# SPLATTER

July - August– Sept. End of Summer Edition 2001

## What a start of Summer 2001

*President W3ZRQ*

June came and went, but this year it entered with a nice BIG BANG. (1) The VHF QSO Party, the first one we've had in a long time, went smoothly with everyone enjoying themselves. The score was nothing to brag about but band conditions were poor and all were complaining.



(2) Field Day was another story. As usual it rained *It always rains on Field Day, that's Traditional* and made everything pretty soggy. The change in location at the last minute dictated a number of changes, additions, deletions, and modifications we had to overcome during the setup. New antennas, new rigs and new station locations were swapped around a few times until we felt comfortable with the setup. All in all, I thought it was a very good Field Day with everyone who attended learning something.

After all our planned events for June were over, July came in with a slow beginning. Individual members started projects to keep them busy. We did some tail gating at the Murgas and Jonestown Mt Hamfests and peddled a number of items that were left from the estate of Tony KB3ABY.

Meanwhile, Tamaqua received its first 440Mhz repeater. AA3TL and KB3CFV installed a 70 cm repeater on 449.475 Mhz, minus 5 with a PL tone of 103.5 and presently located in Ron's garage. Although it is in a low geographic location in Tamaqua it seems to work quite well. We offered Kevin space to side mount it on the tower at my home QTH.

In speaking of the QTH, a few members, NI3H, KB3FSU, KB3DYJ, my son Tom and myself have been busy installing a new tower along with three antennas (so far). By the time you receive this copy of Splatter the Tamaqua Repeater should be up and flying. So program your two meter gear to 147.000 Mhz. plus 600 , no PL tones are needed. It's just a *Bear Bones Repeater,* No PL, No auto patch, and Free to use, but don't abuse !

Technical advisor, W3TI reworked the repeater and installed a new control board. All that needs to be done is to check it out, work all the bugs out, and then fly it. So check it out and let the repeater group know how it works.

It seemed that July 2001 was *Free Tower Give Away Month.* We wish to give a hearty thank you to Albert "Who" for his generous donation of a three section tower (30 Feet) and to Philamena Saffara, widow of Tony KB3ABY for another ten foot tower section. With it all put together, we have the *Tamaqua Repeater flying* at a forty foot elevation above average terrain.

I was just ready to close our column when I learned from W3TI of another tower available. I didn't get all the details but there is a 35 foot tower available ***to Any TWA member.*** Contact W3TI club secretary for complete data. The tower is taken down and free, just haul it away So until next time, keep cool this summer and I'll see you at the picnic.

## Information, For What It's Worth

*From the Editors desk W3TI*

Have you ever given some thought to the fact that each and every one of us have different ideas, different evaluations, and different expectations on what we want out of being called an Amateur Radio operator. And what did we really expect to gain by becoming a member of the Tamaqua Wireless Association.

The origin of the Tamaqua Amateur radio group had its beginning in 1955, there were only six licensed amateurs in Tamaqua and one of them came up with the bright idea to form an Amateur Radio club. The primary objective at the time was to organize in case of an emergency and our communications experience could be utilized. Up until now that objective has proved its worth many times when our members were activated during floods, Hurricanes, crippling snow storms, and Tornadoes, in addition to other services which over the past three decades were beneficial to the community.



By 1961 the membership had grown from its original 6 to a total of 15 and by 1980 we had over 38 on the list. Recall we made note in a previous issue, there were annual dues and survival of the organization was dependent upon member donations.

The mid 1980's brought changes and in order to hold the group together a few members, with visions of future success and continuance, decided it was time for restructure and design of new Bylaws. Whereby each member was asked to donate an equal share annually. This resulted in the membership list to drop like the glide path of a falling rock. The days of a Free lunch were no longer available.

From its beginning, TWA has always been foremost in just about everything having reference to the hobby of Amateur Radio. We were the first club in a three county area to hold an annual banquet. The first club in the USA to get FCC to attend our banquet and give exams. The first to hold a Hamfest in Schuylkill County and in 1982 organized the only Volunteer Examining team within a three county area which still functions four times a year.

Since 1955 there had been three other amateur radio clubs sprout up in the Tamaqua area. Each had internal problems right from the beginning and just petered out. TWA should be proud and credited for being the oldest, continuous operating amateur radio club in Schuylkill County. We never claimed to be God's gift to the hobby of Amateur Radio, but we must be doing something right that has kept us going for more than 45 years.

### The TWA Motto

***We the willing Led by the Unknowing***
***Are doing the impossible for the Ungrateful***
***We have done so much for so long with so little***
***We are now Qualified to do anything***
***WITH NOTHING***

## *It's the Same Old Flag*

*This article Submitted by KB3 GPM & KB3FSU*

Hello, Remember me ? Some people call me "Old Glory", others the "Stars and Stripes". I have also been referred to the "Star Spangled Banner". But whatever they call me, I am your flag, or as I proudly state. . . The Flag of the United States of America. There is something that has been bothering me, so I thought I might talk it over with you because it's about you and me

Some years ago on Decoration Day, they now call it Memorial Day, people would be lined up on both sides of our main street to watch the parade. The High School band was behind me, and naturally, I was leading the parade. When you young people's dad saw me coming along, waving in the breeze, he immediately removed his hat and placed it against his left shoulder so his hand was directly over his heart, Remember ?



You ! I remember you standing there straight as a soldier. You didn't have a hat on, but you were giving the correct salute to me. They had taught you in school to place your right hand over your heart. Your little sister, not to be outdone, did the same thing. I was very proud as I came down main street that day. There were some soldiers and sailors home on leave standing at attention and giving me the military salute. Ladies as well as the men, paid me the reverence I deserve. I may sound as if I'm conceited, I have a right to be, because I represent the finest country in the world, The United States of America. More than one aggressive nation has tried to haul me down, but they all felt the fury of this Freedom loving country. Remember, many of you had to go overseas to defend me.

What happened ? I'm still the same old flag. Oh, I've had a couple more stars added since you were a boy. A lot more blood has been shed since that Decoration Day parade long ago. The town has a new look now. The last time I came down Main street, I saw some of the old landmarks were gone and replaced with parking lots. The Coney Island Hot Dog shop and Chocolate Soldier Ice Cream Parlor were gone. Yes sir, the old home town sure has changed.

But now ... something else has changes. Somehow, I can't feel as proud as I used to. When I come down Main street, you just stand there with your hands in your pockets and give me a small glance and look away. When I think of all the places I've been.... Anzio, Guadalcanal, Vietnam, and Desert Storm, I wondered what's happened ? I'm the same old flag, then I see the children running around and shouting. They don't seem to know who I am. I saw an old man take his hat off and then look aroind. He didn't see anyone else with theirs off so he quickly put his back on.

Is it a sin to be patriotic anymore ? Have you forgotten what I stand for ? Have you forgotten all the battle fields where blood was shed to keep this nation free ? When you salute me, you are actually saluting them. **I'm still the same old flag.**

## TWA Annual Auction

It's "Shack Cleaning time" and time to recycle your used equipment and let someone else use it for awhile. Go through your inventory of excess parts and ham gear and bring them to the club auction.

Each year as an added activity we hold an auction at the club picnic. Auction rules are fairly basic and open to every member to bring your excess ham gear, parts, boat anchors and other items to circulate thru the members and add to this activity. Items should not be junk that cannot be repaired. "White Elephants" should be carefully wrapped or boxed. Items with a minimum bid should be tagged.

A few items remaining from Tony, KB3ABY, that have not been sold at hamfests will be sold at the auction and proceeds from those items will be given to Tony's wife.

## TWA Officers

President Al W3ZRQ
V. Pres. Ron KB3CFV
Secy-Treas, Al W3TI
Trustee Chip NI3H / W3CMA

## Interesting Stuff

Apples, not caffeine, are more efficient at waking you up in the morning. More so, when they are dropped on your head.

*Alfred Hitchcock didn't have a bellybutton.*

A pack-a-day smoker will lose approximately 2 teeth every 10 years.

*People do not get sick from cold weather, it's from being indoors a lot more.*

When you sneeze, all bodily functions stop... even your heart !

*Only 7 % of the population are lefties.*

40 people are sent to the hospital for dog bites every minute.

*Babies are born without knee caps. They don't appear until they are 2-6 years old.*

The average person over fifty will have spent 5 years waiting in lines.

*The toothbrush was invented in 1498*

The average housefly lives for one month.

*40,000 Americans are injured by toilets each year.*

A coat hanger is 44 inches long when straightened.

*The average computer user blinks 7 times a minute.*

Eating breakfast cereals like "Fruity Pebbles" and "Cap'n Crunch Berries" will cause your stool to come out green.

*Your feet are bigger in the afternoon than the rest of the day.*

The real reason ostriches stick their head in the sand is to search for water.

*The only 2 animals that can see behind itself without turning its head are the rabbit and the parrot.*

Television commercials advertising milk use a mixture of white paint and a little thinner in place of milk. It's cheaper than milk

*Prince Charles and Prince William NEVER travel on the same airplane just in case there is a crash.*

The first Harley Davidson motorcycle built in 1903 used a tomato can for a carburetor.

*Humphrey Bogart was related to Princess Diana. They were seventh cousins.*

If coloring were not added to Coco-Cola, it would be green.

*If your Splatter editor doesn't get more articles from the members, you're going to see more junk like this in future issues.*

## Grumbling from an Old Guy

Have you ever sat down and faced yourself in the mirror ? What did you see ? Better yet, what were your feelings on what you saw ? This is what's known as "A Self Evaluation". Well, if you are truthful to yourself you should be capable of writing six volumes and have ten dozen pages leftover.

For example, just write a few pages about what you have done since you became a licensed Amateur operator. As you start writing you will begin to remember numerous experiences. Even if you just received your license a few months ago or years ago and used your license to operate on the amateur bands, you should be able to recall many interesting experience.

If I had an "*Elmer* " when I was age 12 I would have had my Ham ticket at that time. Otherwise, I had to experience each and every step up the ladder by being "Self Taught" . Now in retirement I can reflect on those years and take all the time I want to operate or listen to the Ham bands. I do a lot of listening, - - but there are times I don't like what I hear.

Ham band conversation today has a lot to be desired and should not even be transmitted. There seems to be more complaining and moaning about getting over that next hump or upgrading . One item especially gets my dandruff ruffled about the 5 WPM code test and "*Why do we need to know all that technical Junk*".

A known fact, Institutions of higher learning are telling us there are less graduate engineers today than we had ten years ago. The number of college entries wishing to become educators or teachers has reached a critical point. Yesterdays educators are retiring and their replacements are not filling the gap. The facts show for themselves when High school graduates can't read nor write, we definitely cannot count on them to be the engineers or teachers of the future.

Having left the classroom as a professional educator more than 18 years ago, the lack of training in English, math and the sciences was well noticed. Today that laxity has become a full scale epidemic.

My present day amateur radio activities are a bit lacking. I become lax in the traffic nets and message handling. I work an occasional DX station just to keep up with the times. Packet radio came and went. Week-end contests take up to much time. I've had that, been there, seen that, done that, etc., etc. and the thrill is no longer present. At one time I would feel elated when a class or group would pass their exam and get a license. Not anymore, not since FCC license manuals have been printed whereby the student memorizes the answers without understanding the question.

There was a time, not to long ago, when a 20 WPM Extra class operator would really welcome a 5 WPM Novice class operator to Ham radio because he/she had overcome the Morse code exam. Almost, as if they were his/her equal. Today when someone passes the Extra Class exam, - - eh, So What ?

Well, the mirror is getting all steamed up from my hot breath and we expounded what we had to say. It is just another way to show, if you sit in front of the mirror you can really work up a storm and write down those thoughts from your past. When will we hear what's on your mind.

## TWA Annual Family Picnic Saturday August 18

The Association's annual picnic will not be held on the regular meeting night as in previous years. Please note the monthly business meeting will be the third Friday, *August 17, 7:30 p.m.* at the American Hose Fire company.

In previous years we held the picnic after the meeting. Our host, KB3CFV Ron, who has very graciously offered his back yard picnic facilities, would rather have us Saturday afternoon August 18 starting at 1 p.m. because to much time was expended for club business. Haveing the picnic on Saturday will give us a lot more time for rag chewin', horse shoe pitchin', games, and other picnic activities. Rain date will be Sunday August 19, starting 1:00 p.m.

MENU

**Hot Dawgs**
**Hamburgers**
**Corn on the Cob**
**Baked Beans**
**Potato Salad**
**Marconi Salad**
**And a bunch of other things**




Some call it dinner, others call it supper. Which ever one you eat late afternoon or early evening is when our picnic repast will be served. Usually between five and six o'clock The club supplies the Hot Dawgs, Hamburgers, Corn on the cob, and the liquid refreshments. The balance of the menu is by member donation of a *covered dish*. For example;

Potato Salad, Marconi Salad, Baked beans "*239*", A jar of pickles and olives. Or be original, bring something different. Those who plan to donate toward the *covered dish* idea are asked to let your intensions be known so we don't end up with three bowls of potato salad and four jars of pickles. Reservations are not required, BUT it would be a good idea to inform Chef Ronaldo and the committee so we can order enuff dawgs, burgers, and cobby corn.

***Picnic Location***

QTH of Ron Creitz, 124 Pitt Street, Tamaqua. Parking will be a problem because it is only permitted on the West side of Pitt Street. An area along Lafayette Street, formerly the old Reading Railroad bed is marked with a sign " Parking for Marthas Place Restaurant". We also use that parking space for our Christmas party which is held at Marthas Place.

***Don't Forget—***

***TWA Regular meeting Friday August 17, 7:30 p.m.***

***TWA Annual Family Picnic Saturday August 18, 1:00 p.m.***

***RAIN DATE Sunday August 19th. 1:00 p.m***

# The Ground Wire

By W3TI

There's the antenna wire, the hot wire, the negative wire, and then there is the *"Ground Wire"*. Unlike the Handi-talkie, CB station, or your mobile installation, all receiving and transmitting equipment in the shack must have the addition of a good ground wire connection.

Okay ! So what is considered to be a good ground connection. The average licensed ham operator thinks a wire connected to the cold water pipe or a metal stake driven in the back yard is suffice to be called the shack ground.

***"Not So "***

A water pipe or ground rod driven haphazardly into the ground is a good start but won't do the job to well. There are two well put reasons for using a ground: safety against accidental shock and improved station performance. The grounding system just mentioned can pretty much take care of the safety issue, but an excellent earth ground can actually add to the station's receiving and transmitting performance.

Earth, like any other electric conducting element, will introduce a resistance to the flow of an electric current, so the main objective in ground rod installation is to achieve the lowest ground resistance possible. There are four tips you can utilize 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.

The type of soil make a 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.

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 requires the use of two additional ground rods spaced 20 feet apart from each other and the ground rod being tested.

Now let's test our grounds resistance. Looking at the adjacent diagram, measure and record the resistance between rods "X" and "Y". Reverse the meters test leads and record that reading. Reversing the leads negates the DC effect and any difference there might be between the lengths of each test lead. Average the two readings. For example, if your first reading was 100 ohms and the second reading was 75 ohms. Averaging the two results in 87.5 ohms. Repeat the procedure to obtain "X" to "Z" and "Y" to "Z" readings. Plug these readings into the formula;

Resistance of rod X = (X + Y) + (X + Z) - (Y + Z)

Example:

X + Y = 100 plus 75 equals 87.5 ohms average
X + Z = 125 plus 85 equals 105 ohms average
Y + Z = 105 plus 98 equals 101.5 ohms average

X = (87.5) + (105) - (101.5)
X = 91 ohms

# TWA Committees

Antenna Crew KB3FJJ Chrm.
Activities Mgr. KB3DYJ
EC & ARES WY3K
Club Bulletin W3TI
RFI Team KB3FSU
VE Team WY3K

The Tamaqua Wireless Association holds regular monthly meetings on the third Friday of each month at 7:30 p.m. in the American Hose Fire company, Mauch Chunk street, Tamaqua. Anyone interested in Amateur Radio is welcomed to attend. The Club bulletin "Splatter" is printed about four times a year and distributed to its membership. Articles contained therein may be reprinted as long as Tamaqua Wireless Assn receives the credit line.

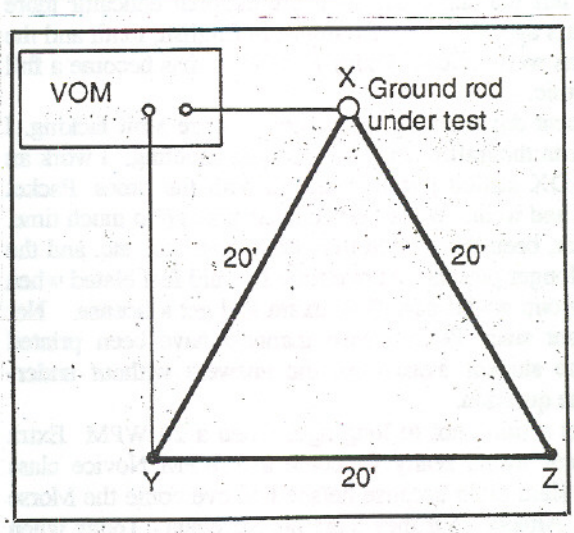
# The Old Ball Game

A doctor at an insane asylum decided to take his patient to a baseball game. For weeks in advance, he coached his patients to respond to his commands. When the day of the game arived, everything seemed to be going well.

As the National Anthem started, the doctor yelled, "UpNuts". And the patients complied by standing up. After the anthem he yelled, "Down Nuts". And they all sat back down in their seats.

After a home run was hit, the doctor yelled, "Cheer Nuts". They all broke out into applause and cheers. Thinking things were going very well.....the doctor decided to go get a beer and a hot dog, leaving his assistant in charge. When he returned there was a riot in progress. Finding his assistant, the doctor asked, "What happened?"

The assistant replied, "Well...everything was going just fine until this guy walked by and yelled... "PEANUTS!!




*Suggested setup for measuring the soil resistance of a ground rod.*

Since you have "Y" and "Z" test rods driven in the ground, why not make a real good grounding system by tieing the 3 together. Connect X, Y, and Z together with bare copper wire. Bury the wire and drive each rod below the surface so you don't trip over them. You'll be surprised with the results.

# What Does It Cost

By W3TI

With rising costs today each of us try to save a buck and as we move from room to room turn the light switch off in the room we just left. *At least that is what our parents taught us to do.* Being frugal has also rubbed off on us when we complete a QSO, we have the habit of turning the two meter transceiver off after each contact with the vision that we are saving a few dollars on our electric power bill. Yet ! We turn the TV on in the morning and even though are not in that room all day, let it run continuously all day long. Why then, did you turn the two meter rig off, the TV set burns up 5 times more electric power than your two meter rig. Did you ever take time to calculate just how much you really saved by turning it off ?

If you turned the two meter rig on at 9 in the morning and left it turned on for 12 hours a day (Battery operated HT's not included) and it is operated from a 12 volt DC power supply, the average ICOM, Yaesu, or Kenwood unit will draw about 700 Ma. in the receive mode If we make use of a few known facts and figures, discounting any loses we might have in power transformers and electronic circuitry, by use of a few calculations we should see some light at the end of the tunnel.

Just about every two meter transceiver requires 12 to 13.8 volts DC to operate. We cannot use 12 volts as a reference point but must take into account the additional power used in the rectifier that requires 18 to 20 volts for the regulator circuit to deliver 12 to 13.8 volts, so let us use 20 volts as reference.

We now have just about all the required essentials. begining with this data let's use up some of that knowledge we acquired during our Novice instruction classes. Remember, *Volts times Amps* equals watts, or 20 volts multiplied by 0.7 amps will come out to 14 watts. That is how much power is consumed in your unit just to run the receiver portion.

Since the power company sells electricity by the kilowatt-hour means if we burn a 1000 watt light bulb for one hour would be equal to one KWH or one Kilowatt-hour.

Let's carry on with some more of that mathematics. We didn't use up a whole kilowatt so divide 1000 by 14 equals 71.4 watt/hours. 71.4 W/Hrs divided by the 12 hours, for each day we have the rig turned on, equals out to 5.95 days or pretty close to 6 days to use up one whole kilowatt-hour of electricity. The power company sells us electricity for about seven and a half cents per kilowatt-hour which means it cost a little more than a nickel to run your two meter unit to monitor for a whole week.

If you went on vacation for a month (30 days) and forgot to turn the rig off, in 30 days it would have used a little over 10 KWH. Your power bill would have increased about seventy five cents.

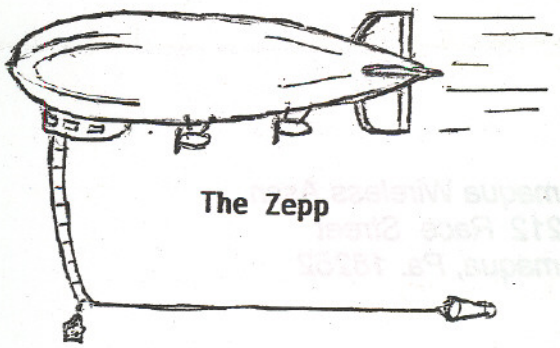
*This article was first printed in the 1991 Ground Hog issue of Splatter and again in 1997. This is the third printing and the cost per KWH is still the same.*

# The Zepp Antenna

Research by W3TI

The Zepp Antenna or end fed zepp, as it's usually called has been around for longer than you think. It has been used by a number of our club members for years. But how many of you know of its origin ? It has always been assumed that it made its debut in Germany and was named after Count Ferdinand von Zeppelin who invented and designed the first gas filled Zeppelin aircraft, era 1900.

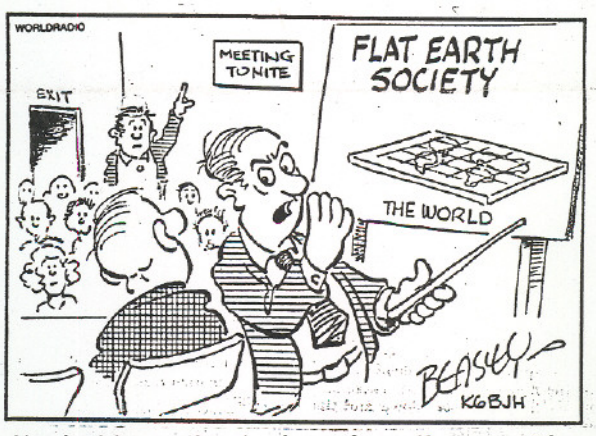
True, it was first used in the Zeppelin for radio communications but was invented by Heinz Beggerow. From the characteristics of operation of this antenna it was his idea to keep the high voltage R. F. as far away from the highly explosive hydrogen gas inside the aircraft. The open wire feeders were lowered below the aircraft and weighted down by a sand bag with the end fed wire antenna trailing behind.



The Zepp

The feed line and antenna had to be reeled in prior to making a landing. Contrary to belief, the Zepp antenna was not strung from front to rear inside the Zeppelin.

Heindrick Hertz, who has been credited as being the first to transmit a wireless signal through space, modified this antenna by relocating the feed line to the center of the radiating wire. Because it used a similar type feed line some antenna manuals call this a center fed Zepp. This in actuality is a Hertz antenna or center fed Hertz and not a Zepp




We better start keeping Hams out'a here...This guy wants to know if the Earth is flat. Why isn't every Radio transmission line-of-sight ?

**TWA Calendar of Events**
**TWA Regular meeting July 20, 7:30 p.m.**
**VE Exams August 4. Tamaqua Municipal Bldg. 9 a.m.**
**TWA Regular meeting August 17, 7:30 p.m.**
**TWA Annual Family picnic Saturday Aug. 18. 1:00 p.m.**
**TWA Regular meeting Sept. 21. 7:30 p.m.**
**HAMFESTS**
**Jonestown Mt. Rptr Assn. July 21. Berwick, Pa.**
**Del-Lehi Sept. 15, Schnecksville,Pa.**
**R.F. Hill Oct. 21. Sellersville. Pa.**

*Tamaqua Wireless Assn.*
*212 Race Street*
*Tamaqua, Pa. 18252*

**TIME LIMITED MEETING NOTICE**