

THE PRESIDENT'S CORNER.

The end of our season of activity is fast approaching. In fact, we have only three more regular meetings if we end with the May meeting, as is generally expected. There will be the Field Day in June of course, but that is something extra.

At the next regular meeting on Wednesday, March first, we would like to see discussed several matters of importance. One deals with the election of a new slate of officers for the coming year. Should they be elected in May when we have our last meeting, or should it wait until we have our first meeting of the new season in October? This should be settled so that we will know who has the duty of making preparations for 1950-'51.

There are one or two points in connection with the coming Field Day that should be discussed. For instance, is it the desire of the Club that we make a donation from the funds to assist this effort? Personally, we believe this is quite in order because this is a club activity and we want everybody to join in who possibly can. Don't let the fact that you may not have a ham ticket stop you! Field Days are good fun and good experience. (3BUX)

NEXT REGULAR MEETING, WEDNESDAY, MARCH 1ST. KIWANIS CENTRE. 8 P.M.

We think you will find our next meeting of particular interest, Mr. J. C. R. Punchard, VE3YP, of the Northern Electric Co. will talk to us on "Tank and Antenna Coupling Circuits".

This is a most timely subject and one that should prove extremely valuable. "Bud" has that happy faculty of being able to explain hard-to-understand subjects in an easily understandable manner, so better take advantage of this opportunity and make this a "MUST".

The ladies will serve lunch and through the courtesy of various manufacturers whose names will be announced, we are going to give away several prizes to those members holding lucky numbers. There will be a 25 watt 12" PM Speaker and several smaller speakers, several Antennas of the "concentrated capacity" type, two one hundred foot rolls of 300 ohm Twinlead, six boxes, each box containing two Volume Controls, one of which is "switch type". Also, there will be a few tubes, including a pair of 811's.

LISTENING AROUND THE BANDS.

Here is a lead for you fellows who are seeking information regarding skip conditions. Supplied by the National Bureau of Standards, it covers ionospheric disturbances for a period of two weeks in advance with dates of anticipated band openings. Listen to the "Voice of America" at 8.45 AM and 2.15 PM every Sunday in the 19, 25 and 31 meter broadcast bands. Also similar data is given by WLAW following regular bulletin transmissions. Times: Monday through Friday at 8 PM on CW and 9 PM on fone. Also at 11.30 PM on fone and at midnight on CW. On Sunday only listen at 8 PM on CW and 9 PM on fone. On Saturday only, listen at 11.30 PM on fone and midnight on CW. Frequencies, 3555 and 3950 KC.

10 METERS.

Quite a number of W2 stations are working Maritime-Mobile along with W5/MM. Band has been good and stations in Denmark, Sweden, Norway, Czechoslovakia, Holland, Algeria, Argentine, Chile, Hawaii, Ecuador and Mexico have been pouring in with a whole flock of G and F. stations together with a couple in Ireland.

20 METERS.

Compared to 10 meters, this band has been rather dead. No steady openings, but open for a few hours with Germany, Spain, Tanganyika and South Africa showing up.

40 METERS.

The VK stations are back again. It's nice the way they seem to be alert to band conditions. If it is open at all you can hear always at least four or five, spread over 50-60 KC. It's not a case of the odd one or two with a dozen W's riding them. Their signals are easily readable. Don't forget the time difference! When it's 9 AM here it is midnight there. Panama KZ5, coming in good and Alaska KL7, occasionally.



80 METERS

Virgin Islands KV4AA, puts in a nice signal here. Also the odd DL4 in Germany. VO and W6 are heard but periods of QRN make signals hard to copy. What with the "Nets" taking up so much space in the phone band its getting to be pretty difficult during the evenings to find an open spot.

160 METERS.

Recent correspondence with British Amateur states that local QSO's are regular daily occurrence, with 10 watts limit. The W3's are still in there. The QST report for February on page 41 states VE1 and W4 working across to G land. Who is going to be the first VE3 to hear them? (3BND)

"SPLATTER"

TV took an awful beating in Belleville during the recent SS 'phone contest! What with 3ADJ at one end of town and 3AOP at the other, things got a bit rugged! No fooling though, those boys are doing alright for themselves! 3ADJ for instance has clicked off a total of 75 countries and had 130 contacts over the week-end --- 3BUV continues to knock 'em down and drag 'em out! 13 new countries over the week-end with a total of 50 in three months. There ought to be a law! By the way fellows, here is a tip for you. Charlie noticed that his tank coil was running kinda warm so he re-wound it using heavy strap copper instead of wire, and DOUBLED his output! ---3BHK still has his beam on the ground so wasn't active during the contest. How about organizing a beam-raising bee Alan, complete with all the usual trimmings of course! -- 3AMT in Campbellford doesn't think much of the CW operating in Belleville we gather. Says he tried to work a certain character at the east end of town and Ken says if he had sent any slower he would have had to stop completely! Can't tell you who the laddies is, he wears horn-rimmed glasses and runs a pair of T55's! -- 3BGB back on 80 with his plate and modulation transformers fixed up once more -- 3UC having Clapp Oscillator troubles. We hear he is looking for a temperature compensated coil! -- Jack Johnson and Dalton Kaye really bearing down on those code lessons and coming along fine. Thats the stuff! 3 BUX says he hopes his arm doesn't go "glassy" on him! -- 3AAY leaving hamming alone for a while and concentrating on electrical studies. Well Joe. Don't work too hard! At long last a VHF link between Trenton and Belleville has been established and 3BUY can no longer complain about the lack of activity on two meters. Frank and 3BHK have been batting it back and forth in great style. 3AAJ and 3AIL also quite active. Its good to hear you on again Harry! Good signals at both ends being reported so it only remains for the gang to get in there and populate the band -- 3AIL trying to catch up on the sleep he lost chasing DX on 40 meters last month. He has also been busy building two meter equipment. -- 3ASD and 3BSB (operating 1UB) keeping regular skeds on 40 CW. Alex is in Halifax and likes to keep in touch with things back 'ome. -- 3ASH in St. Catherines didn't know there were any hams around Belleville and Trenton until 3 ASD put him wise! The guy still seems a bit dubious so give him a call on 7170 any evening -- 3DH slowly recovering from a serious apendectomy. His fb fist and clean signal has been missed on the bands. Incidentally Jim, 3ASH would like to know when you expect to resume skeds. Reply via 3ASD -- 3BUY has passed his Class "A" 'phone test and is now building a rig for 75. This probably means another antenna-raising bee as Frank is minus an antenna for that band. Wonder if the local Hydro boys will be around to help us this time. They appeared at a most opportune time recently to find 3ASD, 3AIL, and 3BUY trying to hold up a 30' pole by the bottum end and just about ready to holler "Timber". Thanks boys! Those pike-poles were just what the doctor ordered -- Welcome to a new comer. Stan. Else, 3ATJ. Stan is an old-timer in ham radio and worked 40 meters before the war. Working at 6RD but living in Belleville for the present Once a permanent QTH is established, Stan says he will be active again. -- 3NU, F/S Bradley, is operating 75 meter 'phone and is the only AFARS station on the air in Trenton. How about giving "Brad" a little help gang? -- Bill Wilkes has been posted to Halifax as you probably know. Something you may not know though is that Bill has a new call. VELAH. Bill says he is going to work 40 meters so keep an ear open. 3GX is temporarily QRT for major improvements around the shack. Gerry just received a new power-saw and had to modify the layout of the shack to get it inside! If you are interested in power-tools, both metal and wood, it would be worth your while to pay 3 GX a call. Swell layout there!



TWO SIMPLE APPLICATIONS OF A D.C. MILLI-AMP METER. Using D'Arsonal movement for #1. Extended current range meter and #2. Voltmeter.

#1. Meters having full scale deflection for 15MA or less may be used for measuring any larger value of direct current by the proper use of a shunt resistor connected across the meter terminals. For example, if a conductor or shunt having a resistance equal to the internal resistance of the meter is connected in parallel with it, the current will divide equally between the two paths and hence twice as much current will be required to give full scale deflection. Therefore the shunt required to extend the current range of any milli-amp meter may be calculated by the following formula.

$$R = \frac{RM \times IM}{I \times IM} \quad \text{Where R is the resistance of the shunt in ohms.}$$

RM is the resistance of the meter in ohms.

IM is the full scale current for the meter.

I is the full scale current for the new calibration.

Suitable shunts to measure currents of less than 300 MA can be made from ordinary resistance wire or #24 or smaller insulated copper wire. It is usually easier to make shunts of half ohm or less with copper wire. Shunts should, if possible, be fastened permanently to the meter terminals. However, it is not always possible to measure resistances of one ohm or less and in many cases the meter resistance is not known. Under such circumstances the "cut and try" method of obtaining the shunt resistance is easier. A shunt of low resistance is connected across the meter and this arrangement is placed in series with a battery, rheostat, and an accurate milli-amp meter. The rheostat is adjusted until the accurate milli-amp meter indicates the desired current. Then the shunt resistance of the other milli-amp meter is changed until the reading agrees with the accurate meter. Care should be taken to disconnect the battery before adjusting the shunt.

#2. (Voltmeter) If these milli-amp meters are to be used to measure voltages, then it is necessary to place a resistor in series with the meter. The meter will still perform its original function as a current measuring instrument, but in this case it is measuring the current which is the result of an unknown voltage. The resistor required can be calculated by using Ohms Law or  $R = \frac{1000 E}{I}$

Where R : Series resistor in ohms.

E : Desired full scale voltage.

I : Full scale current of the meter in MA.

If the meter has to read low voltages, then the meter resistance will have to be subtracted from the series resistor R.

The sensitivity of a voltmeter is commonly expressed in "ohms per volt" The higher the ohms per volt of the voltmeter, the greater the sensitivity. When the full scale current drain of a voltmeter is known, its sensitivity rating in ohms per volt may be determined by the following formula.

$$\text{Ohms per volt} = \frac{1000}{I}$$

Where I : Full scale current drain of the meter in mill-amps. (3AAJ)

#### WANTED

35 MMFD. Millen Variable Condenser, double spaced, about 3" long and 1" square. Needed badly. Will pay premium price. Apply VE3AOP.