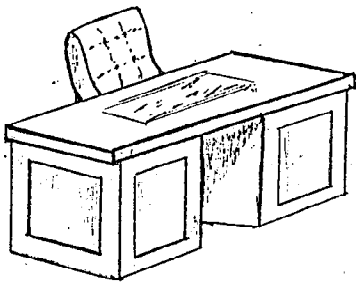
Sept 92

Full Copy

SPLATTER

This Sardine Wrapper is printed from time to time and distributed to the members of the TAMAQUA TRANSMITTING SOCIETY, Tamaqua, Pa. 18252

LATE SUMMER | BACK TO SCHOOL ISSUE | 1 9 9 2



FROM WHERE WE SIT

Recall a few issues back we spoke about what has happened to Ham Radio. Asside from getting away from home brew rigs and construction projects, there has also been many changes with our on-the-air operating practices. For example, when you ask the other station how he copied your transmission. The replying station asks you for a QSL card. What has happened to signal reports like "Copy is 5 by 9" ?

As long as we're on the QSL kick, being a senior member of the "Over the Hill Gang" I recall when you could mail a QSL card for 2 cents and it arrived perfectly readable. The postal service did not run it thru their canceling machine 6 or 8 times so it covered up all the QSO information. Today the post office figures as long as the postage is up they want to give you 19¢ worth of cancellations.

Swapping QSL cards is a very nice methode to remember old friends, especially when you get them out of the old shoe box after 20 or more years have gone by. You can recall many enjoyable QSO's in the past. The sad part, when you get to a card that in now a silent key. To preserve those short messages I put on the back of the QSL, I put them in an envelope and send them first class. Would you believe it, The post office only runs envelopes thru the cancellor machine ONCE !

After a recent DX QSO I got the surprize of my life. DX stations usually make about 8 or 10 contacts then give QSL'ing information. This data consists of the DX station's QSL manager call letters.

This DX station however, was unique, one of a kind. He made direct and explicit direction in order to get his QSL card you must send him three green

continues next page.

IN THE BEGINNING - -

Lord created Heaven and Earth and all that in there is --, and at the turn of the 20th century also gave us Amateur Radio. At that time a couple dozen amateurs began a system of relaying messages from one another until the messages went from coast to coast. To promulgate the system two of these radio men organized a radio club and published a journal whereby they passed the word, asking others to join this message relay system. The club was called "The American Radio Relay League". It soon gained in membership and at present is our spokes person for the Federal Communications Commission and representative to the World Administrative Conference.

Today the league is controlled and maintained by directors, one from each of the 15 divisions of the U.S.A. Any time you have a good idea and an asset to Ham radio, write it up and send it to your director. In the Atlantic Division it is Hugh Turnbull W3ABC. Recently at one of their meetings it was brought forth that at some future date the use of our present transcontental Traffic system would be discontinued and be replaced by two meter packet and bulletin board stations. Today a message can be sent and delivered to the west coast in 24 to 48 hours. Will two meter Packet be faster, Or is it time to put the old relay system out to pasture ?

Another item you might ponder upon. At a recent directors meeting it was suggested the current name " American Radio Relay League" be changed to the "American Amateur Radio League". It failed to get a majority vote, but was tabled to be brought up again in the near future. If the name were changed consider a large increase in league membership dues to cover the enormous printing costs. Think about your own cost of changing the insignia on all those QSL cards, stationery, etc. Here again, they are trying to get away from any indication of "RELAYING" .

THINK ABOUT IT ! !

NEXT MEETING

September 4. Program will be on how to originate and pass traffic. This will also be the judging for the Great Tomato Race. Bring your largest and win a prize. Tomato sandwiches will be served later.



ANTIQUE RADIO



We have a member of the society who has the quot "Nobody is that old". Yes we do, and a few members can recall the days of the antique radio and vacuum tube radio's. If you have some of those radio sets in the attic, the following info will be helpful in determining its age.

HOW TO DATE YOUR OLD RADIO

Two simple ways to determine the age of a radio are the type of tubes and dial used.

The oldest tubes had four pins, brass or ceramic bases and a tip in the top of the glass.

TUBE TYPE:	First year used.
4 pin base	earliest
5 pin	1927
With grid cap	1929
6 pin	1932
7 pin	1933
8 pin octal	1935
(Black plastic base)	
Metal tubes	1935
8 pin loctal	1939
7 pin miniature	1940
(No base - all glass)	
9 pin mini.	1946

Vacuum tubes are no longer manufactured in the United States. The last known tubes made in the U.S.A. was around 1975. At present tubes are only made in Belgium and Japan.

RADIO DIALS

Earliest radios had more than one tuning dial. Usually the the scale was engraved , 0 to 100, around the perimiter on black or brown knobs.

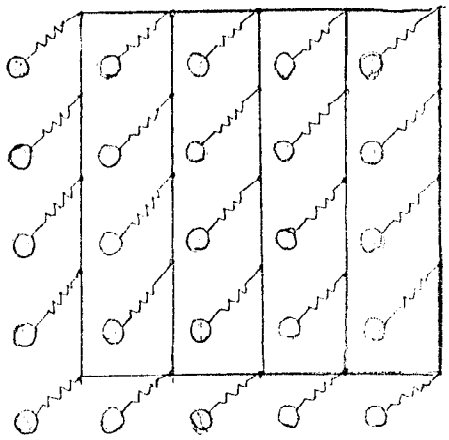
Late 20's to mid 30's sets had a small usually square opening in the front panel with moving dial scale behind it. In the late 30's dials were large round and exposed with a rotating pointer, called an Aircraft dial. 1940's models usually had long horizontal exposed dials with a moving pointer, called "Slide rule" dials.

The first 110 volt A.C. plug-in radios came out about 1927. All sets made prior to that required batteries for power, or were crystal sets that did not need an outboard power source.

OUR SPLATTER RESISTANCE SOLUTION

It was indicated that from any two jacks or contacts, an ohmmeter should read 200 ohms. From that given info it should have been surmised that some sort of resistance or combination of resistors would give that resultant meter reading.

The schematic for "What's in the box" is shown below. All you need is a fist full of 100 ohm resistors.



WHY BEER IS ALWAYS BETTER

You can enjoy beer all month long.
Your beer will always wait for you in the car while you play golf.
Beer is never late.
Hang-overs always go away.
A beer is never jealous when you grab another one.
When you go to a bar you can always pick up a beer.
Beer never has a headache.
A beer will never get upset if you come home with booze on your breath.
If you pour a beer right, you'll always get a good head.
You can have more than one beer a night and not feel guilty.
A beer always goes down easy.
You can share a beer with friends.
A beer is always wet.
Beer doesn't demand equality.
You can have a beer in public.
A frigid beer is a good beer.

GUNDERSON-PENN-JERSEY
Chapter 33

HAMMFEVENTION '92

This will be the 22nd . annual event organized and sponsored by QCWA president W2WIY. It will be held at Neil's Vineyard, Rt 206, Newton, N.J. Starting at 8 PM Saturday September 11,12,& 13. A planned program for the three day event should keep you hoppin' For detailed brochure contact W2WIY, Hammy Richardt, 94 Bald Eagle, Hacketstown, N.J. 07840. Tele- 908-852-3475. Dead line for reservations is Sept. 6.

A R R L MEMBERSHIP

Each year around Hamfest/Field Day time, many of our Society members get their ARRL membership renewal notice in the mail. Each year you are also reminded that you can save a few bucks by sending your membership renewal via the Transmitting Society. And each year only 15 % of the members take advantage of this saving, which gets us to beleive that the other 85% are in the catagory of "Mr. Got Rox".

To our new society members that wish to join ARRL can do so and get a $5.00 discount on their initial membership and thereafter 2 dollars a year discount. To get these reduced prices one must be an active member of the Tamaqua Transmitting Society and application or renewal for same via ye Secy/Treas - W3TI. We have a supply of applications forms and you can join or renew membership any time during the year. If interested, ask about it at the next society meeting.

WE SIT Cont'd.

stamps (3 U.S. Dollar bills). Just what is amateur radio coming to when you must pay good United States currency to get his card ? It has been policy for decades that if the DX station is a real rare country and his QSL is in great demend. Then I can see that station run into a fanancial deficiency.

This is where the International Reply Coupon (IRC's) come into the act. They can be purchased at the post office for about 90¢ each. They can be exchanged in any country for one unit of first class postage of that specific country. As a favor, two IRC's are sent so the station can return his card via air mail, and they usually respond.

Non-club members buy the IRC's for 90¢ each, on the other hand, being an active member of our society we can get the same IRC's for 50¢ each. The U. S. Dollar has been around a long time. The IRC is just an infant but worth it when you want that special QSL card for your collection.

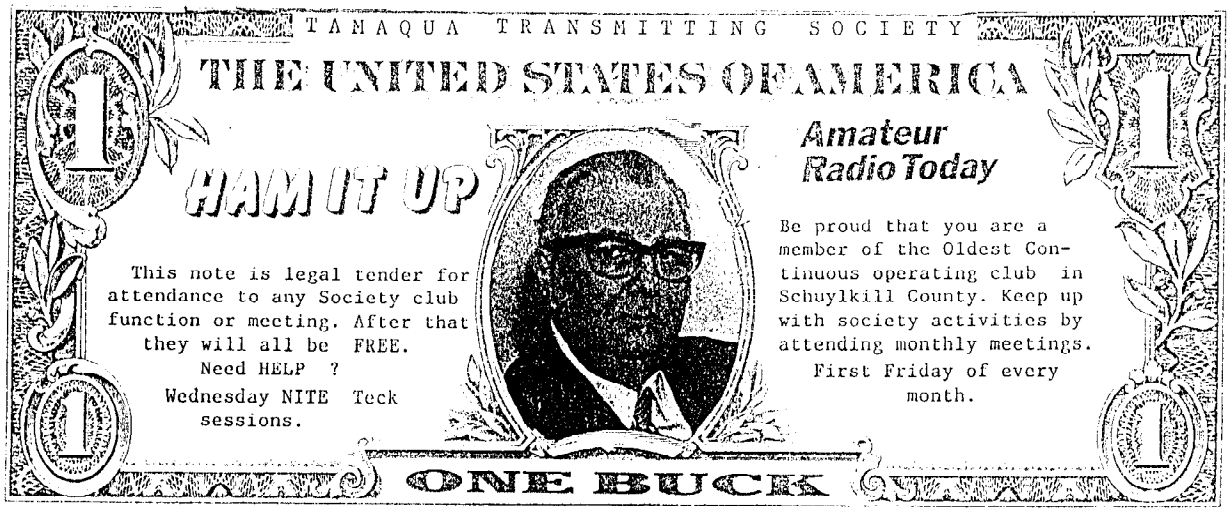
Now for the cost of mailing those cards. If you're just beginning in Ham Radio and starting your collection of DX cards. You can mail them direct to that foreign country for 50¢ air mail. On the other hand if you are trying to save a few bucks you might try shipping them via the Societies out-going QSL service. There is no minimum nor maximum number of cards you can send. The society mails them in a bulk package to the ARRL out-going QSL service. Cost per card at present is about 2½ cents each. They may get to their destination a bit later, but they get there.

Compare: Mailing direct, two IRC's $ 1.00 plus 50¢ air mail or $ 1.50 per card. 50 cards at $ 1.50 each is $ 75.00. Compare this with 50 cards at 2½ cents each is only $ 1.25.

SOCIETY OFFICERS

PRES. Albert WHO KA3WGG
V. Pres. Jim - KA3WCF
Secy/Treas. Al - W3TI
Activity Mgr. Al - K3NYX
Chaplain, Wayne KA3SID

Biz meetings First Friday of the month
Teck session every Wednesday



Tips For Good Grounding

One of the most important yet most overlooked features of an amateur radio station is the ground system. Simply relying on a grounded outlet, water pipe, or ground rod driven haphazardly into the ground probably won't do the job well.

There are two reasons for using a ground: safety against accidental shock and improved station performance. The above grounding system can pretty much take care of the safely issue, but an excellent earth ground can actually add to a station's receiving and transmitting performance.

The main objective in ground-rod installation is to achieve the lowest ground resistance possible. There are four tips you can utilized to facilitate this: use of multiple rods, placement in the right soils, sufficient depth, and soil conductivity enhancement.

The use of properly placed multiple ground rods can lower the ground resistance efficiently. Two rods will drop the resistance of a single rod system by about 40%, while three rods will drop it by about 60%. To be effective, the rods must be at least six or more feet apart.[1] Why?

Think of the soil surrounding a rod as a series of concentric cylinders of resistances determined by the cross-sectional areas at right angles to the current from the rod. Near the rod, the cross-sectional area is small, restricting the current. Therefore, its resistance is high. Driving another rod into this high-resistance area does not appreciably lower the overall resistance of the grounding system (one high resistance paralleled with another). Moving away from the rod increases the size of the cylinder and its cross-sectional area, meaning less resistance. Past about 6 to 10 feet away from the rod, the resistance is no longer appreciably reduced. Therefore, when driving two or more ground rods, keep them this distance apart for greatest effectiveness (one relatively low resistance paralleled with another.[2]

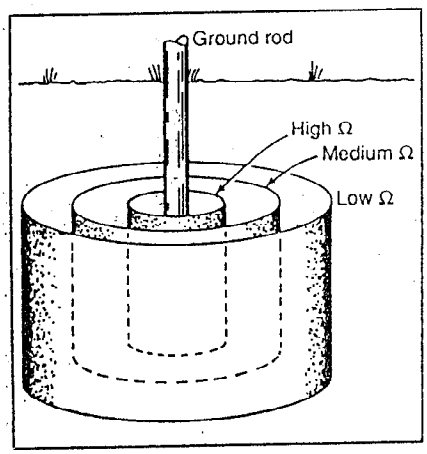


Fig. 1– The soil surrounding the ground rod can be thought of as concentric cylinders of resistances which decrease as the distance from the rod increases.

The type of soil the rods are in makes plenty of difference. Soils with high ash, brine, or mineral content are the best, measuring an average 14 to 30 ohms per cubic meter. Loam, gumbo, or clay is next best at 30 to 50 ohms, while rocky or sandy soils are the worst with resistances rising into the hundreds of ohms.[3]

Ground resistance will increase up to eightfold when soil temperatures drop to freezing and below. You should determine the average soil frost line for your area and drive your ground rod at least 2 to 3 feet below that.

When measuring the resistance of your grounding system with a VOM to check its effectiveness, you must take into account two components. Both the AC component from ground currents and the DC component from electrolytic action will affect the VOM's accuracy. This mandates the use of two additional ground rods spaced 20 feet apart from each other and the rod being tested. Refer to fig. 2 for the following.

First measure and record the resistance between rods "X" and "Y." Reverse the meter's leads and record that reading. Reversing the leads negates the DC effect. Average the two readings. For example, let's say your first reading was 100 ohms and the second was 75 ohms. Averaging the two produces 87.5 ohms. Repeat this procedure to obtain "X" to "Z" and "Y" to "Z" readings. Plug these readings into the formula $[(X+Y) + (X+Z) - (Y+Z)]$ to obtain rod "X"'s resistance.[4]

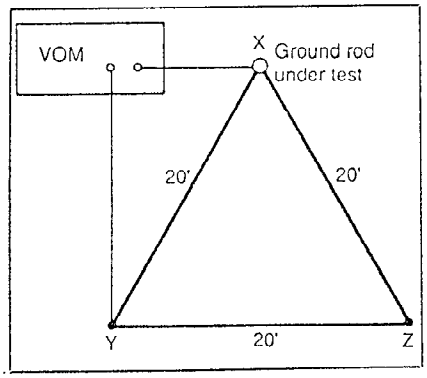
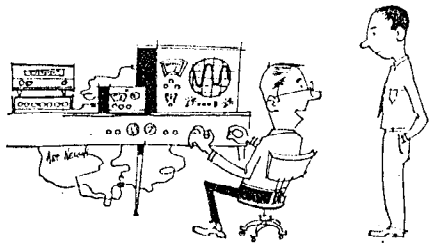
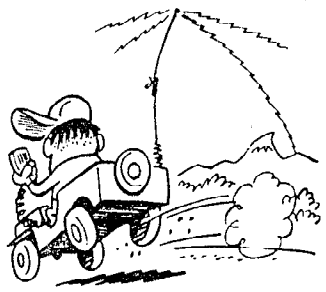


Fig. 2– Suggested setup for measuring the soil resistance of a ground rod.



I never did get around to buying a speaker. I enjoy music better by watching it on the oscilloscope anyway.



FOX HUNT REPORT

Plans for a Transmitter Hunt were presented to you in the last Splatter and is seems that YOU the membership have not did your home work. The committee waited for your comment on about how many of you and your fellow hams were interested enough to participate. Other area clubs had been invited and the committee has had no returns from them either. The committee has now extended the time limit to the September 4th. meeting. Should there be insufficent interest shown, the activity will be scrubbed.

THANKYOU

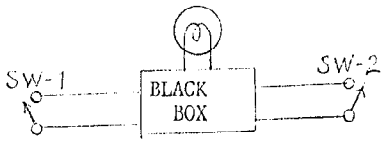
Too those who recently made a donation to our club postage fund, MANY TNX. Another thankyou and Kudos to you who took time to complete and return the evaluation survey sheet in the last bulletin. If you have not returned yours yet, you still have time to get counted. Fill it out and send it.

Sell



The repeater group of the Tamaqua Transmitting Society has a two meter repeater for sale as a complete package. A brand new Isopole antenna, Phelps Dodge duplexer (6 cavities). Transmitter and receiver are synthesized so any frequency combination can be programed. A 100 % duty cycle 60 watt amplifier, card cage, identifier, 75 Amp. power supply, and more. 100 % solid state with all circuits documented for easy maintenance. Present value is well over $2400 A lower compromise price offer can be worked out. An appointment to see and operate the repeater can be made by calling 717-668-3098 any evening after seven P.M.

ANOTHER BLACK BOX PROBLEM



The lamp is a 2.5 volt flashlight bulb mounted on the black box may be switched on or off by either SPST switch. There is a battery in box. What else ? NO tubes, relays or semiconductors are involved.