

AMATEUR RADIO A NATIONAL RESOURCE

FC-ARC QSO'ER

FEB. 18, 1991

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FOX CITIES AMATEUR RADIO CLUB
(SPECIAL SERVICE CLUB)

CLUB STATION "W9ZL"

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318 EAST BREWSTER STREET
APPLETON, WISCONSIN 54911
ARRL CLUB NO. 2132

NEXT MEETING WILL BE MARCH 18, 1991

PRESIDENT:	MIKE JACKSON	WB9BBI	739-9680
VICE PRESIDENT:	MARTHA SCHMEICHEL	N9JAD	731-7338
SECRETARY:	HELEN BORREE	WD9CYW	725-1331
TREASURER:	LES PARDEE	KA9MPP	766-1750
MEMBERSHIP CORD:	JIM SHEETS	K9OQO	739-7695

The Feb. 18th meeting was called to order at 7:00 by Myron Jackson WB9BBI. The meeting was held at Roosevelt Jr. High School.

APPROVAL OF MINUTES: MINUTES WERE READ AND APPROVED.

TREASURER'S REPORT: (BALANCE) 2,336.26 AS OF FEB. 18, 1991. PLUS \$600.00 IN HAMFEST FUND.

*****NEXT MEETING WILL BE MARCH 18, 1991*****

PROGRAM FOR MARCH MEETING WILL BE THE MAKING OF CIRCUIT BOARDS ON A SMALL PRODUCTION SCALE.

INFORMAL ITEMS

VOLUNTEER EXAM: THE NEXT TESTING SESSION WILL BE HELD ON MARCH 16th AT MADISON JR. HIGH IN APPLETON. LOCATED AT 2020 S. CARPENTER ST. CHECK IN 8:15 and testing at 9:00.

HAMFEST: NOTHING

NON EMERGENCY: NOTHING

RACES: Wayne WD9FLJ said Outagamani will not sponser Weather Training this year. Anybody interested in it should transfer to Winnebago Co.

Nominations; will be held for president and secretary in April. please get them in to the committe. They are Rick, Hub, and Jack.

Winners of the Crossword Puz zle were; Bob Cleveland WD9HID and Cathy N9FZL AND GARY ND9Z KEATING.

IF YOU WANT SOME OLD QST'S GET IN TOUCH WITH MORY MEAD W9FBC.

MEMBERS PRESENT AT THE FEB. 18th MEETING WERE:

JIM WIERZBA	WB9OJE	BILL GEREND	KA9TBR
WALLY GREENE	WA9YRL	BOB CLEVELAND	WD9HID
JIM SHEETZ	K9OQO	JEFF SCHMEICHEL	KB9BYP
WAYNE PENNINGS	WD9FLJ	DAVE PASSET	K9EBR
JACK BIGELOW	KA9JOL	HUB GEREND	W9OUT
DAVE ARNOLD	KA9NMK	LARRY SEIBER	KD9IA
TERI LARKEE	KA9WCF	DAN BAYER	WB9QFX
S HANE ARNOLD	KA9WKV	HAL SIETH	NQ9F
DON YOST	WD9GOR	RICHARD SONNENBERG	W9UVZ
ROY HOYER	WB9QKW	ERIC KIRCHNEN	KB9DYG
JOSH GRISWOLD	KB9DYF	MARTHA SCHMEICHEL	N9JAD
HELEN BORREE	WD9CYW	MIKE JACKSON	WB9BBI

RESPECTFULLY SUBMITTED,
HELEN BORREE WD9CYW
SECRETARY

Well March madness is here again and more than half gone. Did you get those antennas up this winter or will you have to do it this spring now that the wx is somewhat improved.

Tnx for the good response on the crossword last month. The winners were Bob Cleveland and "the Keatings". I was suprized by the quick response of some. I had responses in the mailbox already on Friday, only two days after the mailing. The winners earned the famous copper tube J-pole. Next month will display another puzzle that will be much more difficult and deal with famous persons who invented things or made discoveries in the area of electronics.

Well are you getting geared up for ham activities this summer? Start scheduling the field day, E.A.A. and the assorted events where our club provides communications. All of these activities are fun and continue to be the backbone of club activities. I am sure that announcements will be made at club meetings and we will also try to get these dates into our newsletters as they become available. A number of biking activities are done where our club and other clubs provide the communications. This gives us an opportunity to meet hams from outside our area.

I havn't heard from Green Bay yet as to the joint spring picnic, but expect to hear soon. If the event should take place, plan to attend and meet some of our good friends to the north.

A test session is scheduled for March 16 at Madison Jr. High School. As you know, the test for the new codeless license is a combination of the novice and tech written exams and of course no code. I would expect this will become a more popular test as the word gets out. The test session will cover the other levels of tests as usual. I have received a number of calls regarding my views of the new license. Ive also had a number of calls about the new test and testing locations. We will try to include some information as to specific questions in the next newsletter.

As to Novice classes. Next fall we plan to have a class at James Madison again. If you know of people who are interested, have them give me a call and I will try to answer their questions. I know there are some changes developing in the Novice question pool so we'll try to keep up on that. We have had no discussion on the new tech. classes, but if you are interested in the class or interested in instructing be sure to make those wishes known.

A reminder once more of the two vacancies in leadership positions for the club. At the May meeting, the president and secretary will be elected for the next two years. If

you are interested please contact KA9JOL, Jack, WX9C, Rick, or W9OUT, Hub. New ideas and new enthusiasm are always needed and this is an opportunity to lead the club in exciting directions. We look forward to hearing from you.

Keep hammin. We look forward to seeing you on Monday night at Roosevelt Jr. High. Our program will focus on the layout of circuit boards, screen printing of boards and some methods of the etching process. If you design boards or just like to copy some of those neat projects you read about, these few pointers may make that process a little easier. If you don't like CIRCUIT BOARDS, well we can PRINT and ETCH your tee shirt. See if you can RESIST that. You can RUN them back to your PAD and SENSITIZE your own SCREEN.

MIKE, WB9BBI

SAMUEL B MORSE

Who is Samuel F.B. Morse you ask? Well everybody knows he invented the morse code and the telegraph, or did he? Like many others in history, he certainly had a good idea but if it hadn't been for others, probably brighter and more experienced with basic fundamentals, he never would have gained the level of fame he did.

The term "telegraph" (record from afar, Latin) had actually been used before Morse was even born. Seventeenth century Englishmen had developed Semaphore devices where messages were sent from one hilltop to another. Of course semaphore as we know it and morse code are two different forms of signals but the term "telegraph" is an old one.

Morse, born in 1791 was educated as an artist who made a name for himself as a painter. He studied art in England but earned a reputation by painting portraits in America. One of his greatest accomplishments was the painting of "Lafayette". He became known as a leader of American artists. Still dissatisfied he returned to Europe in 1829 to resume his studies. While there, he painted "The Louvre" which he thought would appeal to Americans, had never seen such a collection of masterpieces.

Upon his return trip to America, in 1832, a new spark of interest came to him. He happened into a discussion about electromagnetism based on some of the works of Faraday. "Drawing sparks from a magnet" suggested to the mind of Morse, that messages in code form could possibly be sent over a wire. Being ignorant of the most basic principles of electricity did not prevent him from developing some ideas. That great American belief that "Americans can do anything they set their mind to" became a characteristic mark of Morse. I guess Americans still believe that today.

The next few years proved to be years of change for Morse. His wife died leaving him with three small children. His influence and appreciation for the arts began to decline and further, his mind became absorbed more and more with his new contrivance, the electromagnetic telegraph. Morse read about electromagnets and he realized that he could make one. We need to remember that this was before enameled wire and Ray-O-Vac batteries. He set out to construct one but could not get it to work. He finally went looking for advice. Leonard Gale, a colleague, pointed out to Morse that the wire needed to be wound in an orderly manner, and possibly more important, it had to be wound with insulated wire. Joseph Henry had written about electromagnets years before but since Morse had no education in the area of electricity, he was ignorant of this basic ground work. Henry had already designed a device of the type for which Morse was striving. After much work, Morse developed a working model of the electromagnet and was able to construct a device that would record characters of his crude code.

Morse demonstrated his new device at New York University in 1837 by sending messages over 1700 feet of wire. One of the observers, Stephen Vall, was impressed by the demonstration. He offered financial assistance to Morse if his son Alfred could become an assistant. A business relationship developed and the young Vall went to work for Morse. Vall proved to be a very capable young man and was largely responsible for working out the final form of Morse's code. Vall also refined the keying

mechanism and further invented a printing telegraph that Morse had patented in his own name.

The next few years proved to be lean and hungry years for Samuel Finley Breese Morse. He continued to take on partners who offered to help but were more interested in padding their own pockets. It also seemed that the country was not ready for this contraption yet. Morse applied for government appropriations which finally reached the House in 1843. He was made the butt of many jokes and stupid humor. He left in despair, broke and ready to give up. As it turned out however, after more serious discussion, a grant of thirty thousand dollars was given for a test line of forty miles between Washington and Baltimore.

Construction began but once more the system was fraught with problems of greedy participants. For technical problems, Joseph Henry was again consulted. He suggested that they use bare wire strung along poles using broken bottles as insulators. Their first attempts to lay uninsulated wire underground proved unworkable. I wonder why.

Joseph Henry also provided the ideas for relays that allowed telegraphy to span far greater distances than Morse was ever able to achieve. The thought of a relay never occurred to Morse. Now distances of communications were endless.

The big break for Morse came at the Whig Convention in Baltimore in 1843. Political messages were sent back and forth between Baltimore and Washington. What a great invention the people thought. As a result, the government set aside eight thousand dollars a year to maintain the telegraph equipment as part of the post office. Morse then organized the Magnetic Telegraph Company and ran a line between New York and Philadelphia. A fellow by the name of O'Rielly organized a line between the seaboard and the Mississippi. Wires were beginning to span great distances and in 1848 the Associated Press set up its own wire service. Now it was really off and running and telegraphy over land by wire grew into many branches of industry and commerce.

In 1856, Hiram Sibley organized Western Union and this new form of communications began to take some order.

Morse became a rich celebrity. He had to fight many patent suits. For the success of some he had to deny any help received from Joseph Henry. As with inventions by many people, the contributions of others cannot be overlooked. Joseph Henry, Faraday, Alfred Vail, and Leonard Gale contributed greatly to the inventions credited to Morse. Certainly tenacity and vision were great assets of Morse. Regardless of who gets the credit or who deserves the credit, Morse's contribution was an important one to communications as it developed in the years to follow.

WB9BB1

HEAD WORK

What is the four-digit number in which the first digit is $\frac{1}{4}$ of the last digit, the second digit is 6 times the first digit, and the third digit is the second digit plus 3?

KA9YYQ

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