



HAM HUM

AK-SAR-BEN
RADIO CLUB
INC.

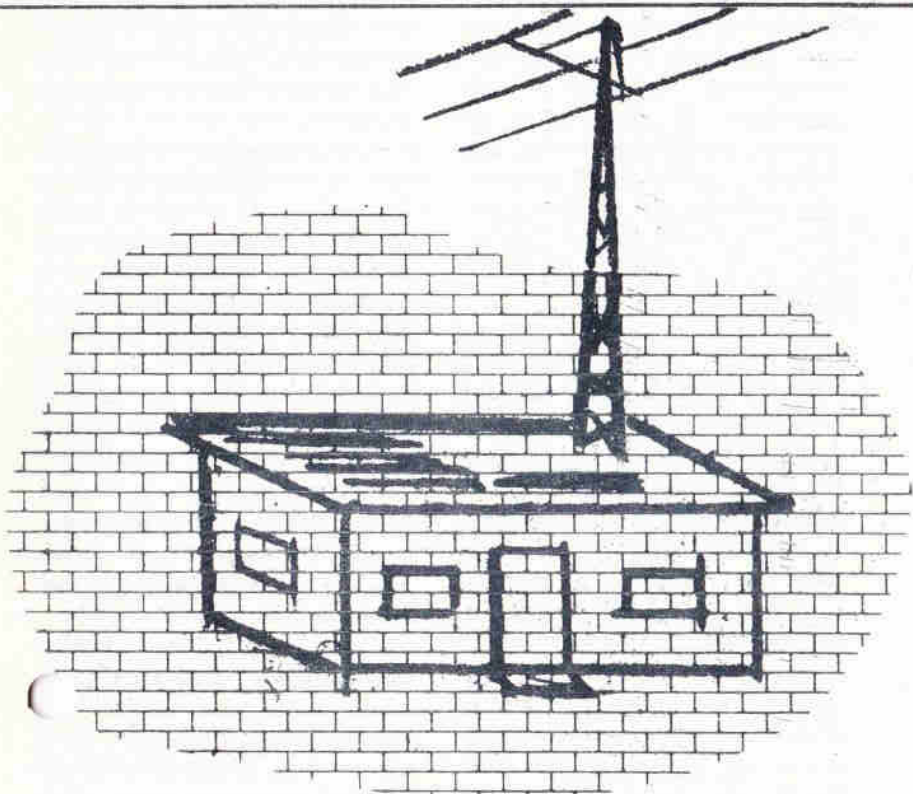
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FUTURE PLANS SEE PAGE 7

Ham Hum

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

EDITORS
Al McMillan, W0JJK
Dick Eilers, W0YZV

(From RF, Lower Yakima Valley R.A.C. Inc.)

One of the most amazing things about Amateur Radio is the fact that a preponderance of electronic technicians and radio engineers began their careers via the ham radio route. And a further amazing fact is that most of them are still enthusiastic amateur radio operators. In other fields of human endeavor when you achieve professional status you probably try to forget the fact that at one time or another you were a rank "amateur." NOT so with ham radio.

Why is this so? One of the main reasons is that Amateur Radio is without parallel not only as a proving ground of technical electronics but it is also the finest fraternal order which ever existed. Besides being a vast, world-wide Institution of Higher Learning, it is composed of people who are bound together by a common interest. Most of us who are hams can go to almost any town or city in our areas and find fellowship from among the many fellow-hams we have met on the air. Here there is a common bond which

overshadows the fact that otherwise our interests are more often than not totally different. Farmers, lawyers, dentists, housewives, students, doctors, engineers - you name it - all friends under the banner of an order which lays no claim to pretentious rites or gobbeldy-gook.

Remember the last time you were whipping down the highway at 60 (?) MPH? Going in the opposite direction you perceived the brief blur of a passing vehicle. Maybe he was sharper than you because shortly you heard the universal password - CQ spelled out in auto horn. He saw your call plates or the mobile whip. You heard his salute. Odds are great that you will never meet him face to face, but some night on the air you may get to know him better.

These are the reasons that the prime, motivating for among radio amateurs is that one ham helps another. What better working example of the Golden Rule can many other groups show?

MARCH

MEETING

The regular meeting will be held March 13th at the 4-H Building, Ak-Sar-Ben Field and we hope you will all be there. The turnout for February was very good. We call your attention to the fact that even though the February meeting was announced as "Buddy Night," you can also bring a buddy to the March meeting.

After a short business meeting we will have a demonstration of receiver alignment using equipment one could normally find in the ham shack, presented to us by John Orr, WOPHW. If you will recall, he had the screws all out of the cabinet but due to the shortage of time was unable to present it last month.

We will then have part two of the report on the use of the Oscilloscope by Cecil DeWitt, RMB.

In addition we will have a demonstration of a one-tube transceiver patterned after the

one shown in the November CQ Magazine by Lew Tourek, WQPIZ. To help him with this demonstration Ed Gutman, WQCQX, will bring his BC 1335 that he now has operating on 10 meters. It was hoped that he could demonstrate on both 10 and 6; however at the present writing he is having difficulty getting channel 2 set on 6 meters. It is hoped that between now and the meeting he will be able to solve his difficulties so that the demonstration will include switching from 10 to 6.

Your Program Committee will welcome any suggestions you have as to future programs. We have tentative programs lined up for April and May but could use more ideas. You will find the committees listed elsewhere in this issue. Get in touch with any of the members and let them know what you want.

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SINGLE SIDEBAND...Part 10

Some experimental work has been done by the author with the audio and modulator circuits as shown in part 8 of this series, and some improvements have been worked out in detail. These improvements will require another tube in the audio section, but this is a minor price to pay for a cleaner signal. If you are building this unit and do NOT desire to make the changes, it is suggested that R23 be changed to 330,000 ohms, $\frac{1}{2}$ watt.

The changes are as follows: in order to improve the R.F. waveform, remove one end of C7 from the cathode of V5B, and re-connect it to the plate of V5A. This will drive the 6AR8 balanced modulator harder than it should be driven, so it is recommended that a capacitive voltage divider be made up by installing a ceramic capacitor across R6. The value of this capacitor will be about 1,000 uuf, but the value should be adjusted so that about 1 volt R.M.S., or 3 volts peak-to-peak appears across R6. The voltage at this point is fairly critical, and should not deviate from these values by more than 10%.

It was felt that the distortion in the audio section was too high, so the phase inverter was reworked to eliminate the distortion and give more output

to drive the balanced modulator. To make these changes refer to both the diagram in this issue and that in the January issue of this magazine.

In the diagram on pages 8 and 9 of the January issue cross out the notation V2A, and mark this tube V1B. No parts values for this stage are changed, but whereas before the first and second audio amplifiers were in different tube envelopes, now they are in the same envelope. C21 is the same capacitor in both the January diagram and this month's diagram, as are C22, C23, R24, and R25. The phase inverter is the only change in the audio section, and the diagram for it and its component values are shown on Page 5.

The voice control amplifier was also changed to obtain more gain. The VOX amplifier diagram is (also) shown on Page 5. R17 and T2 are the same in both this issue and the January issue. V1B and R26 as shown in the January issue are omitted and V14 and R53, 54, 55, 56, C41 are added. This will give more positive VOX action.

While these changes do add somewhat to the complexity of the exciter it is felt that the improved operation obtained is more than worth the extra work required in building the unit.

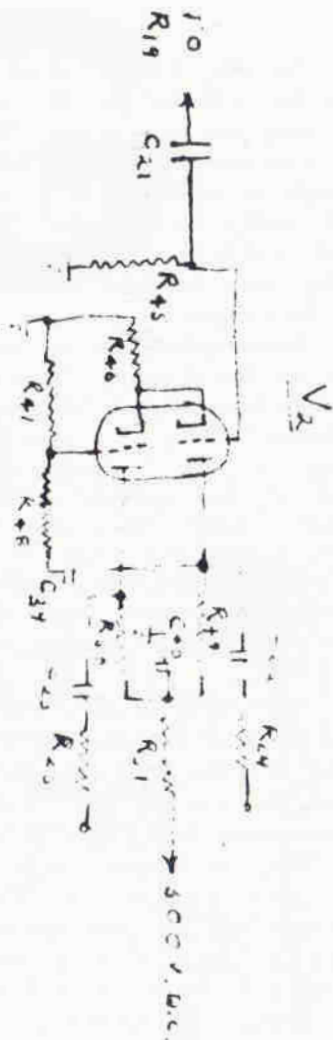
(Continued on next page)

If desired a 1,000 ohm 1W resistor can be substituted for R12, the linearity control. This may result in some loss of gain, however the stage with this resistance will be linear.

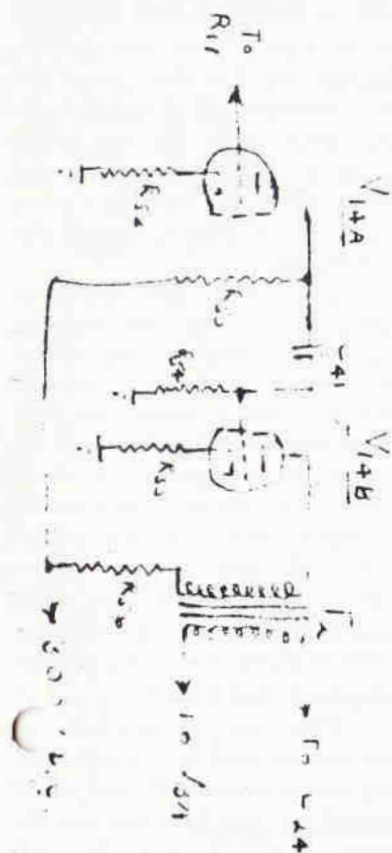
NEXT MONTH: The VFO and VFO mixer will appear, for sure.

Harlan Bercovici, KQ311T

.....



- V2, V14 - 12AU7
- R45 - 470 K ohm
- R46 - 1200 ohm, 1W
- R47, R54 - 100 K ohm
- R48 - 1 meg ohm
- R49, R50, R53 - 47 K ohm, 2W
- R51 - 1000 ohm
- R52 - 470 ohm, 1W
- R55 - 1500 ohm, 1W
- R56 - 10 K ohm, 2W
- C39, C40, C41 - .01 YF 600 Volt Ceramic



CLIQUE

We were reminded again at the last meeting that the Club is being run by a clique. This is supposed to be a bad thing, at least in the mind of the person who makes the statement. The only trouble is that we freely admit that the Club is being run by a clique.

Upon looking up the word we find that it means, "A small and exclusive set or coterie of persons." The group running the Club is small, approximately 15% of the membership. The word "small" being relative, 15% we consider small. It is exclusive in that it is composed exclusively of those people who are willing to give of their time and efforts.

The Hams of the vicinity can be divided into three classes. The first, the doers, (and these are the ones in the clique) representing those people willing to serve as officers, trustees, committee members, etc. This group represents approximately 15% of the membership year round and on occasion will run as high as 35% to 40% of the membership. Of the Hams in the vicinity it will run only about 5%.

The next group, the don'ters, is composed of those Hams who are willing to ride through without any active participation in the management of the Club. Many of them have performed a good service for the Club and for amateur radio in the past and are now willing to let others

carry on. The rest for some reason or other are not actively participating in the operations of the Club. This is an important group to the Club, however, as they can contribute ideas and give good moral support to the officers they elected.

The third group of Hams in the vicinity are the non-members of the Club who of course do on occasion contribute to the welfare of amateur radio and who when the chips are down will be ready, willing and able to help out. There are several reasons we feel this group are not members of this Club or any club. Some are just plain unsocial, some do not have the time, some are inactive, some may not be able to afford the five bucks.

It is from this group of non-members that we usually find the individual who makes the crack that the Club is operated by a clique. We feel that almost invariably this is a form of rationalization in an effort to excuse themselves because they have not joined with the amateurs of Omaha and vicinity in promoting amateur radio and are not desirous of the enjoyment and the company of a lot of fine people.

Thus, as you can see, are not insulted by the comment but freely invite each and every one of you who have not already done so to join both the Club and the clique.

BIG

Plans for

'59



FILL IN THE BALLOT
ON THE FOLLOWING PAGES



The Club House Committee of the
 AK-SAR-BEN RADIO CLUB
 presents the first plans for 1959.

We need your help to get started with your club house. Because of the many wonderful ideas which have come to light recently, we must have a method of combining them. We hope the ballot below will help.

Your ideas are needed now so that we may present a resume of them at the April meeting.

Please circle the "X" following your choice in each of the following categories. Should you vote "NO" in the first category it is not necessary to complete the others.

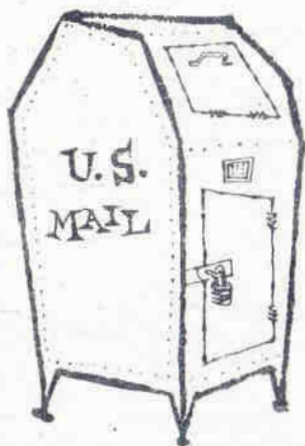
March 16 is the next committee meeting, we must have your ballot by then. Either mail it to AK-SAR-BEN RADIO CLUB, P.O. Box 626 or bring it with you to the next meeting.

- | | | | | | |
|---|-------------|------|-------|------|---|
| 1. I am not in favor of a club house | | | | | X |
| I am in favor of a club house | | | | | X |
| If in favor please continue | | | | | |
| 2. We should purchase property first and build second | | | | | X |
| We should purchase property and build now | | | | | X |
| 3. I prefer a frame building | | | | | X |
| I prefer a masonry building | | | | | X |
| 4. We should have a basement | | Yes | | | X |
| | | No | | | X |
| 5. It should be located in the | Country | | | | X |
| | City | | | | X |
| | Suburban | | | | X |
| 6. The area should be: | North | X | South | | X |
| Central | X | East | X | West | X |
| 7. Our building should hold: | 50 persons | | | | X |
| | 100 persons | | | | X |
| | 200 persons | | | | X |

- | | | |
|--|--|---|
| 8. We should have a club station | Yes | X |
| | No | X |
| 9. We should have a club shop | Yes | X |
| | No | X |
| 10. Our club house should be open: | Weekends | X |
| | Evenings | X |
| | Always | X |
| 11. I believe admittance should be by: | Custodian | X |
| | Special Key Holders | X |
| | All Members | X |
| | Other _____ | X |
| 12. I would like to see construction by: | Club members | X |
| | Contractor | X |
| 13. I believe that building costs could be met by: | | |
| | Special Fund Raising Campaigns | X |
| | Selling Bonds | X |
| | Other _____ | X |
| 14. I would be willing to purchase a | \$25 Bond | X |
| | \$50 Bond | X |
| | \$100 Bond | X |
| | I would not be able to purchase a bond now | X |
| 15. I would be willing to help in the construction: | Yes | X |
| | No | X |
| | If "Yes" what type of work _____ | |
| | How many hours a week _____ | |
| 16. I believe that operating costs (heating, lights, water, maintenance) should be met by: | Special Assessments | X |
| | Increase in Dues | X |
| | Other _____ | X |
| 17. Please add all remarks and ideas you have _____ | | |

Use additional paper if necessary.

Club members only, Please sign your name here



MAIL THIS
BALLOT
TODAY

TO
AK-SAR-BEN RADIO CLUB, INC.
P.O. BOX 626
OMAHA, NEBRASKA



DEADLINE MARCH 16

Committees

The President announced the following committees for the balance of the year 1959:

PROGRAM, Ed Gutmann, W0CQX; John Orr, W0PHW; Dick Eilers, W0YZV.

REFRESHMENTS, Elmer Burt, K0DFJ; Jerry Novotny, K0KKP; Tom Doll, K0OKS.

TECHNICAL, Larry Caccamo, W0NMN.

MOBILE, Francis Goodrich, K0JLG.

MEMBERSHIP, Damond Nuckols, W0UIO; John Droescher, K0KWB; John Biodrowski, W0MYO; Jim Kilton, K0KNJ.

PUBLIC RELATIONS, Max McKinney, W0YVV; Hugh Tinley, W0GHK; George Winkler, K0QYM.

CIVIL DEFENSE, Ed Gutmann, W0CQX; Cecil DeWitt, W0RMB; Frank Parsons, W0EMS.

FIELD DAY, Tom Doll, K0OKS.

TV, John Snyder, W0WRT.

TVI, John Droescher, K0KWB; Paul Taylor, K0BSV.

Iowa Amateurs Get Call Letter License Plates

Thirteen months work was climaxed on February 24, 1959 when Governor Loveless affixed his signature to a bill authorizing call letter license plates for Iowa radio amateurs. The movement was instigated by the Council Bluffs Radio Operators Club who set up a local committee in January of 1958. A State-Wide Committee was set up in May and work started in earnest. Several promotions and contests were run during the year to keep all Iowa amateurs interested and alerted and duplicate bills were introduced into the House and Senate in January shortly after the legislature convened. The Senate bill arrived on the floor first, passed by a landslide 48-0 vote and was sent to the House. The bill was voted on in the House a week later and passed by a resounding vote of 94-2. Wonderful support and assistance to the committee was given by amateurs all over the state. The plates become available January 1, 1960 for a fee of \$2.00.

VHF News

Editor - Ham Hum

Here is some recent V.H.F. news - As far as 6 and 2 meter operations are concerned, there doesn't appear to be very much doing from the month of February. Still no cards or letters from anybody volunteering any information so we will continue to appeal for your help in passing along some V.H.F. info for the column. We'd like very much to get some pictures too; especially of operators and rigs, antennas and mobile installations.

Haven't been on 6 much recently because the neighbors just bought a new Zenith TV set and it suffers from a severe case of audio rectification whenever my 6 meter transmitter goes on the air. First complaint I've had from 6 meters too! As soon as I can get the neighbors' TV serviceman to pull the TV chassis and install a 100 mmf. disc ceramic from the high impedance grid to ground, the rectification should be eliminated. Incidentally, this is also a common trouble in cases of BCI in the small AC-DC radios and hi-ti amplifiers too. This type of interference will generally be non-tunable as far as the receiver dial is concerned. (this takes place in first audio stage)

I've had a few reports of 2 meter aurora starting again this season. Bert, WQRYG in

Lincoln, managed to work North Dakota on an aurora about 3 weeks ago. Frank WQEMS reported hearing some 2 meter aurora too so just make sure you can key the rig.

As announced in last month's Ham Hum, the FCC has issued a notice of proposed rule making, Docket 12728, to permit Technician Class licensees to operate in the amateur 144 mc. band. More details are supposed to be in the March QST. Remember, this is an FCC proposal and they are open for comment. Final date for filing will be March 31. On the controversy over whether the technician class licensees should have the use of 2 meters, why not write to your Midwest Division ARRL Director, Robert W. Denniston, W0NWX at Box 631, Newton, Iowa and pass on your suggestions. Or if you are a member of the ARRL, you've probably already received a letter from Mr. Denniston with an attached questionnaire on this subject. I personally feel that since the upper 3 megacycles of the 2 meter band has so little activity, the Technicians could do a wonderful job of making use of this valuable bandwidth. General class licensees simply have refused to use this wonderful band that has such tremendous potential for the present and

future. I have been trying to create some real interest in 144 mc. for several years now but without any great success. (be the MARS VHF nets will help activity some. In the C.D. alerts for the past four years, we've used 2 meter relay links for handling traffic from Omaha to Lincoln and in the summer of 1957 from Fremont to Lincoln. We have, in these instances, demonstrated just how effective and reliable 144 mc. is for this type of operation but it doesn't seem to create any impression.

In view of these facts, I believe that FCC should let the Technicians have 145 to 147 mcs. with the lower and upper megacycle reserved so as to leave some incentive to get the General class ticket.

73, John D. Snyder

WVWRT, Omaha

NOTICE

On Thursday, February 19, 1959 at 12:58 p.m., C.S.T., a CW (A1) carrier, followed shortly thereafter with a short CQ, appeared on the City of Omaha Fire Department frequency of 154.19 mc., at Fire Alarm Hdqtrs, 40th & Nicholas Sts.,...

(W)K AT YOUR HARMONIC'S OR SPURIOUS RADIATIONS.

Art Gaeth, WØFQB

Communications Supervisor

(From the NORTHERN LIGHTS CARRIER, Anchorage A.R.C.)
TO BE OR NOT TO BE

Judging from the latest article in QST concerning the status of Alaska with reference to the various contests, it would seem that the wishes of we Alaskans are being ignored by the Great White Fathers in West Hartford. The people voted to be a state, Congress voted us a state, and the President has declared us a state. These things notwithstanding ARRL has declared us not only a state, but a country as well. This is fine for all outside of Alaska and gives us a unique status in the world of hamdom. We can give the rest of the world a new state and a new country at the same time. There is one big hitch however, when the granddaddy of the DX contests comes around. Are we a state? NO! ARRL has arbitrarily declared us a country, which entitles us to work all the Ws and VEs we wish. Now, all the other states and one foreign country can work all the rare DX, but not the state of Alaska, a state recognized by Congress et al, but not ratified by ARRL apparently. In as much as they don't want to recognize their dues-paying members, but would rather keep a new country for DX hunting big shots, to keep up their country total, it would seem the only logical thing to do

(Continued on next page) 13

(Continued from page 13)

would be to ignore the contest and let them hunt down KL7 QSOS. This idea is being backed by a majority of DX minded hams in Alaska, most of them paid up ARRL members. We have never been asked our desires so we are using this means of making them known. Are we or are we not a state? Why shouldn't we be allowed to work the same DX as our sister states? Perhaps ARRL has an answer. If we can't have the same privileges, there is only one answer, don't participate in the DX test. If anyone has any ideas on the subject - pro or con - let's hear them.....

Dear Secretary: I have moved from 841 South 35th Avenue, Omaha, Nebraska to 315 North 12th Street, Clarinda, Iowa, my home town. I am buying into a business for myself but would still like to receive the Ham Hum as I still have many friends in the club even though I haven't been able to attend meetings lately.

73,

Joe M. Kelley
315 North 12th Street
Clarinda, Iowa

WANTED 20A - John Lindell
8126 Sellick Quadrangle,
University of Nebraska, WOYGY.

OFFICIAL BULLETIN NR 691 FROM ARRL HEADQUARTERS WEST HARTFORD, CONN. FEBRUARY 19, 1959 TO ALL RADIO AMATEURS BT

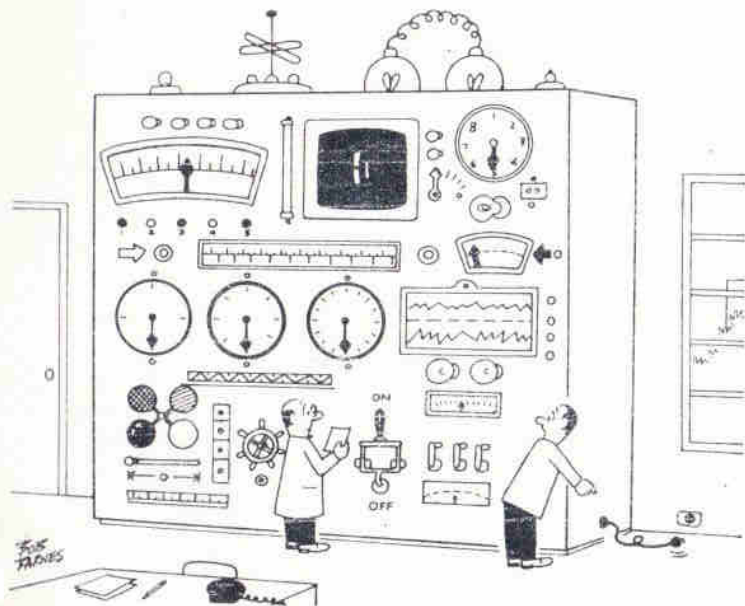
The Soviet Central Radio Club is sponsoring an International radio-telephone contest, in which amateurs everywhere can take part from 2100 GMT March 14 to 0900 GMT March 15. Use phone only on the 7, 14, 21 and 28 Mc bands to exchange five digit numbers consisting of the readability strength report and serial contact numbers. A station may be worked only once regardless of band. Contacts between amateurs on different continents count two points, between amateurs in different countries on the same continent, one point, and between amateurs in the same country zero points but can be counted toward multiplier. Total contact points times the different countries worked gives final score. Cups and certificates go to the winners. Mail entries to USSR Central Radio Club, Box 101, Moscow AR

FOR SALE: Anyone interested in a 5 element, 2 meter Elinco beam? FB for getting started on the VHF M.A.R.S. Net. Matches 52 ohm feedline. Will sell for \$6. For more info, call John Snyder, WØWRT, 2402 South 43 Street. RE 1538.

OFFICIAL BULLETIN NR 690
FROM ARRL HEADQUARTERS
WEST HARTFORD, CONN.
FEBRUARY 13, 1959 TO ALL
RADIO AMATEURS BT

A number activities, designed to appeal to every operating interest, are scheduled soon. Following the YL OM phone Contest February 28 and March 1, the weekend of March 14 will feature a QCWA QSO

Party, YL OM CW Contest, Minnesota QSO Party and WINJM High Speed Code Test. The Swiss Helvetia 22 Contest comes up April 4 and 5 and the Netherlands CW PACC Contest April 25 and 26. Detailed information on each appears in QST before the event is held. Watch the Other Activities Calendar for convenient page references AR



"I think I've located the trouble, professor!"

AK-5 R-BEN RADIO CLUB INC.
P.O. BOX 626
OMAHA, NEBRASKA

NEXT MEETING
AK-SAR-BEN 4-H BUILDING
AK-SAR-BEN FIELD
MARCH 13, 1959
8:00 P. M. SHARP