

HAPPY NEW YEAR

T.A.R.C.

3860 KC — SARDINE-WRAPPER — 3700 KC

CLUB OFFICERS

PRESIDENT	W3ZRQ	Allen Breiner
VICE PRES.	W3RZV	Tex Dallas
SECRETARY		Joseph Lettenzi
TREASURER	W3EEK	Carl Zimmerman Jr.
ACT. MANAGER		Joseph Blihar

JANUARY 1957 VOLUMN 3 Number 1 ARRL AFFIL.

This is our annual NEW YEAR issue of the TARC Sardine Wrapper published in the interest of " Ham Radio ". This Wrapper is of, By, and For, AMATEUR RADIO. " The Tamaqua Amateur Radio Club is a Non-Profit Organization formed in the late fifties to advance the spirit of Amateur Radio in the Coal Regions as well as furnish trained personnel and methods of communication during time of emergency. Anyone who has an interest in Amateur Radio is always welcome to attend meetings of the TARC, and if interested join the club. Membership fees for Adults $ 3.50 per yr. and for associate members, $ 1.50 all payable to the Treas. CARL ZIMMERMAN JR. W3EEK 110 Gay Street, Tamaqua, Pa. (phone 1550 R) Membership in the TARC includes the monthly "SARDINE WRAPPER". Meeting are held the THIRD MONDAY of the MONTH at the BOROUGH HALL in TAMAQUA, at 8:00 PM. Unless otherwise notified by card. Interesting programs are furnished and everyone is welcome. The TARC owns a Grid Dip Meter, Three Speed Record Player and Code Records. Plans are underway for the procurement of a name brand Xmttr, and Receiver, and all associated equipment. Contributions to the Tarc Sardine Wrapper, are heartily appreciated and in all probability will be published. (address W 3 COW Thos. Theodore Jr 113 West Patterson Street, Lansford, Penna.

THE PRESIDENTS CORNER ****

Quoting from any publishers dairy, "A picture is worth a thousand words". I never pictured myself as president of the TARC. Tnx follas any way. In talking of pictures, I guess I'm supposed to out line what I have in mind during my stay at the presidency. Well we shall speak of pictures of the past. In my memoirs I recall two field days, both very successful as to contacts but both flop in regards to companionship and cO-operation. I picture various committees to numberous to mention that are still inactive. Unless the club recieves reports (In writting) from those committees by the February meeting they will be discharged and new ones appointed. The Banquet Committee Chairman Tex W3RZV has had a taste of this cooperation from his committee. One not even on this committee, W3COW, has put his shoulder to the wheel and it looks now like between those two members we shall have a very successful banquet. There are no limitations to what this club can produce if and when we can give but one half hour a week toward some good for the TARC.

What picture lies ahead?? This is one query that even I can't answer. All I may do in the presidents seat is sugjest. One thing I've noticed in our club, we have quite a number of father and son memberships. Weare glad to see Pop take an interest in his boys hobby and visa-versa the son following Dads footsteps. We would like to encourage more of this. However we always have a "BUT" to put in between here. Dad knows that "Ham" Radio is a professional hobby and little Jimmy wants to be as big as Dad Right off the bat. Its taken years of learning and experience for Pop to find his place in Amateur Radio and Jim Jr. wants to start out right at the top. This doesn't seem to work out right. As an expose I had to

start with 45 watts, then 75 watts and now to 300 watts. I'm looking forward to a K W some time but I'll wait till I master the 300 Watter. Yet, more power to the lad that can start out with a kilowat.

I quot from one of our former prosidents " Lets cut out the kids stuff and childs play" . We are dealing with the Federal Government when we have that ticket hanging on the wall and those boys deal the cards in a professional and grown up manner. So wat say fellers ? Let's grow up, let's give the club our cooperation. Your not doing it for me. Its your TARC . Only you can make it or break it.

I just exposed the committees and father and son's in this article. If the editors still want an edition next time We'll try to tear the club apart again and put it together. Till then 73 Al W3ZRQ

(editors note: This item may be printed in the "wrapper" only if it is printed as is. In small letters and caps only where needed.) Lets make it look like a News Sheet and not a hand-bill for the Presidential election.

*** PRESIDENTS CORNER ***

The New Italina Vice President Gene Dalesio (Datsa Short for a me)

I'Ma no no how to tanka you for make-aw me da nu visa da pres. I'Ma hepa I cana liva upa to da higha standard sho'sa represonta. I'ma gonna do guda joba dis atime.

You piason's no about the bigada banquet woe have ona JANUARY 26. Everybudy sho'sa gona hove a guda time.

You gota guda friend, bring him alonga, at'sa fine, Sho'sa no costa much, tra scuda ($3.00)olda member anda friends, duo scuda medzo ($2.50) for students. Mi frienda Carl, hosa finda nica joint on Lafayette Streets where da food sho'sa guda onda plentifullost .

We'za gota a jerk who'sa worka likea son-a mongun, writa lotsa letters for biga prizes. COW, hima say muchi agud priz haveа como in hisa place. So whya you wait, sonda the money to moa, I'ma no gona taka care everything for you. I'ma fix you upa a number one. Dats a me. W 3 RZV TEX DALLAS

233 West Broad Street

Tamaqua, Penna. (Chairman of Banquet Comm.)

W 3 A KIND FRIEND (by W3RZV)

Hams throughout the Eastern Coast will be shocked and saddened to learn of the death of W3AKF, Marvin W. Shellhamer, 402 North Lehigh St. Tamaqua, Pa., on Dec. 18 1956. Death came rather suddenly to Marv, although he had been ill several years. Many of you knew of his illness for the past two years. His sight gradually left him, due to a tumor operation near the brain. Even with all his problems and difficulties, he continued to operate the rig and rag chew with the boys. As time went on the gap between those CQ's widened. That familiar call, "This is W3AKF - - - AKF - - - A Kind Friend, calling:" will not be heard emulating from Marv's shack anymore. He was a kind friend and had made many friends on the air. Most of the local hams have received inquires over the air as to the whereabouts of W3AKF. Those who knew his troubles asked about his health and welfare.

Marv was one of the oldest pioneers in ham radio in this area. Many an interesting story he told about the good old spark coil days.

Until about a year ago he was an active member of the Tamaqua Amateur Radio Club, and has contributed to the ever growing interest and growth of our club.

To the members of his family and his friends, we offer our sincere sympathy.

We hope the youngster who receives Marv's Call will live up to the high standards he has set.

CONSTRUCTION : cont. from December Issue-- Locate the tube sockets and punch the holes for them. Drill the holes that will be needed to pass wires from top to the bottom of the chassis. If these wires are to carry less than 600 volts use a rubber grommet to line the hole and to protect the wire. If the wire is to carry more than 600 volts use a ceramic feed-through bushing.

Locate the necessary parts on the back chassis drop. These generally consist of the power supply connections. Use a high-voltage safety connector for the plate voltage. The output of the transmitter may also be located on this back drop.

Wire in the heater connections and remember that these leads will carry comparatively heavy current. Use at least # 18 wire and run the wire in shielding braid. Dress these leads close along the chassis walls so that they will not interfere with any R. F. wiring. Solder the connections. Don't depend on solder for the required mechanical strength. Any connection with a pound of solder on it is evidence of poor workmanship. Don't make COLD-SOLDER JOINTS.

Heat the parts to which the solder is to be applied. If you are soldering near plastic be careful. Most plastics melt at a very low heat point and if they do not actually melt they are very liable to become distorted in shape. The completed soldered joints should have a smooth satin finish. If the joint is rough and dull it isn't enough. Either the soldered parts were not clean when the joint was made or not enough heat was applied. . . . . To Be Continued. . . . . .

HERE'S TO WIVES AND SWEETHEARTS. MAY THEY never, NEVER MEET.

CHOOSING YOUR HAM RIG (W8VVD Hartland B. Smith)

Are you one of those beginning radio amateurs who finds it somewhat difficult to choose a transmitter from among the numerous models presently on the market? If so, the material which follows has been written especially for you.

POWER---When optimum conditions prevail, even flea-power equipment will provide soldcopy QSO's over great distances. For example, I remember talking with one European amateur who was running only 7 watts. A few years ago I had a 2 watt transmitter that provided a number of excellent 11 meter QSO'S with stations on both coasts. Once, while using a battery powered 75 meter phone rig with an input of less than 6/10 of a watt, I was able to work a fellow more than 200 miles away. Low power contacts can be fun. However, a QSO is only enjoyable if it is 100 % at both ends. When the bands are crowded, or when propagation conditions are not at their very best, the possibility of establishing and maintaining solid contact with low power equipment is very unlikely. On the Novice Bands, during the early evening hours and on weekends, the QRM is extremely heavy. All the power you can muster is needed to break through the welter of signals. Since the Novice Power limit is 75 watts, your transmitter must be rated for at least this input if you are to be in the top layer of QRM.

You'll notice that I specified "at least" 75 watts. Even though you are a Novice, you need have no qualms about using a transmitter with a maximum power rating greater than the legal limit. During your period of Novice operation, you merely keep the antenna coupling low enough to hold the input at 75 watts. Then, once your General Class ticket comes along, you can increase coupling up to the point where the transmitter is working at full load. And, of course, the greater its maximum rating, the better job your transmitter will do in the General Class Bands.

PI - NETWORKS---The pi-network final amplifier circuit has become so popular that it is used almost exclusively in present day transmitters. There are three (3) important reasons why this is so. First, the pi-network is easily bandswitched. Second, it discriminates against TVI. Third, it usually does away with the need for an antenna tuner. If these important advantages are to be realized, though, the pi-network MUST be correctly designed. Both the input and output capacitors should be sufficiently high in value to provide adequate Q, even on the low frequency bands. Otherwise it will be impossible to correctly match the transmitter to a low-impedance antenna feeder.

On 160 meters, if you use a 52 ohm co-ax line, the input capacitor of the pi should have a value of approximately 360 mmf. and the output capacitor value should be at least 1800 mmf. In fact, in order to dip the final during the tuning process, even more than 1800 mmf, is desirable in the output capacitor. Unless the capacitor values approach those shown, the loading circuits will tend to operate in reverse. The final will show little or no dip at resonance. Worse yet, you may find yourself with a rig that just won't feed power to your antenna at all.

160 METERS---A number of presently marketed transmitter kits cover only the bands from 80 to 10 meters, in spite of the fact that 160 is an exceptionally interesting band capable of producing very strong ground wave signals. For example, 160 meter mobile stations 20 or more miles away often roll in at S9 to S9 plus. Besides producing consistently loud groundwave signals, both day and night, 160 often makes possible night time contacts with stations several hundred miles away. If I were buying a transmitter, I'd make sure that it provided for 160 meter operation.

KEY CLICKS---Unless certain precautions are observed when a transmitter is keyed, spurious signals known as key clicks are apt to be radiated. Key clicks give the signal a harsh sound when heard over the air. If they are severe enough, the clicks will interfere with stations operating on frequencies quite far removed from the one on which transmissons are taking place. Key clicks are a nuisance and are frowned on, not only by other operators, but also by the FCC. To guard against clicks, it is advisable to employ a key click filter with your transmitter. To be most effective, this filter sould contain an iron cored choke, a resistor and a large value capacitor.

CHIRP---When an oscillator stage is keyed, the oscillator does not start up instantaneously. A very brief but, nevertheless, significant length of time is required for oscillation to get under way. Quite often during this starting process, the frequency of oscillation shifts slightly and gives the signal a chirping sound.

If, in order to cure chirp, the oscillator is allowed to run continuously and only the final amplifier is keyed, some of the oscillator energy is apt to get through to the antenna during key-up periods. This energy, which can be heard faintly in a distant receiver, is called a back-wave. Back-wave not only degrades the quality of your signal, but it also blankets your own receiver and makes break-in operation impossible. Both chirp and back-wave can be eliminated by differential or time-sequence keying, a feature which automatically keys the oscillator a fraction of a second ahead of the final amplifier. Differential keying definitely makes for a better sounding signal.

TVI---There are a number of precautions which should be taken in the design of a transmitter in order to minimize interference with nearby television receivers. First of all, adequate shielding must be employed. Furthermore, there should be no large holes or gaps in the cabinet through which r.f. can leak. All meter leads and wires emerging from the case should be by-passed for r.f. and the filament leads of the r.f. section should be bypassed at the tube sockets. The final amplifier should preferably be of the pi-network type, because of the ability of this circuit to bypass harmonics to ground before they can get on the antenna feeder. In addition, the antenna connector should be of the shielded type in order to work effectively with co-ax cable.

FINAL DOUBLING---It is poor engineering practice to double in a pi-network final because of the pi-network's tendency to accentuate, instead of discriminate against, subharmonics. For example, those transmitters which rely on final doubling in order to reach 10 meters are apt to feed an excessive amount of 20 meter energy to the antenna. Under some circumstances, depending on the frequency of operation and the antenna system used, this 20 meter subharmonic can radiate and result in a pink ticket from the FCC. There fore, if you plan to work the 10 meter band, pick a transmitter which operates straight-through on this wavelength.

SAFETY---The voltages encountered in any amateur transmitter which is operated from an a.c. power line are sufficiently high to cause a very serious, possibly fatal, electrical shock.....Those voltages should be confined inside the transmitter case where they cannot be inadvertently contacted during the day to day operation. A dangerspot often found in less expensive ham rigs is at the key terminals. One terminal of the key goes to ground, while the other normally goes to the cathodes of the final amplifier and the oscillator. A voltage coming from the d.c. plate supply through the internal resistance of the tubes appears on the cathodes. When the key is closed, this voltage is grounded out. However, when the key is open, this voltage ends up at the ungrounded key terminal where it can produce a nasty shock. A voltmeter placed across the key terminals will, with some transmitters, read in excess of 200 volts. This is much too high a potential to exist on an unguarded terminal. Good transmitter design requires a low voltage relay be interposed between the keyed stage and the key.

FUSING---The power supply components in any transmitter make up a good share of the cost of the rig. They should be protected against damage from any overload. Make certain that the transmitter you purchase is adequately fused.

MODULATION---Since, on the 80, 40 and 15 meter bands, a Novice is restricted to CW there seems to be little reason for buying a modulator until that coveted General Class ticket comes along. Once it is legal for you to go on phone, however, you'll want to put out the strongest possible signal in order to cope with the ever present QRM. The ARRL Handbook says, "(Plate modulation) is the simplest to apply, gives the highest efficiency in the modulated amplifier, and is the easiest to adjust for proper operation." With Screen modulation, clamp-tube modulation and controlled carrier modulation the unmodulated carrier output is only about 1/3 that obtainable from plate modulation. Only a PLATE MODULATOR will provide you with the strongest carrier per watt of final amplifier plate input.

If you've read this far, you undoubtedly have a pretty good idea of what I believe are the most important points to keep in mind when buying a transmitter kit.

IF A TASK IS ONCE BEGUN
NEVER LEAVE IT TILL IT'S DONE.

BE THE LABOR GREAT OR SMALL,
DO IT WELL OR NOT AL ALL.

I LIKE TO HEAR THE ROOSTER CROW,
HE'S LIKE SO MANY MEN I KNOW,
WHO ROAR AND RANT, RAVE AND SHOUT
AND BEAT THEIR MANLY CHESTS, WITHOUT
A darn thing to brag about.

BANQUET COMMITTE** To date of the 98 letters I wrote requesting prizes I am very happy to say the returns have been very gratifing. I have 40 of my original 98 letters answered. Of this 40 we have 13 who could not contribute due to policy. The other 27 came through with a total of 60 prizes. YES I SAID 60 PRIZES. Those prizes range from Mobile Whip, Spring and Mount, Transmitter & Power Supply, Vibrators, Beam Ant. Handbooks, QSO Indexs, Twin Lead, Xtal Mike, Navy Beam Filter, at least 4 $5.00 cert., Heath Q-Multiplier, ARRL Handbooks, Maps, CQ cert. FO-1 Osc. Kit, Capacitors, Sun Batteries & Handbooks, Condensors, Xtals, 12 Hi-Pass Filters. Well follows this is the bottom of the page and the prizes are still coming in. So far be it from me to let you all pass up a good thing see you all at the banquet Jan 26.

W 3 COW

RECEIVER HASH—— W3YXS is QRL with his new job and the new harmonic, congrats Wally W3ZXF still has a bad case of YLitis and the automobile is always headed West those days. Remember when it was always going East??
W3QCW, Teddy is QRL the banquet these days and has been doing a swell job obtaining the prizes for the coming affair, keep em coming ob.
If you fellers heard that whistling voice on 75 foney on week-ends it was only W3ZPW, from New England way, with his brandy new store tooth. Hi. Hi.
(I suppose I am only to type this up but when I came to the wrd brandy I has to stop and re-read, just to find out who was drinking what. I suppose during the holidays one follows tooth could get brandy soaked. Brandy flavored mouth wash and tooth paste, make good X-Mas gifts)
W3CMA got a new kitchen set from the XYL, wonder just what connection that has wid ham radio. Lost*** one hat, finder please return to W3CMA.
Not much to report on W3RZV since his has been QRL the Xmas Holidays rush at the Post Office.
W3FLJ has been rebuilding his rig, seems that his pals in the neighborhood didn't like his signal in their squint boxes. Just put it in a lead case Billy, and drop if off the Brooklyn bridge. That is a sure cure for TVI. Hi. Hi.
W3EEK and his lil peanut whistle has been heard on 10 lately, trying to add to the totals for W A S.
WN3IGH puts a nice signal in to Tamaqua on the 80 Meter Novice Band and he does a nice job of operating for a Novice.
WN3IOA expects to be on the air in the very near future.
SWL, Joe Blihar took his exam for Novice ticket and is sweating it out now. Wonder what the new call wil be, Joe??
W3ZRQ is working on his final amp, he installed a blower and more shielding and now runs more power to his rig.
W3KJJ is still working the DX on 80 CW, still is looking for Asia for 80 Meter WAC.
W3WJY and W3AMC were Tamaqua visitors recently.
W3ZPW as W3PTM went ice skating the other day, guess the operating chairs were well padded with pillows lately.

By W 3 K J J

Anyone interested in having a PIZZA PIE feast after the next meeting get in touch with Tony W 3 C M A

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† We Are sorry to record the passing of one of our club members, Marvin Shellhamer, W3AKF. Marvin was first licensed back in 1929 and held W8AKF till 1932 when due to difficulties he became inactive. Marvin returned to the air in 1941. In 1946 his call was changed to W3KME and later obtained his present call, W3AKF. Marvin was always a very ardent fone ham and used to operate on the old 80 fone band. After the war Marvin was a pioneer in opeating on 2 meters and up to the time of his passing away was active on the 75 meter fone band. We shall miss him. †

By W 3 K J J

A MESSAGE FROM YOUR PAST PRESIDENT

I want to take this means of thanking all the Tamaqua Amateur Radio Club members for their fine COOperation during the past year in helping make my term as President of the TARC a success. I want all of you to give the New President, Allen Breiner, W3ZRQ, all the help and Cooperation he needs, in order to keep the TARC on its high Standards.

I want to wish Al a very successful term as president for the Year 1957.

Also a VERY HAPPY AND PROSPEROUS NEW YEAR'S TO ONE AND ALL

and don't forgot

LETS GET THOSE RESERVATIONS IN FOR THE TARC'S THIRD ANNUAL BANQUET JANUARY 26, 195[illegible]

Well I must say we did it again we filled three pages. I'm sure some one will find fault and I don't blame them but we gave you a choice of sending in material that we would print. Dead line the 15th of each month. I have received a letter from W3YYT of Minersville (thank you kindly YYT). Its up to you fellows, send it in we can use it. After the first 5 stencils were cut and run through the machine we discovered an omission. Of all people to pick on I don't know why it has to be Doc. Flannigan. Doc. was appointed our Chaplain, A very wise choice indeed and I forgot to include Doc. on the front of our January issue. So Doc. please accept my apologies, it seems the more you do for this club the tougher we treat you. Last month Doc. spent a lot of time on a beautiful front page for Xmas Issue. We ran 65 copies and only the bottom half came out. Doc. I hope we learn to appreciate your help and stop leaving you out of your due reward. W 3 COW

LETS GET THOSE RESERVATIONS IN FOR THE BANQUET JANUARY 12th is the DEADLINE. CU thr.



1957 Calling!

JAN 26th [illegible]

AND [illegible]

YOU KNOW

THAT YOU ARE [illegible]

GIBAS CAFE [illegible]

"THIRD ANNUAL TARC BANQUET"

Hollow There Ted:

Reference TARC article on DX in the Christmas issue. Here's a line to let you boys know that Minersville hams can work DX too. This is all with 20 watts on 20 Mtr Fone and C.W. (mostly C.W. KG1 (Greenland) and KG4 -- Fone: CT1, DJ1, DL4, EA5, G3, G5, GI3, I1, OE6, OK1, OK3, OZ2, OZ5, YO2, -- C.W.: KP4 -- 40 Mtr C.W. DL3 -- 10 Mtr C.W. and SWL card from OK2: ES 75% Confirmed. I Hope you print this, then maybe I'll get some competition, Hi.Hi. ROBERT HAAS W3YYT

"The Young Yellow Tiger" (YYT)

THIRD ANNUAL TARC BANQUET



THE BANQUET Comm. REQUESTS THAT YOU HAVE YOUR RESERVATIONS IN NO LATER THAN

JAN. 12th

TO BE ABLE TO ATTEND

"TURKEY"

FAMILY STYLE

"PRIZES"

AND MORE PRIZES

$3.00 ADULTS

$2.50 STUDENTS

