Tamaqua Wireless Association

SPLATTER

THE AMATEUR RADIO NEWSLETTER OF SCHUYLKILL COUNTY

Since 1967 Vol. II #10 2017

OFFICERS:

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Vice President: Tom Smith KC3CRS (tswizard@pa.metrocast.net)
Secretary: Jim Shellhamer KC3DXS (kc3dxs@ptd.net)
Treasurer: Ed Boerner KB3AYY (kb3ayy@kb3ayy.com)



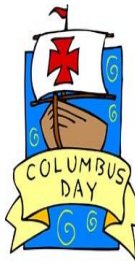
Tamaqua, PA

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- Need Emergency Service in Schuylkill County, dial 911
- Need Amateur Radio Service, contact one of the officers above
- We are here to serve the community. If you need radio communications for an event email one of the officers above and we will gladly help

W3CMA Home Page:
www.w3cma.org
Facebook:
TWA Tamaqua Wireless Association
Youtube Channel:
https://www.youtube.com/channel/UCqHQWwP6--piClV-YiiNzfA

October 2017						
Sun	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**
1	**2**	**3** Schuylkill County Emergency Services Net @ 8PM on 145.370 KC3CRS or N3RZI	**4**	**5** The Chew with JD @8PM on 145.370 KB3JD	**6**	**7**
8 Heritage Day Festival 10AM to 5PM. Downtown Tamaqua	**9** 	**10** Schuylkill County Emergency Services Net @ 8PM on 145.370 KC3CRS or N3RZI	**11**	**12** The Chew with Tom @8PM on 145.370 KC3CRS	**13** SARA Club Meeting at Schuylkill Medical Center Pottsville 8PM	**14** PA QSO Party Bonus Station is W3UU
15 PA QSO Party Bonus Station is W3UU	**16**	**17** Schuylkill County Emergency Services Net @ 8PM on 145.370 K3VNN	**18**	**19** Club Announcements on 147.270 @7:30PM The Chew with Kevin@8PM on 145.370 K3VNN	**20** TWA Club Meeting at The American Legion in Tamaqua 7PM Nomination of officers meeting	**21**
22	**23**	**24** Tamaqua Halloween Parade Schuylkill County Emergency Services Net @ 8PM on 145.370 KB3FET	**25**	**26** The Chew with JD @8PM on 145.370 KB3JD	**27**	**28**
29	**30**	**31** Schuylkill County Emergency Services Net @ 8PM on 145.370 K3VNN	**Notes: October is a busy month for TWA. We have the heritage day festival on October 8th and we have the Halloween Parade on the 24th Whatever you could do to help us would be greatly appreciated. Time/food/refreshments for heritage day and if you could donate 2 to 2.5hrs of your time for October 24th. Thank you!**			

AMATEUR RADIO TESTS

Tamaqua Wireless Association offers amateur radio test sessions four times a year. If you are unable to attend one of the regularly scheduled test sessions our VE team is available to register and conduct additional test session(s) to accommodate individuals or groups if you cannot make one of our test sessions. Please contact Bill Dale at bdalejr@ptd.net. Otherwise, our tests start at 9AM on the dates given below. The tests are held at the Tamaqua Borough Municipal Building 320 East Broad Street in Tamaqua. If you are new to amateur radio and need help studying for the technician test, our website www.w3cma.org has a study guide posted or you can contact Bill and he will put you in touch with a member to help you. Just so you know you do not need Morse code anymore. Cost is $15.00 for an FCC license that could last you a lifetime.

Test Sessions 2017

- ~~April 1st~~
- ~~June 3rd~~
- ~~August 5th~~
- November 4th



VOLUNTEER EXAMINER

Are you a VE and want to help out with a TWA's test session? Are you interested in becoming a Volunteer Examiner (VE)? If you answered "Yes" to either of these questions please contact Bill Dale. Bill has been our VE liaison for over 25 years and has the answers for you. His email is bdalejr@ptd.net. If you would like to become a VE, contact Frank D'Amato or Jim Shellhamer; these two recently received their VE credentials and would be the go to for answers. Their emails are Frank – kb2mxv@gmail.com and Jim - kc3dxs@ptd.net. We would love to see you at a test session…

REPEATERS

TWA maintains two VHF repeaters and one UHF repeater. One 2 meter repeater is located on top of the ABC High Rise building in Tamaqua the other is currently on top of the Clamtown Hill in West Penn Township. Our newest repeater is UHF. It is located on top of the Vulcan Hill near the Mountain Valley Golf Course. We are currently waiting on frequency coordination. Anyone with a valid amateur radio license can use them. We encourage repeater etiquette and limit your "kurchunking" with your call sign to a minimum please. The Tamaqua site is strictly analog FM and the Clamtown location is a Fusion repeater that can do C4FM and analog FM and the UHF is analog FM.

TWA Repeaters

146.490 / 147.490 (PL 123.0)

147.270 / 147.870 (PL 131.8)

444.600 / 449.600 (PL 131.8)

147.270 is our Fusion repeater

Simplex: 146.550

REPEATER FUND

TWA has three active repeaters in Schuylkill County. Because of the terrain the club installed three repeaters. Two of the three are coordinated and we are still looking for a permanent home for the 270. We are looking for support to keep the repeaters operating. A repeater fund has been set up, please donate today. Contact Ed, KB3AYY at kb3ayy@kb3ayy.com and he will give you more information.

CALENDAR OF EVENTS:



- November 4th Amateur Radio Test Session 9AM
- November 16th Club Announcements 7:30 on 147.270
- November 17th Club Meeting 7PM American Legion
- November 17th election of officers
- November 22nd Tech Night at the American Legion 7PM
- November 23rd Thanksgiving
- November 24th Black Friday



- December 1st to 3rd ARRL 160M Contest
- December 7th Club Announcements 7:30 on 147.270
- December 9th Club Christmas Party – Tentative
- December 9th installation of officers
- December 9th to 10th ARRL 10M Contest
- December 17th ARRL Rookie Roundup- CW Contest
- January 1st 2018 Straight Key Night
- January 6th Kids Day
- January 6th & 7th RTTY Roundup
- January 20th & 21st VHF Contest
- February 12th to 16th School Club Roundup
- February 17th & 18th CW DX Contest
- March 3rd & 4th SSB DX Contest
- April 15th SSB Rookie Roundup
- June 9th to 11th VHF Contest
- June16th Kids Day



WHAT'S NEW WITH TWA

- September's meeting was attended by the following members: WY3K, KC3CRS, KC3DXS, KB3AYY, KA3FUL, N3OGG, N3HHH, KB3FET, K3VNN, KB2MXV, KB3JD, K3ROS, and K3TE
- The upgraded Fusion repeater from Yaesu was ordered. The cost of the upgrade was $300. I would like to thank WY3K, W3OFD, WA3WIJ, KB2MXV, and KC3CRS for donating money.
- We would like to congratulate Tom Smith KC3CRS for getting is VE credentials. Our next test session is November 4th we look forward to seeing you there.
- Looking to see if there is any interest to doing a Severe Weather Alert NET once a month. – There was nothing voted on.
- TWA is growing again. We would like to welcome Ross Shanoskie K3ROS to TWA. Welcome Ross.
- A huge thank you to Jim Munley for getting TWA incorporated. This is the first step in applying for nonprofit status. Thank you Jim! Below is a copy of an ad that was published in the Pottsville Republican.
- Jim was given permission to get TWA 501-(c) (3) status.



Announcements

Legal Notices

LEGAL NOTICE

NOTICE IS HEREBY GIVEN that Articles of Incorporation have been filed with the Commonwealth of Pennsylvania Department of State in Harrisburg, Pennsylvania, under the provisions of the Pennsylvania Business Corporation Law of 1988, for the following corporation:

Tamaqua Wireless Association

William E. Dale
245 Golf Road
Tamaqua, PA 18252

Cemeteries

HALLOWEEN TRIVIA:

1. When was Count Chocula and Boo Berry cereal introduced?

FROM THE PRESIDENT'S DESK

Tamaqua Wireless Association, Inc. ----- First CW from Space

Notice something different? The Tamaqua Wireless Association is now a nonprofit corporation. Thanks to the work of Jim Munley – KB3FET – our organization received our incorporation from the Pennsylvania Department of State. Next on the agenda, we'll begin the process of obtaining our 501 (c)(3) nonprofit status. Again, Jim has offered to take the lead in processing the application.

First CW From Space – Sputnik Turns 60.



That is the title of an article that appears in the latest edition of QST. It caught my attention for two reasons. As a young kid growing up in Tamaqua I remembered all the talk about the first satellite in space, launched by the former Soviet Union on October 4th in 1957. I can remember sitting on the street corner curb after dark – something parents do not let their young children do in this day and age – and staring skyward in search of Sputnik. As I recall we were convinced that we spotted the sphere every night we watched. I'm sure we were seeing nothing more than an airplane, and after reading the article it stated that Sputnik was a mere 23 inches in diameter orbiting the earth at 500 miles in space and difficult to see with the naked eye. As a kid, it is fun to let your imagination run wild, but in reality, it is obvious we never did see the satellite.

"First CW From Space" was the second reason I found the article interesting. Fast forward from those childhood memories, I was now very curious what the CW message stated. But after reading the entire article, it never reviled the message. So, this now lead me on an internet search to obtain that CW message. Well I was almost as disappointed to learn there was no message as I was that I never saw Sputnik as kid. The CW was just radio pluses or simply, continuous "beeps".

I guess with today's electronics my expectations were set fairly high, but I must remember this was 1957. So, just to hear a continuous beep from the first satellite from 500 miles in space was I'm sure very exciting. Sadly, Sputnik burned up reentering earth's atmosphere on January 4th just three months after launch.

The article did reveal an interesting fact that amateur radio station W3AEE was the first to record and broadcast the beeps on Columbia University's FM radio station WKCR. The amateurs beat RCA broadcast engineers who recorded the beeps and were about to broadcast to the public the beeps on NBC radio.
Chock one up for amateur radio.



Two Tone or No Tone

I received this from Frank D'Amato. Please click on the link and read. This is typical Schuylkill County Bureaucracy at its finest. I remember when the Tamaqua Police Department came to me about prices on two-way radios. This was when the "county" was having Motorola's MDC (identifier) installed in the programming and only one communication company was doing the work. I could not get the "Tamaqua" tones without written consent from the police chief. Even then the director of county communications was hesitant. Enjoy. https://www.newsitem.com/articles/state-schuylkill-county-must-provide-pager-tones-for-ems-fire/

News from ARRL's Website

1. FCC opens 630 & 2200 meter bands: http://www.arrl.org/news/fcc-opens-630-and-2200-meter-bands-stations-must-notify-utc-before-operating

2. FCC updates rules for personal radio services: http://www.arrl.org/news/fcc-s-updated-rules-governing-personal-radio-services-become-effective-on-september-28

Trivia answers:
Count Chocula was introduced in March 1971 and Boo Berry December 1972

MONTHLY REMINDERS

Monthly TWA Club Announcements

3rd Thursday of the month in October @ 7:30PM

Club announcements will be heard at this time.

Tune in to 147.270. . . .

If you can't make the meeting, tune in and you will hear what will be discussed.

Thursday Night Chew



Rag Chew with either Tom, Kevin, or JD

@ 8PM on 145.370 Tone of 123.0

Stop by and bend their ear for a while. There is a new schedule, check out who is running The Chew in the calendar!



Schuylkill County Emergency Services NET

Check-In Every Tuesday Night

145.370 (PL Tone 123.0)

Alternate Frequency 147.345 (PL Tone 123.0)

The Net begins at 8:00 pm local time

The Net is hosted on SARA's Repeater

OCTOBER HERITAGE DAY AND HALLOWEEN PARADE:

October has become one of the busiest months for TWA. We hope you could help us out!

1. Sunday October 8th is Tamaqua's Heritage Day from 10AM to 5PM. If you can assist with food donations and/or donate your time we would greatly appreciate it.
    a. Looking for water, soda, soup, hot dogs, paper plates, spoons, etc
    b. Also if you can donate your time contact Ed Boerner.
2. Tuesday October 24th is Tamaqua's Halloween Parade. We are to meet around 5:30PM behind the Borough Hall. You will get your assignment for the parade.
    a. Make sure your portable radio is charged to handle about two hours of work.
    b. We will be using 146.490 with a plus 1MHz offset and a tone squelch of 123.0. IF you need help programming your radio please contact Ed Boerner.
    c. We will also use 146.550 no tone.

TECHNOLOGY COMMITTEE UPDATE

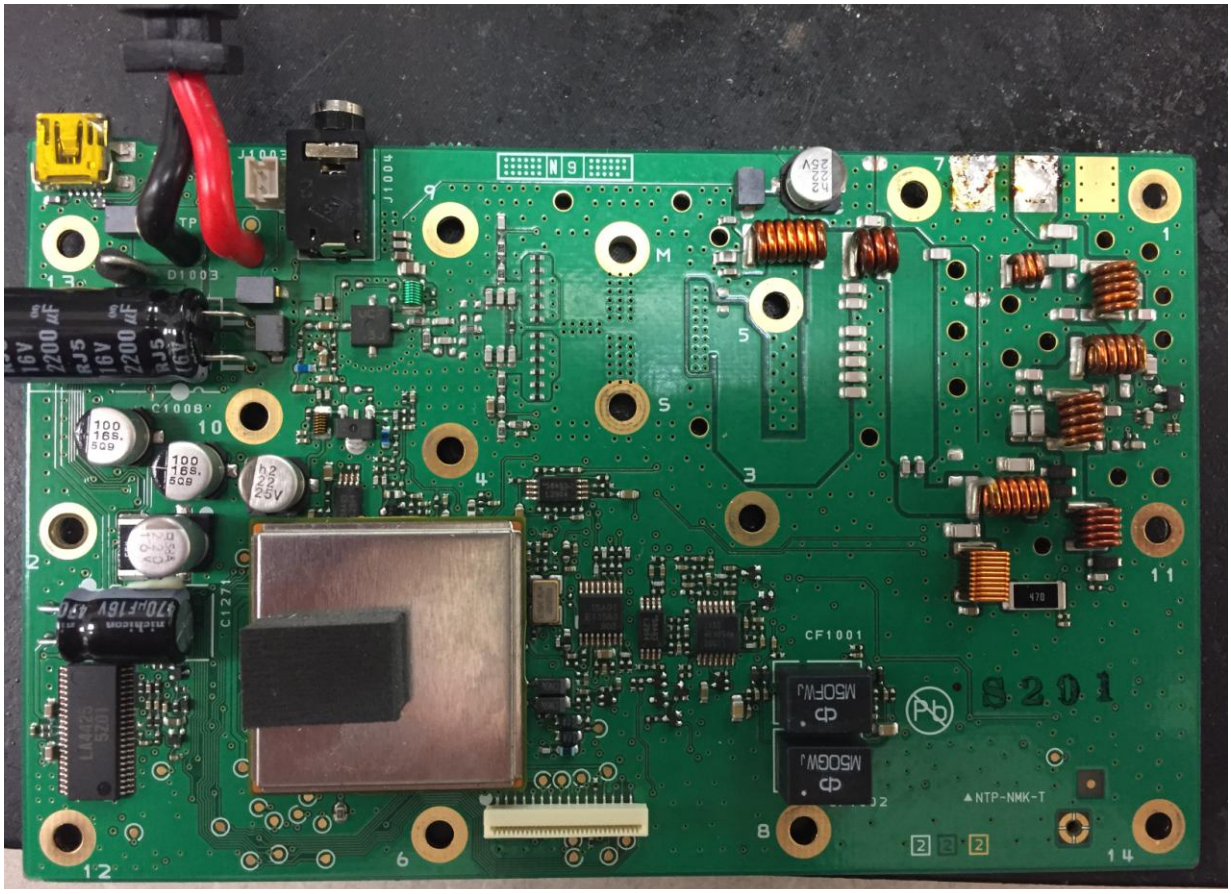
There was a meeting held after the business meeting on 9/15. The following occurred

1. A $300 check was made out to Yaesu for upgrading our DR-1x to the 2x. The check was mailed after the meeting.
2. I asked that a letter be sent to Steve Cotler to get permission to trim tree branches around the guy wires at Mountain Valley
3. Monthly Weather Net was brought up again but no one seemed interested in participating.
4. After a long discussion on purchasing a DMR repeater a vote was taken. 4 people voted for the purchase of a Motorola repeater. 7 people voted against it.

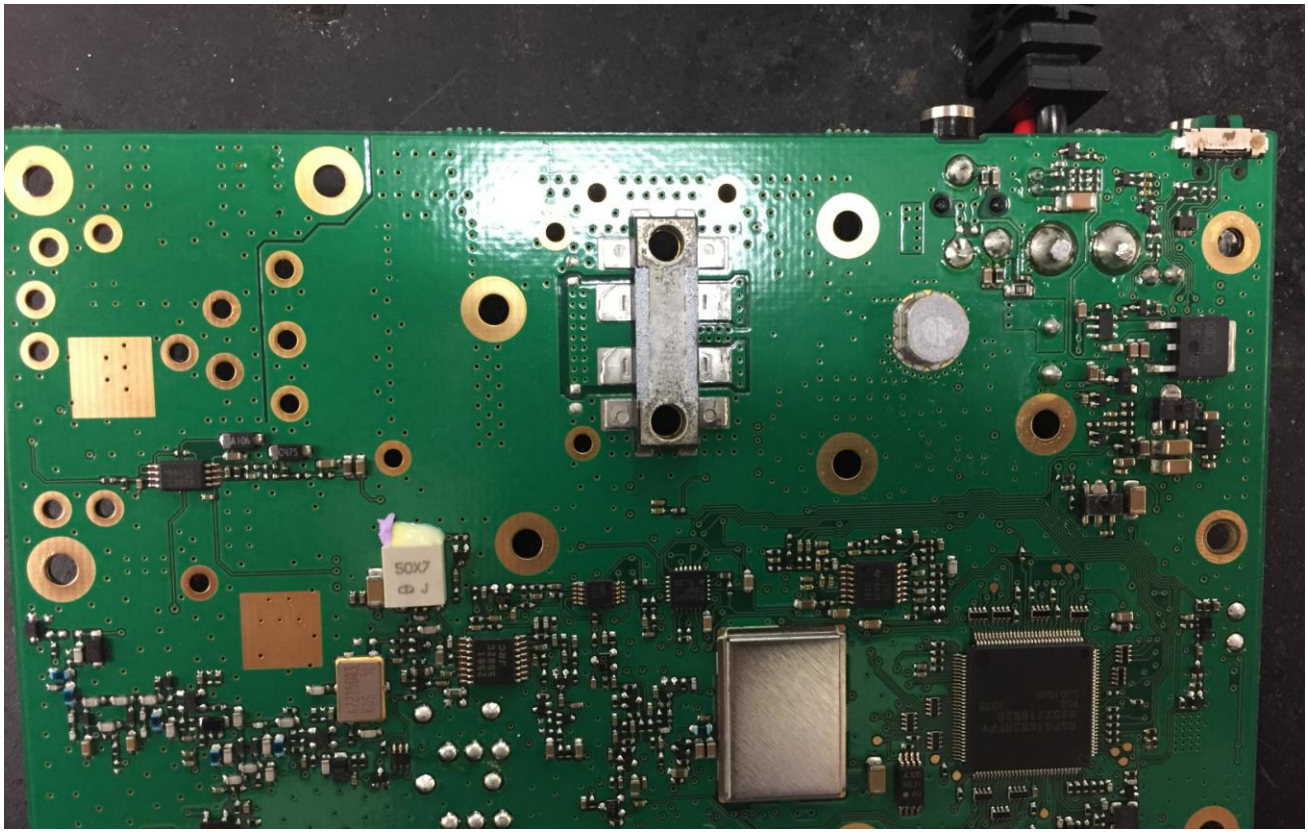
October 8th is Tamaqua's Heritage Festival. At last month's meeting we voted on having another stand at the festival. It starts at 10AM and goes to 5PM. We are looking for food donations and support to man the event.

FROM THE BENCH

I was recently asked to look at an FTM-3200DR. Below are pictures of the top and bottom circuit boards.



Above is the top side of the FTM-3200DR circuit board. In the top left is the power supply filtering below that is the audio amplifier IC. Underneath the large metal square is the DSP IC. To the right of that you have some OP-Amp IC's and an A/D Converter, and some other logic IC's. There is a white strip connector at the bottom that connects the front panel to the radio; next to the no lead symbol (Pb) there are two black ceramic filters (almost square looking). Now we start working our way up to the top. You will see a number of copper looking coils; these are used in conjunction with capacitors and some resistors as the RF output filtering. Then finally up at the top right you have two screw holes with three large pads, two of which are covered with solder. The middle pin is the RF out to antenna and the two flanking the middle are the grounds. The problem with Tom's radio was the "driver" was defective. It is located right below the black headphone jack. It is black, square looking, FET with four pins coming off. This FET was not supplying the power gain needed to the "final." The "finals" are located on the bottom of the board.



This is the bottom side of the FTM-3200DR. Let's start with the top left. Under the copper pads you have the APC (Automatic Power Control). This is an Op-Amp circuit that gets its power level signal from part of the output and a signal from the microcontroller. This is the circuit that adjusts the power level from low, medium, and high. Below that are a lot of components that are needed to work with the DSP circuit. To the right of that you have a metal shield to the right of that is the brains of the radio, the microcontroller. Above that you now have voltage regulators. The large black IC with three pins is the 8 volt regulator. In the middle top is the "finals" IC. To the right of the "finals" IC is an almost round piece of metal. That piece of metal is the "heat sink" for the driver. This is what made removing the driver difficult. Every time I tried to remove the FET this heat sink dissipated the heat from the soldering iron. Oops, I forgot the programming and firmware update. That is a micro switch up on the top right side. Moving this switch sets the microcontroller setting.