

The Tickler

From the Prez.....

Hi everyone. It has been very hot and dry this summer. We have gotten a few showers, but nothing that will save all of the crops. It has helped to cool it down just a little. I can hardly take those 100+° temperature days we were getting a couple of weeks ago.

Norm W8TTH has been spending a lot of time up North again this summer. He is helping get the Buckley Old Engine Show grounds ready for the show which will be held August 16th through the 19th. Norm is the resident welder for the show grounds and helps keep everything up and running before, during, and after the show. I will be going up there to do my part of our membership commitment in the Sound Booth during the show. That job fits right in with my ham radio background. I get to talk to people and make announcements that help people.

We didn't make the Van Wert Hamfest again this year. I had my family reunion on the same day and Norm was too busy out in our shop to go. I hope, if you were able to attend that you had a great time and found lots of bargains.

Findlay Hamfest will be held on September 9th and ours will be the next Sunday which is September 16th. It will be here before we know it. Please contact Mark NU8Z to see where you can help out. Help is always appreciated and there is always room for suggestions on how to make things better.

Don't forget to check out the website at www.w8tqe.com and get any new information and pictures to Bob K2IBM. He is our web master and we need to support him and the club by sharing he keeps up the website. Also, don't forget our newsletter editor, Ted K8AQM. He also needs our support. Get him articles and pictures. We don't need him making up a bunch of stuff to put in the paper. Without these two we wouldn't know what was going on with the club. They do a great job.

The meeting this month will be July 30th. I hope to see you all there.

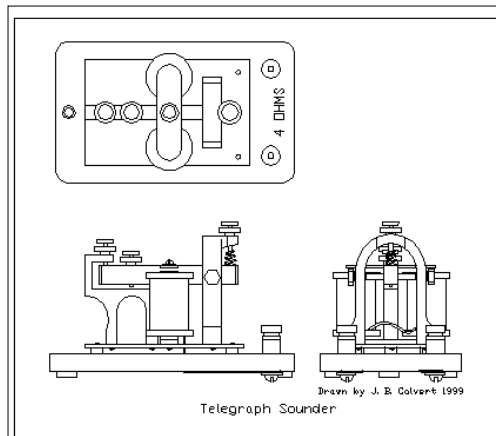
73,
Ginny W8TTX

July Program

The July program will be a DVD of "The biggest Field Day Ever". You have to see this setup of over 50 stations for Field Day. The program will last about 45 minutes. No program is scheduled for August and your editor will be gone for the September meeting.

“Clickity Clack”

One of the “fleas” I was able to purchase this year was a telegraph sounder made in Menominee, MI back at the turn of the 19th century made by the Signal Electric Company. The description of how a sounder works and adjusted is given here from a text by J.B. Calvert in 1999:



“The telegraph sounder was invented by Alfred Vail after 1850 to aid the rapid reception of Morse Code by ear, replacing the slow and cumbersome Morse register. The register hung on for many years, since it did not demand a highly trained operator. The sounder is simply an electromagnet attracting and releasing a movable armature that makes audible clicks when it strikes its upper and lower stops. The simplicity is somewhat misleading, because the device is arranged to do its job as faultlessly as possible. Practically all sounders were of a very similar classic form. The sounder that I shall describe here was made by the Signal Electric Manufacturing Company of Menominee, Michigan, and is typical.

The sounder is mounted on a finished wooden base 5-1/4 x 3 x 3/8 inches, and is just under 4 in high overall. It consists of a magnetic circuit and a hammer and anvil assembly, screwed to an iron baseplate. The magnetic circuit of the sounder consists of a pair of bobbins on which lacquer-insulated #24 AWG copper wire is wound around an iron core, and top and bottom pieces completing the magnetic circuit. The upper piece is attached to the pivoted hammer bar. The coils are protected by a fabric covering, and by black fiber washers at top and bottom. Connections are made to two screw terminals mounted on the wooden base. The windings have a resistance of about 3.8 Ω , which is suitable for a local circuit energized by a battery of 1 or 2 V. At 1.5 V, the windings take about 0.4 A. A sounder of this type would be operated by a relay in the line that responded to normal line currents of 20 mA or so, and wound with fine wire, such as #30 AWG. The local battery would be one or two jars of gravity. Special sounders with higher resistance (and lower operating current) were also available for direct connection in the line in emergencies, and these were often mounted together with a key in a set, called a *pocket relay*, protected by a case. The sounder does not care about the polarity of the current operating it, responding identically to either direction.

The brass hammer bar, 5/16 x 3/8 x 3-3/16 inches, is pivoted 9/16 in. from one end on an iron arbor that mates with brass cup screws held in a horseshoe-shaped iron yoke. The yoke also has an adjusting screw for the phosphor-bronze helical spring that fits in a 1/4 in. hole in the top of the bar. The other end of the bar is received in a rectangular opening in the anvil. The anvil is brass, 5/16 thick, and nearly 2 in. high, which, like the yoke, is fastened to the 2-3/16 x 3-3/8 x 3/32 inch iron base. The anvil holds an adjusting screw for the upper stop, and a similar screw is held in the hammer bar for the lower stop. Some earlier sounders had both limit screws in the yoke, and a different form of spring. The iron plate is fixed to the wooden base by three machine screws in threaded holes in the plate. All brass is bright, all iron is blacked. The name of the manufacturer is on the side of the hammer bar. The wooden base has a single hole with a metal bushing for screwing the sounder to the desktop.

The stops and the spring are adjusted until the sounder gives clicks of the same strength at top and bottom limits. The travel of the hammer bar must not be too small nor too large. The proper adjustment depends on the strength of the current to some degree. This adjustment is not difficult, and once made, is relatively permanent. Each of the adjustment screws has a stop nut that maintains the adjustment. In quiet surroundings, the sounder itself makes a satisfactory sound. It was common to mount the sounder in an open wooden enclosure on a jointed arm, so that it could be brought closer to the operator's ear, and even to wedge an empty Prince Albert can so that it touched the metal baseplate, to give it a distinctive voice, as well as for added amplification. This was especially valuable if other sounders in the vicinity were also busy.

The sounder (to be precise, its relay) was connected to the desired circuit by means of a switchboard using brass plugs. Normally, the circuit was closed, and the sounder hammer was on the lower stop. When someone wished to transmit, he or she opened the switch across the key contacts, breaking the circuit and causing the sounder to click as the hammer hit the upper stop. This, of course, attracted attention. When the transmission was over, the key switch was again closed, and the sounder clicked again. This signaled that you could now break the circuit for a transmission, if you wished. The circuit was normally closed, and you could tell that it was good by looking at the sounder (or relay). The circuit was a party line, and everyone could hear everything that went on. *(continued on page 4...ed)*

AARC Club Gossip!

Did you know that...

...N8AMM has received 300+ W8C QSLs? They're all answered too!
 ...we are still waiting for KG8CO to dig the hole for the 160m tower?
 ...WD8LCH has a new car? A Honda CRV.
 ...K8KIC may have "lost" the source of his noise in the neighborhood?
 ...K8TI has his tower down ready for a tribander to go up?
 ...W8TTH is acquiring some Rohn tower? Anyone need some?
 ...K8AQM sent his "salted" (from the T32 trip) K2/100 in for repair?
 ...the KC8JMS QSLs are in and WE8Z is answering requests?
 ...K8KIC is back on his card game "winning" streak?
 ...KK1G has moved to the Detroit area for work?
 ...N8AMM and KG8CO have taken down the W8CFP tower?
 ...KG8CO has a great Force 12 antenna for sale?
 ...K8AQM made an Alpha Delta copy for 40, 20, 17 and 15m?
 ...thanks to K8AA and K8NP, K8AQM has his shack telephone back in service?
 ...W8LNR and K8TLT supplied pictures of this year's Field Day?
 ...N8AMM is getting ready to start his tower project?
 ...a new "Kizuna" bug and straight key arrived from Japan at the 'AQM shack?
 ...W8TTH says, "too much work, not enough time for play!"
 ...K8ADM has a TH-7 for sale and it's down and ready to go to a new home?
 ...K2IBM can't turn his yagi? Too many tree limbs have grown in the way!
 ...K8AQM has an "extra" 3 L tribander for sale?
 ...a new Alpha 374A is in the AQM shack?

AARC Club Minutes

Board meeting June 25, 2012.

Discussed Junior Achievement Summer Blast and the open house, there was no treasurers report due to Mark NU8Z being out of town the new badges are here, Dues are due, The museum ship weekend, Field Day. The meeting was adjourned at 7:30 pm.

Meeting

The Adrian Amateur radio club met at the CAP building at the Lenawee County Airport on June 25, 2012. The meeting called to order at 7:00 PM by president Genny W8TTX with 16 persons present. The 50/50 was won by Denny WE8Z who donated his share back to the repeater fund. The minutes of the May meeting were approved as posted in the Tickler upon a motion by Bob K2IBM, the second was by Norm W8TTH. The motion passed. It was noted that dues are due. Denny WE8Z reported on the June 2 museum ships weekend with 622 contacts, Ted reported that his group made 2400 qsos Caleb KK1G Vice President resigned due to his change in employment and will be joining the Novi club. We discussed the electrical circuits in the club ham shack It was obvious more circuits are needed however more study will be done later to determine all the details. The club discussed appointing a station manager to keep track of club equipment as we have had problems in the past keeping track of some items. A motion by Norm W8TTH that a station manager be authorized to spend up to \$100 a month to keep supplies to needed levels. Denny WE8Z moved to table the motion second by Bill KD8WSL. The meeting adjourned at 8:30 PM.

Secretary Bill KA8ARK

The American manual telegraph was a remarkable system of simple, rugged apparatus extremely well adapted to its purpose, combined with skilled operators. A typical experienced operator could send and receive at 25 to 30 words per minute. The corresponding bit rate of no more than 25 bps was well handled by wire lines on poles that naturally had low capacitance, and by the small inductance of the relays and sounders. In fact, ground return circuits were universally used for telegraphy, and were quite adequate. The gravity cells later used were excellent on closed circuit; in fact, they had to be so operated to keep the solutions apart. Since they were in fixed, protected locations, they were reliable and easily maintained. Because the telegraph used skilled workers in a world of unskilled labor, as well as giving the first real opportunities for women outside menial labor, its social aspects are as interesting as the technical ones.”

N8KR and I were wondering through the flea market and came upon the battered, beaten and cracked Signal Electric Company sounder and key. With some TLC, polish, paint, glue and buffing a restored “Signal Electric” sounder is now clacking away! A five volt wall-wart supplies the dc voltage to the unit.

A second key was also purchased on a board and I happened to have a sounder without a key; Ken now also has a sounder and key which he prizes for its novelty.



K8AQM sounder



N8KR sounder

Project Boxes

Hey, don't throw away those old phone patches, swr bridges that don't work nor any other old box! Save those boxes for other shack projects! Below are an old mic-footswitch box, phone patch box,

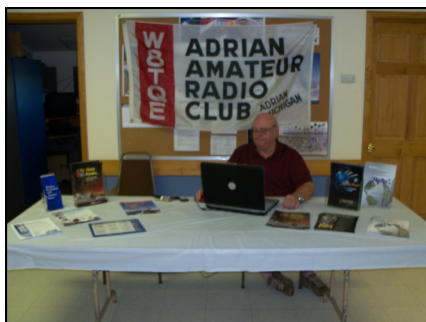


an old plastic multi resistor box and a “dead” tnc box all re-used and made into multi-telegraph key boxes used in my shack. I pulled all the old parts out and just inserted jacks wired in parallel with one lead running to the transceiver. On the phone patch box I just gutted everything and painted the front to match the rest of the box. The tnc front panel is just a thin piece of tin drilled with jacks mounted and wired.

Other projects could use these boxes such as RTTY interfaces and their needed isolation xformers, multiple mics, multiple headphones, the possibilities are unlimited! So don't throw away those old boxes, recycle them into useful shack projects!

Field Day 2012 and the Summer Blast

This year the Adrian ARC operated Field Day with the annual Summer Blast and with the CAP, Coast Guard Aux. And the Bits and Pieces RC Flying Club. W8TQE had two sep-ups, one outside and the shack inside the CAP building. That's Denny, WE8Z, Neil, K8NP and Bob, KE8FX manning the outside station; Bill, KD8WSL manned the table and information area inside the CAP building with of course Brian, KG8CO "operating" the club station. Larry, W8LNR, Cletus, K8TLT, Ken, K8KIC, Don, N8AMM,



Bob K2IBM and Dan, K8TI were all present for the days' activities representing amateur radio.



Bits and Pieces RC Flying Club was there with Don, KC8OGW (their club president) organizing their of excellent RC plane display.



The CAP display in the building was well organized by Bill, KA8ARK and Ken (forgot his call).



Bruce, KB8OXX was the representative for the Coast Guard Aux., he was there with their pontoon boat.

Cletus, K8TLT worked with the manufacturer of a great solar panel set up (simplifiedenergysolutions.com)



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The Tickler is the official paper of the Adrian Amateur Radio Club in Adrian, MI. It is printed monthly and is distributed to members of the club, local disaster officials, local electronic outlets and other editors of ham radio newsletters. Articles about activities of members are solicited. Permission is granted to any other publication to reprint items appearing here, provided complete source credit is copied including previous print source. The club owns and operates repeaters W8TQE on 145.370, - 85.4 PL or 537 from your touch tone pad and 444.675, 123 pl.

Local Area 2 Meter Net and 10 Meter Chats

Sunday 9:00 p.m. The ARES Net on 145.370 - Ken, K8KIC -Net Control

Tuesday 10 Meter CW Local Chat at 8:00 p.m. on 28.050 +/- QRM

Tuesday and Thursday 10 Meter Local Chat 9:00 p.m. on 28.328 +/-QRM

Local Area Repeaters

W8TQE 145.370 - 85.4 pl Adrian, Michigan

W8TQE 444.675 + 123 pl Adrian, Michigan

K8ADM 443.375 + 107.2 pl Adrian, Michigan

K8ADM has access to Echo Link

Adrian ARC 37th Annual Hamfest and Computer Show

September 16, 2012

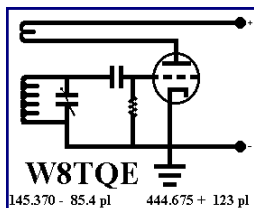
Hamfest Chair

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First Class