Ye T.A.R.C.

SARDINE WRAPPER

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Meetings For March

March,14th. Tamaqua Borough Hall March,28th.

Field Day is just around the corner as the TARC will be entered in the Nation Wide set-up this year. Being only abt,3 short months away, Plans are alredy under-way as to Rigs, Rcvrs, Ants,Eats QLF etc.

The Club is also getting quite a bit of young blood and a surplus of new operators. At the present time code practice groups are held at the QTH of ZRQ as KJJ. It is hped that wen the Code class committee gets functioning there will be regular skeds for code lerning as code practice. However if ur name isn't on the committee list don't let that scare U away. The Committee needs all the help they can get.

EDITORIAL MATHEMATICS IN RADIO By T. Sarli

"The greatest hobby in the world!" That is the opinion of thousands of licensed radio operators. Anyone can get inot radio with a limited amount of study. But to some its a far away dream. Why, you may ask? A young person looking over some of the questions and schematics sees in them a jumbel of straight lines-crooked lines and numbers and is therefore a little scared. Radio is technical and anything technical must contain mathematics. Some are afraid of numbers. Not being too well versed in slinging math around they stay away from radio. If the beginner would only realize that the math used involves no more than a basic knowledge of fractions, the foundation received in school is sufficient to pull them through the most intricate of problems.

In practically all the problems you come to in radio, there are special formulas that apply to the problem. In the Radio Amateur's Handbook the first two chapters is devoted to all electrical laws the novice need to know. The most important to the beginner being OHM's LAW, (E= IR). E equals Voltage or (Volts); I is Current (Amperes) R is Resistance (Ohms).A simple method of working with Ohm's Law is by drawing a triangle.

E always at the top of the triangle--I in one corner and R in the other. Now by looking at the triangle you can find the three formulas with no trouble. Wanting to find I or Current simply put down $I=\frac{E}{R}$ E being at the top of the triangle so it becomes the top of the fraction or the numerator. R being at the bottom of the triangle becomes the denominator. Substituting the correct values, the problems becomes a simple fraction. If R is the unknown quantity $R=\frac{E}{I}$ If E is the unknown quantity--E=I X R; both the I and R being on the bottom of the triangle you simply multiply.

As you advance in radio there will be more formulas to learn but keep in mind it still breaks down to simple arithmetic.

A SIGNAL BUILDER UPPER (PRESIECTOR) By WN3ZRQ--es-W3KJJ

To the Op who wrks 75 or 80 this will not be of much value, but to the DX op on 40,20,15 es 10 this preslector was found to bring the way-down under sigs up to a readable strength. It is also cheap on the pocket-book to build. Lots of the material came out of the junk box.

The tube may be a 6BQ7,6BK7 or 6BZ7. Coils were made out of B&W miniductor #3012, however coils may be wound to suit the builder. The ceramic trimmer Cn was added to try to neutralize the stage from going into oscilation. To date we haven't been successful in neutralizing the hi-gain RF stage but we left the trimmer in place because we found it helps to cut down quite a bit of the noise-level of the tube. Cn maybe ommited but tuning will become more critical.

The balance of the diagram is self explanitory. We salvaged an obsolete Anchor TV Booster and used it as a start for the case and chassis.The small selenium rectifier was used for power and since most of these units used an isolation Xformer for the B supply it doesn't matter how the A.C. plug is inserted eliminating accidental schock from the line voltage. However other selinums can be used and a source of 6.3 volts for the filiments added.

COIL DATA

L-1, L-3 3 to 6 turns #24 DCC. This will depend upon the ant., Rcvr., and feed line used.

L-2, L-4 #3012 B & W Miniductor.

40 mtrs. - 25 turns
20 mtrs. - 16 "
15 mtrs. - 8 "
10 mtrs. - since the 10 mtr band wasn't open we couldn't cut coils for this band, but with a little experimentation these can be added wen the time arrives.

