.00 monthly	\$159.95
AC48	250 Watt (115 VAC) Economy Supply	\$ 49.95
AC384	300 Watt (115 VAC) Deluxe Supply	\$ 79.95
DC384	300 Watt (12 VDC) Deluxe Supply	\$ 89.95

SPECIAL

FIXED STATION PACKAGE
 (INCLUDES DUO-BANDER 84 AND AC 48 SUPPLY)

\$199.95
\$10.00 Monthly
Order Package
ZZM088

WRITE FOR OTHER PACKAGE INFORMATION