



HAM HUM

Published by
AK-SAR-BEN RADIO CLUB, INC. - Omaha, Nebr. 68101
Post Office Box 291 - Downtown Station



Vol. XVIII
No. 9-10

September-October

NEXT MEETING

WHEN: FRIDAY, OCTOBER 11, 1968 - 8:00 P.M.

WHERE: RED CROSS CHAPTER HOUSE
(enter south door only)
432 South 39th Street
(ample free parking)

WHAT: OUR TWO METER REPEATER STATION,
including a demonstration and movie on two
meter repeaters. Discussion of the new fre-
quency allocation to take effect shortly. Let's
get in gear and avoid those pink tickets!

REFRESHMENTS AND GABFEST WILL FOLLOW
REGULAR MEETING.

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.



Next copy deadline: October 25th

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AK-SAR-BEN RADIO CLUB, INC.

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AUGUST MEETING

The August meeting was held on Tuesday, the 27th, at the Fitzgerald Friendship Room, Commercial Savings and Loan Association, 4501 Dodge Street, Omaha. There were 44 in attendance at the meeting, a record number for August.

President Bob Lockwood, WAØDHU, presided at the meeting. He gave a brief rundown on the canoe race of the Midwest Canoe Association which was held on Sunday, August 25th. See write-up elsewhere in this issue.

Discussion was held concerning the recent purchase of the two meter Repeater Station and what it means to the Club and to the community.

Three new members were accepted: John C. Ebright, WAØQGZ; Bryce N. Nelson, WNØTSS; and Robert H. Schellhorn, WØYSX.

In behalf of the members of the Ak-Sar-Ben Radio Club, Inc., Louis V. Cutler, WØVLI, presented to Arthur R. Gaeth, WØQFB, a plaque in commemoration and appreciation of his Club membership and his

selection, after 45 years of service in amateur radio, to the Nebraska Amateur Radio Hall of Fame. Dick L. Eilers, WØYZV, presented to Art Gaeth an Admiral's Commission in the Great Navy of the State of Nebraska, and presented a white orchid to Mrs. Gaeth. (See page 7)

Our guest speaker of the evening, and our main reason for holding the special meeting on other than our regular meeting night, was Edward P. Tilton, W1HDQ, V.H.F. Editor Q.S.T., who was returning through Omaha from a ground trip which included the V.H.F. meeting at the Ozarks and visits with hams and clubs in Colorado. Ed gave us a very interesting talk on VHF antennas and, as the principles that apply to VHF antennas are exactly the same as apply to HF antennas, it was most interesting to the members and guests in attendance. . . brought out the fact that for the benefit of the high frequency man, VHF antennas are ideal for experimentation to determine types, etc.

of HF antennas particularly because it is a lot easier to play around with 2-foot pieces of wire or tubing than the lengths used in HF work. The principles involved can be tested here and then applied to full antennas for HF. He brought with him the antenna from his car which he has set up as a combination antenna for broadcast band, 6 meters, or 2 meters. By the use of the plug-in or screw-in elements, he changed it from a broadcast whip, to a vertically polarized antenna on 6 or 2, or a horizontally polarized antenna on 6 or 2. In all a very interesting demonstration and talk enjoyed by the audience.

Those who wish to pursue the subject further might gain additional information from the V.H.F. Handbook, which incidentally is edited by Mr. Tilton, or the antenna book, both of which are ARRL publications and available either directly from ARRL or through your favorite ham supplier.

Question and answer period followed and kept up during the coffee break until our meeting deadline which was 11:00 o'clock.

This is the first meeting of our Club that has been held in the Friendship Room of Commercial Savings and Loan Association. We particularly appreciate the use of the room. It is ideal for our meetings and it is hoped we will be able to use it either occasionally or regularly in the future. Our use is, of course, subject to scheduling with other organizations and has not been available to us on the second Friday.

Dick L. Eilers, WQYZV, was Mr. Ak-Sar-Ben for the evening. The third person to shake his hand was John R. (Mac) McGovern, KQMS, who was the lucky winner of the prize.

Hi Gang:

Thought I'd better drop you a line letting you know I am at a new QTH now. I sure enjoy getting Ham Hum and read it from cover to cover. I have been off the air since early June but intend to be on again from my new QTH by the middle of Sept.

Had a FB eyeball with Erv Darge, WQMH, while he was here in July.

I will be in a crowded area so sold my tower and Hy Gain Beam and will put up a B-24 Mini Beam and hope I will be able to poke at least a feeble signal back to the old home stomping grounds.

Regards to all the gang.

73,

Orin Miller, W6EHJ

(Ex-WQSEE)

9340 Cosgrove

Pico Rivera, Calif.

90660

FOR SALE

Master Mobile brand fixed station ground plane antenna for 2 meter band. Get on 2M FM!

Surplus altimeter radar TXR. Could possibly be put on 450 MHZ. Pair of 15E OSC. tubes.

John Snyder, WQWRT

3221 S. 45 St., Omaha

Phone: 556-1538

THE MIDWEST CANOE ASSOCIATION RACE

By Bob Lockwood, WAQDHU

The Midwest Canoe Association held its annual canoe race on Sunday, August 25th. The starting point was the Locust Street marina. The women, the mixed (men and women), and the boys finished at Plattsmouth, while the men in the aluminum and fiberglass canoes continued on to Nebraska City, Nebraska.

The Ak-Sar-Ben Radio Club, Inc. set up several checkpoints along the river to check the progress of the contestants. Harold McClenahan, WAQDGA, and Bob Lockwood, WAQDHU, covered the starting point and the finish line. Jim Knudsen, WAQMHF, and John Evans, WAQLMA, were on the South Omaha bridge. Cecil DeWitt, WQRMB, and family

were stationed at Bellevue. Dick Eilers, WQYZV, was at Plattsmouth; Chuck Michel, KQQVL, Jim Anderson, KQDNE, and XYL, Sharlene, were at Rock Bluff, about ten miles downstream from Plattsmouth. After the last canoes passed Plattsmouth, Dick Eilers, WQYZV, stationed his mobile unit between Rock Bluff and Nebraska City to relay.

The women started at 9:00 A.M.; the mixed at 9:30 A.M.; the boys at 10:00 A.M.; the men in aluminum canoes at 11:30 A.M. while the men in the fiberglass canoes started at 10:45 A.M. A total of 39 entries were listed.

Following is a chart showing the winning contestants:

<u>Number</u>	<u>Names</u>	<u>Departing Time</u>	<u>Finish</u>	<u>Total Time</u>
<u>Women's Class</u>				
W3	JoeAnn Blazek Hazel Wright	9:00	12:09	3:09
<u>Mixed Class</u>				
M2	Mr. and Mrs. Paul Opocensky	9:30	12:26	2:56
<u>Boys Class</u>				
B 10	Robert Bosiljevac Ken Prososki	10:00	12:52	2:52
<u>Men's Aluminum Class</u>				
21	Jerry Whalen James Warren	10:30	4:53	6:27
<u>Men's Fiberglass Class</u>				
12	Ray Bosiljevac Robert Ohnesorg	10:45	4:22	5:37

The race was highly successful; the weather was perfect. One contestant became ill but otherwise everything went off without a hitch. The mobile and portable stations listed above did a fine job. A very accurate account of the progress of the contestants was realized. A big "thank you" is in order for those who participated in this activity. Hearty congratulations for a job well done!



Some men, like blisters, only show up when the work is done.

W8LCG - Via Ham Fax

ADDITIONS TO ROSTER

John C. Ebright, WAQQGZ
17400 W. Dodge Road #12
Omaha, Nebraska 68114

Bryce N. Nelson, WNQTSO
3024 North 75th Avenue
Omaha, Nebraska 68134

Robert H. Schellborn, WQYSX
117 South 38th Avenue
Omaha, Nebraska 68131

WHERE TO GO?

By George H. Goldstone, W8AP

We have pointed out previously that 75 nets are moving - or being moved - out of the 3800-3900 area into the 3900-4000 kc area which will be available to General and Conditional class licensees after November 1969. Some of the 'established' nets on 3920, 3930, and other popular frequencies are getting a bit tromped on already. It would certainly be in order to say "Where else to go?"

The usual answer is "Move to 6 or 2 meters." When the possibility of TVI is taken into consideration, some city-dwellers, as well as suburban and rural hams in TV fringe areas, think twice before putting more than a watt or so on 6 or 2. Not that a watt won't go places on those bands if your antenna is a good one, and "up there." But 160 meters is bound to see some greatly expanded usage after the new allocations go into effect. Just about every state in the union gets more frequencies than were available before, with more power in most instances, even a kilowatt in certain areas, although within 25 kcs of the total allocations.

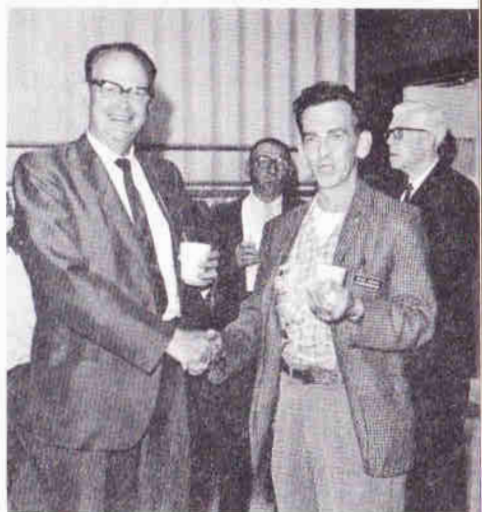
Can 160 meters be relied on to cover a typical net area? Even using AM, it will accommodate the needs of a local net. 160 meter mobiles have been operating in several metropolitan areas for years, using 10 and 15 watt rigs with typical loaded 8-foot whip antennas. Can you imagine what SSB will do on 160, in the same application? And, if you want to think about fixed

station use of 160 on SSB, we recall what shambles was made of the 1805 spot a few years back when a well-known W1 came on with a low power SSB rig! We suspect that using a typical 75 meter antenna, with the feeder shortened and the whole thing worked against ground Marconi configuration, there should be no trouble obtaining full state net coverage. Maybe not in Texas or California - but certainly in these parts.

The various power levels can also be handled very nicely by SSB equipment, using an exciter with input switchable from 25-100 watts - plus a linear amplifier capable of being driven by that exciter up to the highest power permitted in the area. This is not a very difficult design problem, with so many low drive tubes on the market - or at swapfests!

It looks to us as though the solution to the problem of overcrowding on '75 may well be licked by shifting nets to 160 meters. Not to mention 40! The 40 meter band could use some more signals too! There is no power limit on 40, of course, other than the 1 kw.

Equipment design? We recall W8DGP's "Up-transverter," which converted incoming 160 meter signals to 7000 - 7300 on his SSB transceiver; and on transmit, used a high-level converter to convert 7 mc SSB to 160 meter SSB. This is a good example of radio amateur ingenuity; something a little more ingenious than taking another couple hundred dollars out of the household budget! Isn't that a little more like hamradio as most of us learned it?



WHAM BAM --- COOKED HAM

The V.H.F. Reporter

It is a well known fact that large filter capacitors as used in high voltage power supplies can fail in a rather spectacular way. The display of noise, smoke, and flying particles is well known to some hams who were fortunate enough to be far away at the time and were not injured. For those who have not had this eye-opening experience, a means to keep you ignorant of the details follows.

A capacitor is a device that is used to store electrical energy and consists of two plates of some conducting material separated by some non-conducting material. This non-conducting substance is called a dielectric and may be glass, mica, rubber, air, or others too numerous to mention. The insulating properties of these materials vary and some amount of pure resistance exists in each case as the perfect insulator does not exist. Every capacitor thus has some value of resistance associated with it and will pass some current. Although this resistance has a very high value for most capacitors, the fact that it exists cannot be ignored or forgotten. Large electrolytic filter capacitors as are often used in high voltage power supplies have a value of resistance that could present problems if a series connection were made involving two or more capacitors. The series connection of capacitors to increase the voltage capabilities has become common practice since the swing to SSB. The high current peaks of a SSB signal can be obtained by using

values of filter capacitance to store current between peaks. This allows use of small transformers and compact desk top kilowatt linears.

As an example of poor design and the results of this, assume C_1 electrolytic capacitors of 20 MF. each were connected in series. If each has a voltage rating of 450 volts, the two when connected in series should have a capacitance of 20 MF. and be able to stand 900 volts. At first glance this appears to be a simple statement of fact; however, the internal resistances of the two capacitors has not been taken into consideration. If we assume one capacitor has an internal resistance of 50 megohms and the other has 100 megohms, a dangerous situation design wise exists. When the two capacitors are connected in series and the 900 volts is applied to the top of the combination, the voltage drops across the capacitor of 50 megohms resistance will drop across it a part of the 900 volts equal to 50 megohms divided by 50 plus 100 megohms (the total series resistance). This amounts to $\frac{50}{150}$ or

one-third of the total 900 volts. Because one-third of 900 volts is only 300 volts this capacitor is working well below its 450 volt rating. The capacitor that had 100 megohms internal resistance will drop 100 megohms divided by 50 plus 100 megohms or $\frac{100}{150}$ of the total

voltage. This amounts to two-thirds of 900 volts which is equal to 600 volts. Because this 600 volts is far

above the 450 volt rating of this capacitor, it will fail. The failure may be gradual or spectacular.

To prevent this failure in many cases a simple design feature may be incorporated. Across each filter capacitor a resistor of proper wattage having a value of about 100 K may be connected. This resistor would thus appear to be in parallel with the internal resistance of the capacitor. From our laws we know that resistors in parallel have a total resistance that is less than the value of the lowest resistor. Thus the value of the resistance in the capacitors can be made lower than 100 K ohms by the addition of this resistor across each. A rule of thumb would indicate that two resistors when connected in parallel have a total value very close to the smaller of the two when the resistance of one is at least ten times greater than the other. Since a value of 50 or 100 megohms is greater than ten times 100 K, the addition of this resistor across the capacitor reduces the total resistance to the capacitor to very near the 100 K value. If each capacitor has the 100 K resistor across it, the voltage will divide almost equally across the two series capacitors. To allow for tolerances the voltage applied to a series string of capacitors should be less than the sum of the capacitor working voltages. Some allowance must be left for the slight differences and for voltage surges in the transformer primary.

de Orange County Amateur Radio Club via VHF Bulletin

Both the XYL and myself wish to thank the twenty-two participating radio clubs for the honor afforded us on Tuesday, August 27th, at a meeting of the Ak-Sar-Ben Radio Club, involving the receipt of a corsage for the XYL, a very fb plaque for my 45 years of service in amateur radio, my selection to the Nebraska Hall of Fame, and receipt of a commission as an Admiral in the Great Navy of the State of Nebraska.

These awards were a climax to a current triangle in my life in that I had just completed, for the first time in my life, a successful sked with surgery, attained the age of 62, and am retiring after 32 years from the Omaha Fire Department, all at the same time.

Again thanks to all, and 73.

Art, W0QFB

FROM HAM MONITOR

Those remarkable computers won't really be lifelike until one of them makes a mistake and tries to blame it on another machine.

You can't fool all of the people all of the time but those highway signs come pretty close.

It's not true that men seldom make passes at girls who wear glasses; it's the frame that counts.

WA8LGC - via Ham Fax

NOTES FROM THE BOARD

By Bob Lockwood, WAØDHU

The last meeting of the Board of Directors of the Ak-Sar-Ben Radio Club, Inc. was held on Tuesday, September 17th, at the home of Jim Knudsen, WAØMHF. Following is a brief rundown of the topics discussed.

Program for our October meeting will center around our two meter repeater station. A good demonstration of the repeater will be in order and we will have a movie on two meter repeaters. This meeting is designed to demonstrate to the membership just what the purchase of this rig can mean to our Club. Let's have a good turnout at the October meeting.

One of the biggest problems submitted to the Board recently was the change of meeting place. This was due to the change in use of the 4-H Building at Ak-Sar-Ben Field wherein they converted it to an office building and thus could not accommodate meeting groups. We have at last secured such a meeting place at the Red Cross Chapter House. We firmly believe this will be helpful to both the Ak-Sar-Ben Radio Club, Inc. and to the Red Cross as it will bring the two into closer harmony with the net result of more efficient emergency communications should the need arise. Our deep appreciation to the Red Cross for allowing the Ak-Sar-Ben Radio Club, Inc. to hold its regular meetings at the Red Cross Chapter House.

With the advent of the tornado and hail storms which hit the southwest section of Omaha this summer, the need for each of us to accept our responsibility to be ready to do our

part in a well-planned manner and to serve our community in the event of future emergencies comes into sharp focus. The opportunity is ours. Are we going to carry the ball? Our Club is what we make it. Just a few can't carry the load; it has to be a coordinated effort of all of us working together. We, the members of the Ak-Sar-Ben Radio Club, Inc., are at the threshold of a bright future. The opportunity is ours. Let's make the most of it!

WANTED

Electronic technician - 2-way radio service 8-year old expanding firm requires 2 trainees with 2nd Class License. Accepted for on the job training, both bench and field work. Top wages, medical and life insurance, vacation and share in profit program. If interested, call Mr. Joe Berounsky, 827 So. 20th, 341-8069 for interview.

OFFICIAL BULLETIN NR 186 FROM ARRL HEADQUARTERS NEWINGTON CONN SEPTEMBER 12 1968 TO ALL RADIO AMATEURS BT

The Netherlands has extended its reciprocal operating agreement with the United States so that it now includes Surinam prefix PZ as well as the homeland and the Netherland Antilles prefix PJ. A list of countries with which the United States and Canada have reciprocal operating agreements will appear in the October issue of QST under IARU News AR

REPORT ON HAMFEST and STEAK FRY

The annual Hamfest and Steak Fry of the Ak-Sar-Ben Radio Club, Inc. was held on September 8th at the Benson Park Pavilion. Approximately 100 persons attended — Hams, XYLs and Jr. Ops.

Games for the kids and the adults were handled by Ak-Sar-Ben Radio Club's official game coach, Cecil DeWitt, WØRMB. The games were enjoyed by both participants and onlookers, and above all there was a chance to get together and to see faces we had not seen for some time plus a number of visitors.

The steak team did a marvelous job over the charcoals and those T-Bones were so tender that even this old editor, with his store bought teeth, could perform very well on them. The goodies brought in the covered dish as per instruction turned out to be most delectable and fit in with the steaks very nicely and we could find no one yet hungry at the end of the meal.

A tic-tac-toe computer was in operation all during the picnic and no one was able to beat it except the man who knew how. He was none other than the builder of it, our Vice Director for the Midwest Division who was one of our out of town guests, Andy Anderson, KØNL, from Holton, Kansas. In connection with his new job as Vice Director, he is attempting to visit as many clubs as possible, particularly such events as our Hamfest and Steak Fry. Next he is planning to visit the Lincoln Club. He brought with him two additional Kansas Hams. Thanks to them for coming and for bringing the tic-tac-toe machine.

Prizes were furnished by the Ak-Sar-Ben Radio Club jointly with World Radio Labs and were much appreciated by those who were the winners. Lucky Cecil managed to have one hundred percent in that the three adult registrations in his family all were drawn for prizes. In addition we did give out a couple of subscriptions to *The Ham Monitor*, a Kansas publication, and two registrations to the upcoming National Convention to be held in Des Moines. Our thanks to World Radio Lab, the Des Moines Radio Clubs, and to Ham Monitor for these prizes. Our thanks also to the picnic committee for handling the arrangements. We are all looking forward to the Hamfest and Steak Fry next year. (See p. 12-13-14)

OFFICIAL BULLETIN NR 185 FROM ARRL HEADQUARTERS NEWINGTON CONN SEPTEMBER 6 1968 TO ALL RADIO AMATEURS BT

A brand new challenge for DX minded amateurs comes into being officially on January 1, 1969 with the inauguration of the ARRL Five Band DXCC award. Only contacts made after that date will count towards this new DX achievement. At least one hundred countries must be confirmed on each of five separate bands to qualify. Full rules will appear in October QST AR

By crossing a line on the ocean, you can lose one day. By crossing one on the highway, you can do even better.

Via Fresno Skip



Gents from out of State - KQNL, Andy on the right.



President Bob Lockwood, WQDHU, is commended and receives plaque for outstanding effort during 1968 Field Day competition.



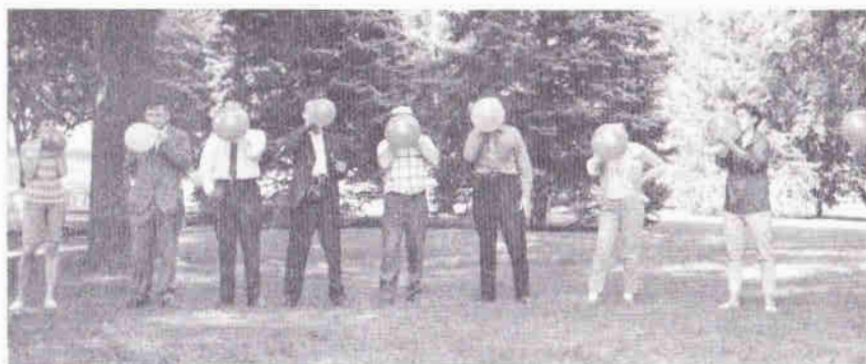
Igniting the charcoal: (left to right) Jim Droege, WQYCP
Royce Johnson, WAQKIL
Norv Bowen, WAQNPF
Jim Anderson, KQDNE



Dick Eilers, WQYZV, displays trophy the Club won in competition during 1968 Field Day. Bob Lockwood, WQDHU, receives plaque for outstanding effort during 1968 Field Day.

Hamfest Chefs
(left to right)

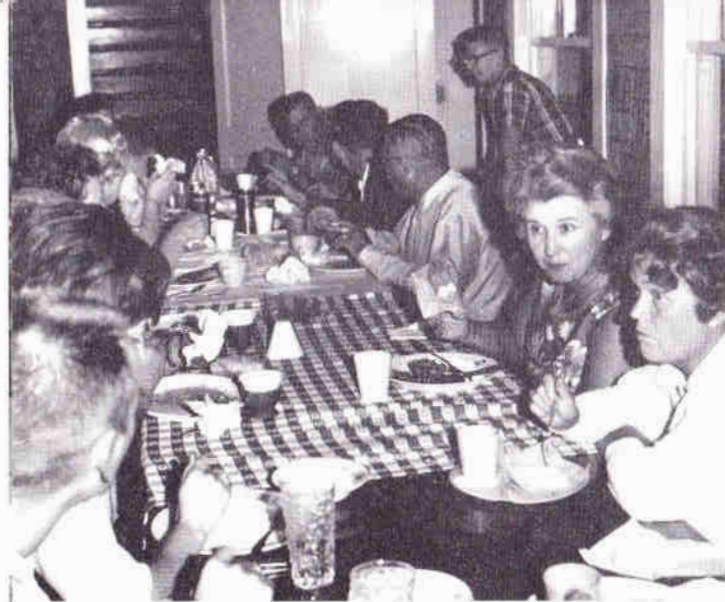
Jim Knudsen, WAQMHF
Royce Johnson, WAQKIL
E. Kilton, KQEYR
Droege, WQYCP



Cecil DeWitt, WQRMB, getting a bang from Hams' fun and games.

Treasurer, Harold
McClenahan,
WAQDGA, keeps
track of the
feed.





Steaks
vs
Hams

Tic-tac-toe computer
outwits Hams



Hamfest QSO's
and Dess
Kilton's
feasting.

YOU, TOO CAN PASS THE EXTRA CLASS! by K6YA

Experience running a Radio Electrical School taught me some "do's and don'ts" in taking the exam and they are passed along to the brethren in the hope they will reduce casualties of aspirants to the Extra Class license.

If you can copy press from KFS and KPH which goes out at about 23 wpm, send READABLE code and know the answers to at least 75% of the License Manual or Study Guide questions, there is no reason to muff this test. It's all a matter of your mental and physical attitude when you arrive.

Decide in advance that you are going to take a well-earned holiday and go to the FCC to find out what the exam is like, so you will know how to prepare for the NEXT one. No studying or cramming the night before—take the XYL out to dinner and a show. Next morning a very light breakfast or, better yet, none at all, a quick glance over the few tough questions which you have previously marked in red for a quick review while you ride the bus or train, DON'T drive, too much hassle.

The receiving test, which is first, is really very easy. The first 150 letters are plain language; if you miss a letter you can fill it in by inspection—if you get the time. Just try to get the sense of it as you go along, remember you are just there to find out what it's like; you don't give a darn one way or t'other. There are no mixed code groups as in the commercial exam, no KEIZ deMZLSS Florimin. W. SOS SOS SOS. That kind of stuff really separates the men from the boys. Items like Lat. 38 deg. 50 Min. N, long. 123 deg. 47 min. W., etc. do not

help but they are not in the ham exam.

Now that you have passed the receiving test, you have a chance to make a friend of the examiner on the sending test. First get that old rattletrap key into comfortable adjustment and then send a string of V's until your arm and wrist are flexible. Nobody can send readable code with a tense "glass" arm. Remember, don't slur your dots, they are just as important as dashes; send every word solid and firm. Be sure you send words, not just a string of letters which would take a cryptographer to decipher. You think and talk in words, so send that way. Look over each word before you send it; relax your arm or even let go of the key while you look it over. Overlong spacing is a heck of a lot better than too short. Send at a comfortable rate of speed, whether it's 18 or 25 wpm, even if you are a little slow, the examiner will accept it rather than ragged, unreadable stuff. The real test of a wireless operator is—can he remain cool and send readable code under panic conditions.

If you have maintained your devil-may-care attitude you are now up to the written exam so don't lose it now. Don't look over all the questions to see how tough they are, just begin with No. 1; if you know it cold, answer it. If you are not sure pass it up and try No. 2. If you come to one like "Draw a schematic of a radiotelephone transmitter" which is obviously going to take a lot of time, pass it up for now and go on to the end, answering the ones you know cold. Then add up the number you have answered, if it is

over 75% of the total hand in your paper and go home. If less, start picking out the easiest of the ones you skipped. Keep working at it until you have over 75%. Remember, on the multiple choice questions you have a 20% chance of being right by just guessing. There is no point in sitting there and sweating for 4 or 5 hours as some of the candidates do. If you fail, for another \$4—you can go back next month and try again but if you maintain the right attitude you won't have to. Not your life, not even your job depends on this exam so keep your cool. Be sure you have a stamped self-addressed postcard (5¢) with you to hand to the secretary and the chances are that you will get it back soon with the terse comment "You passed the EXTRA Class exam."

de Foothills Club, FOOTPRINT
Via Redwood City,
Standing Wave News

FOR SALE

Please list the following in Ham Hum:

HW-20 Heathkit Pawnee 2 meter T-R,
VFO, 12-115 v. self contained, condx.
excellent. Also 4X150 pwr. amp.,
Class C or linear operation w. P/S.

Contact WAØTTN.

Harry Snyder,
Fremont 721-4457

A bachelor is like a new detergent; works fast and leaves no ring.

WA8LCG - via Ham Fax

OFFICIAL BULLETIN NR 182 FROM ARRL HEADQUARTERS NEWINGTON CONN AUGUST 15 1968 TO ALL RADIO AMATEURS BT

The Federal Communications Commission has denied a petition to K6EDX and K6RNQ to rescind restriction on 50.0 to 50.1 MHz and 50.0 to 50.25 MHz scheduled for November 22, 1968 and 1969 respectively. FCC thereby restates its intention that these segments will be reserved to holders of Extra and Advanced Class licenses as of the dates above. (Incidentally, the ARRL Board has twice opposed restrictions on these segments of the 50 MHz band.) FCC also denied three requests for additional grandfathering of higher class privileges in special cases. Details on these matters will appear in the October issue of QST AR

All a youngster wants out of school these days is himself.

WA8LCG - via Ham Fax

FOR SALE

Collins 75A4 Serial 131 3.1KC, 800 cycle and Lafayette 2 KC filters. KWM2 design second converter. Dual 1:1 and 6:1 tuning. \$300.00. HT32 with P.T.T. and HT46 design AALC. \$175.00.

WØAW, Bill Mathemier

935 E. Military

Fremont, Nebr. 68025

Ph. 721-6453

WHAT DO YOU REALLY MEAN?

From WIRELESS WORLD, a British Publication - de RARA Rag

YOU WRITE

It can be proved that...

It is generally acknowledged that...

It can be shown that...

It is clear that...

Did not operate as well as had been predicted...

After considerable experimentation a solution was found...

A typical sample...

If instability results, appropriate remedial action will suggest itself...

It is technically feasible but there are practical problems...

Transient tests are carried out...

The equation was solved numerically...

This value is a first approximation...

It should be possible to improve the method...

Various methods have been used to palliate these deleterious factors...

The fundamental principles will now be described in detail...

It is of interest to compare...

There are certain practical difficulties in realizing the gain figure...

Some reservations must be placed on these figures...

YOU MEAN

I hope it can be proved that...

I heard someone say that...

You figure it out; I can't be bothered.

It's not clear, but I'm shaming you into taking it for granted.

The equipment burst into flames.

We fiddled about until it came right.

The only sample which did what we wanted.

If instability results you will have to think of something Jack.

It cost ten times as much as we estimated.

The fuses blew every time we switched on.

We averaged eight different answers.

This value is flagrant guesswork.

Nothing worked.

We cooked the figures wholesale.

We mugged the following from a textbook.

It isn't, but I'm going to all the same.

All the transistors burn out simultaneously.

These figures are quite useless.

SILENT KEY

Harold J. Prell, W5AZD
3025 North Vermont Avenue
Oklahoma City, Oklahoma

(ex W9VIG-W0VIG-K4ZBQ)

Sign at a street crossing:
"Watch out for schoolchildren,
especially if they are driving cars."

W8LGC

Via Ham Fax

**OFFICIAL BULLETIN NR 187
FROM ARRL HEADQUAR-
TERS NEWINGTON CONN
SEPTEMBER 19, 1968 TO ALL
RADIO AMATEURS BT**

The newly designed annual ARRL cross indexed Net Directory is now ready for distribution. If you have recently requested a copy it will automatically be mailed to you. All others may request their copy from the ARRL Communications Department, 225 Main Street, Newington, Connecticut 06111. Be sure to include your zip code with your return address. Please mention the call and frequency of the station transmitting this bulletin AR

**OFFICIAL BULLETIN NR 183
FROM ARRL HEADQUARTERS
NEWINGTON CONN AUGUST 22,
1968 TO ALL RADIO AMATEURS BT**

Attention DXers. Announcement is hereby made of two additions to the ARRL Countries List. These additions are Blenheim Reef and Geyser Reef. Confirmations for contacts only after May 4, 1967, will be accepted for DXCC credit. In addition, the VQ8CBN operation from Nelson's Island will be credited towards the Chagos Islands listing. Cards for Blenheim and Geyser for contacts made after May 4, 1967, and Nelson's Island, may be submitted for credit starting September 1, 1968 if all other DXCC endorsement requirements are met. Further information will appear in September QST AR

DEAR MABEL

I haven't written for quite awhile because Homer and I have been away on a trip. We drove through several states and kept making unexpected stops at the houses of hams he has talked with. Some business vent of his having to do with eyeballs. I don't fully understand it. Perhaps he thinks he can sell glasses on the side...glasses to see out of, I mean.

Goodness knows, what with this new gleam in his eye at the mention of SSB, he'd better do something on the side. You know, Mabel, I don't think that Chattahoochee did him any good at all, since he was FORCED to associate there with those SSB'ers. (Silly group of letters, isn't it?)

In fact, I think myself that it set him back years. He's taken to wearing a file in one shoe and a screwdriver in the other one. And he looks all around him now before he says anything into the mike. He says you never can tell who's listening. I've always thought the trouble was that not enough people listened. Otherwise, why would he always be calling CQ hour after hour so much of the time with no answers, if enough people listened?

Love, Gladys
de Florida Skip

U.S. TAX CUT

Did you hear about the Medic patient who had surgery! He woke up and found a placard on his incision! "This is a Federal project showing your tax dollar at work."

OFFICIAL BULLETIN NR 188
FROM ARRL HEADQUAR-
TERS NEWINGTON CONN
SEPTEMBER 26 1968 TO ALL
RADIO AMATEURS BT

The United States has concluded a reciprocal operating agreement with the Barbados. Amateurs of one country visiting or residing in the other may obtain permission to operate their own amateur stations there. This new agreement, along with Surinam, supplements the list appearing on page 91 of October QST AR

Exhilaration is that feeling you get just after a great idea hits you and just before you realize what's wrong with it.

de Signal Report

OFFICIAL BULLETIN NR 181
FROM ARRL HEADQUARTERS
NEWINGTON CONN AUGUST 8 1968
TO ALL RADIO AMATEURS BT

All amateurs are invited to participate in the ARRL September Frequency Measuring Test, September 14. Note that this GMT date represents the evening of September 13 to United States and Canadian amateurs. W1AW signals for measurement will be at 0130 GMT September 14 simultaneously on approximately 3507, 7042 and 14,045 kHz, and at 0430 GMT on approximately 3594,

75 and 14,110 kHz. Complete details appear on page 95 of August QST. Your FMT results may help you qualify for Official Observer appointment AR

A MESSAGE ABOUT SEAT BELTS

A small mistake . . . misspelling the word "seat."

Don't YOU make the big mistake of driving without seat belts! They can and do save lives everyday.

BUCKLE UP FOR SAFETY!

Published as a public service in cooperation with The Advertising Council and the National Safety Council.

Son: Daddy, why is a man allowed to have only one wife?

Father: Son, when you grow older you will understand that the law protects those who are unable to protect themselves.

de Signal Report

A motorist saw a sign on a service station, "LAST CHANCE FOR 28¢ GAS. STATE LINE ONE MILE." He stopped, had his tank filled, then asked: "How much is gas across the line?" "Twenty-two cents," replied the attendant.

Via Ham Fax

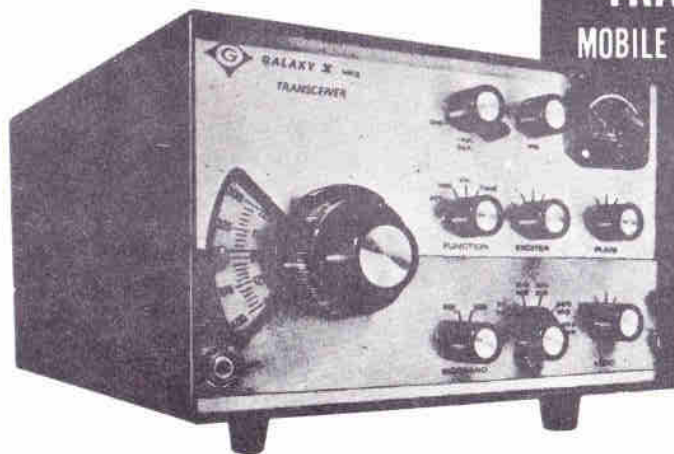
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