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An ARRL Special Service Club

AARA

Meets at the **Colonie Community Center** 1653 Central Ave.Colonie

Friday Jan. 8

Social Hour 6:45 PM Board Meeting 7:15 PM Meeting 7:45 PM refreshments are available

> Talk-in repeater 145.19 (-) MHz

Happy New Year 1999



AARA web site: http://users.aol.com/k2ct/index.htm

Are You Changing Your Address:

Please contact Bill. For address corrections write to

Bill Nettleton, K2BX 7 Frederick Pl., Troy, NY 12180 or e-mail at k2bx@msn.com

January Meeting Keeping it easy (snow is possible)

Warm up your left foot for the January meeting. K2XA has volunteered to dig out the old key and help organize a little QLF competition. Plus DX Talk, Operating Talk, Contesting Talk etc. I would like to take a little time to talk about the up coming year. If there is a certain type of program you would like to see, we can talk about it. VP Ernie, K2EP

Tickets for the **raffle** should be ready. This year's prize will once again be a **dual band** mobile rig. We hope to make \$1000 on the raffle.

Pay your 1999 Dues \$15/year Checks should be made out to AARA and sent to: Saul Abrams, K2XA, 307 Maple Rd., Slingerlands, NY 12159

LETTER TO EDITOR

Dear mike,

I have been to a lot of radio club meetings since the fall of 1957 and I must say that this December's meeting will truly standout in my mind as one of the best I have attended in a long time. It was nice to see nearly everyone glued to the tube for the entire presentation, and that was because you didn't need a degree in mathematics to follow the beloved subject -- antennas!!! For those of you that missed this video, all I can say is you missed one of the best presentations that I have seen in 40 years. Outstanding presentations such as this are what make clubs outstanding!!!

John, K2SIG

B+ Term

B+, the positive dc voltage required for certain electrodes of tubes, transistors, etc. The positive terminal of a B power supply.

B power supply, A name used sometimes for the unit that supplies high-voltage dc energy to a tube plate or screen circuit.

Results of the **1998 AARA SPRINT** Held Dec 10, 1998

Congratulations to Seymour (K2XF)for his first place effort. Only a seasoned competitor knows how to get that one Q nobody else could (N2LBR) Persistence pays off. Here are a few hints for you first time contestants:

- 1.Always sign your name and call on your log sheet. It makes it a lot easier on the scorekeeper.
- 2.Times in GMT should be entered for each contact.
- 3.Signal reports are a must. A simple note saying all reports sent were 59 is fine. You must enter

the report given you on each contact. It's part of the exchange.

4.To simplify evaluating a signal, use the K2QF rule. "If you can hear him, he's a 59. If you can't he's a 57."

K2XF	26
N2MQQ	22 *
K2SIG	22
K2ONP	22
WD2AJS	18 *
KB2HPW	14
K2ZP	14
N2UZQ	12
WAIKKM	8
K2EP/2	5
N2LBR	1

H&K Lite: Robert Lachance, KC7RJE, says he's found a great way to package ham gear you're taking on the road: While

gear you're taking on the road: While recently planning my vacation, I was concerned about packing my new H-T to avoid damage while traveling On a recent visit with a friend to a sporting goods store, he showed me a gun case he was buying. I decided I'd buy one too, but for my H-T, not a firearm! The case is lined with soft foam rubber and has a rigid plastic exterior. The case will hold the H-T, antenna, AC adapter, spare battery, and other small items of equipment. They're available in a variety of sizes, too. (No reason why one of these wouldn't make a great carrying case for a larger transceiver of the HF mobile variety for DXpeditions and the like, too.--Ed).--Robert E. Lachance Jr, KC7RJE, Las Vegas, Nevada

H&K Lite items have not been tested by the ARRL unless otherwise stated. Although we cannot guarantee that a given hint will work for your situation, we make every effort to screen harmful information. Send technical questions directly to authors, not to the ARRL. We invite you to share your hints with fellow hams. Send them to "H&K Lite," ARRL, 225 Main St, Newington, CT 06111 or via e-mail (preferred) to Rick Lindquist, N1RL, **n1rl@arrl.org <MAILTO:n1rl@arrl.org>**. Please include your name, call sign, complete mailing address, a daytime telephone number, and your e-mail address. Authors are compensated for items used.

INTERESTING FACTS ABOUT AMATEUR RADIO By Steve Hurst, KA7NOC

CW stands for "continuous wave", most hams refer to Morse code when they talk about "CW". So what does CW have to do with Morse code ? Morse is the code used via the CW medium, or "mode", of communication. Morse code can be created by means of a flashlight, signal flags, mirrors, even a stick hit against a water pipe can be used to communicate with Morse code, or any code for that matter ! Telegraph operators used Morse code over the telegraph wires back in the 1800's to send messages. These messages were known as " telegrams ". People of that time relied on the telegraph operators to pass information over great distance's. Telegraph operators also checked the current weather conditions across the country, making sure that the trains ran on schedule. So, it's no surprise that when radio came along at the turn of the century. Morse code became the standard in communication, as many telegraph office's went "wireless".

As the art of radio progressed, most ships became equipped with transmitters and receivers. Those ship-to-shore operators used Morse code as their only means to communicate with other ships and land stations. The *R.M.S Titanic* used Morse code to send its ill-fated destress signal "C Q D". Of course the amateur's were using Morse code all along. They used home made "spark gap" transmitters to send their messages around the globe. These primitive transmitters took up enormous amounts (by today's standard) of radio spectrum !

Ok, so what is morse code ?

Morse code is named after its inventor Samuel F.B. Morse <u>http://pacmedia.com/fecha/saints/morse.html</u>, 1791-1872. Morse invented the code (and the electromagnetic telegraph) in 1836. The code consists of a series of dots and dashes. Each letter of the alphabet and numbers 0 thru 9 have individual combinations assigned to them. For example, the letter "E", is a single ".", or "dit". Making it the easiest letter to learn ! The letter "O" is "- - -", or "dah dah dah", another fairly easy one to learn. Most are not that easy, but with practice and determination, it can be done. Some people can copy code at speeds of up to 70 words per minute! Of course that is more the exception than the rule, most hams copy code in the 10 to 30 words per minute range. Once you get over the learning curve, morse code becomes a second language, you begin to hear "words", not just each individual letter. You begin to recognize the rhythm of the words so you can easily pick them out and follow along with the conversation.

The oldest radio service

Amateurs have been around since the beginning of radio itself. Many individuals built, communicated and experimented with radio. They communicated using Morse code, that strange configuration of dits and dahs still holds the fascination of many operators today. Amateur's, or "hams" as we are known, have been at the forefront of radio technology. Many hams have pioneered the art of radio and provided experimentation, which has led to many of today's high tech. communication capabilities. A good example of this experimentation is communicating thru a PC. Hams also communicate with computers, but instead of using the phone lines to transfer the information, we send the information over the air waves using HF or VHF/UHF radio equipment. An example of computer communication on the amateur radio bands, is called "RTTY", which stands for RadioTeleType, better known as simply teletype. RTTY is a very fun mode of communication, and much simpler to participate in with the advent of the desktop personal computer. Another example is called "packet", whereby "packets" of information are sent at the same time, arrive at their destination, then wait for a reply. There is a whole network across the country linked together via VHF/UHF repeaters to carry messages back and forth thousands of miles away.

<u>B - P L U S + S W A P S H O P</u> free ad to members send or call Mike, WD2AJS

For Sale: 1999 Ultimate Entertainment Books at a cost of \$40.00/each. The profits from the sales are going to the AARA Repeater Fund. See George, K2ONP at the meeting.

Upcoming Events..

January	9-10	North America QSO PartyCW Jan QST North America QSO Party Phone	
	15-17		
	23-25	VHF Sweepstakes	Dec QST
	29-31	160-meter DX Contest	Jan QST
Feb.	20-21	ARRL DX Contest CW	Dec QST

AARA RAFFLE should be ready soon.

This year's prize will once again be

a dual band mobile rig.

We will need all members to sell, sell, sell.

Tech Talk Dave, KB2HPW

Well now that winter is here, and we're all forced inside, now we have time for all our homebrew projects, right? Yeah, I know time is tight, but once a work station is put together it's a lot easier to sit down and start a project. It doesn't cost a lot either; just basic tools and with some creativity, everyday items can be used to help build that project you've been thinking of.

Of course an important item in the workstation is a soldering iron. A soldering station with a temperature control will prolong the life of the tip and give more control for sensitive work. However with proper care a basic 25-30 watt pencil iron will provide years of service. It's a good idea to keep a damp sponge close for occasional cleaning while working, and tinning the tip will prolong it's life as well as making it easier to use.

Other items such as cutters and pliers make work a bit easier. Electronic supply stores sell high quality tools that withstand everyday use, but many hardware stores sell small tools that are a good value for occasional hobby work. Even automotive stores and craft supply stores are good sources for small tools suitable for electronic work.

Now comes the fun part! Some "specialized" tools you may already have! Common household tweezers make grabbing small parts much easier. Need a helping hand? Fastening some clothespins to a block of wood makes a nice fixture for holding circuit boards or holding parts together for soldering. With many kits, parts are shipped in small bags, which can be lost when sprawled out on a table. Instead use an old ice cube tray or a muffin pan to separate parts for easy assembly. With steel screws, nuts and washers a refrigerator magnet can keep them from rolling around. Your creativity here may reveal many other such "tools" that you already own.

So there you go, some examples of how to keep the cost down and yet enjoy some project building. It doesn't have to be expensive, in fact the whole "work station" can be put into a small cardboard box and taken out when needed. So pick a project, open up the box and have fun tinkering!

My Christmas Gift to Ham Radio

OK, here's the deal.

I'm willing to forgo the enormous profits that could be made by this idea because I feel it is too important to Amateur Radio to be rationed out for mere profit.

I propose that ALL hams erecting a tower, with or without a permit do the following: Construct 3 vertical dipole antennae with associated stand off brackets. There probably should be make of PVC pipe. Mount these near the top of your tower.

Since these antennae will be modeled after cellular tower transmitting ones the following will happen: NO ONE will complain about your tower - they will assume that it belongs to TPC (The Phone Company for those not familiar with the phrase).

They will keep their children, dog and cats indoors to prevent them from getting cancer because of the 'radio waves'.

Cellular phone sales and use will double in your area and as more people walk around the supermarket grinning, smiling, and talking on their phones the amount of problems we receive for phone RFI on 40 meters will almost disappear.

And some irresponsible guy will probably invest \$50 in materials and thousands in advertising and sell them on some shopping channel for \$49.95 plus shipping and handling.

Fred, k2fr@juno.com (Fredrick R. Gern)

SSTV for free? By Ernie Mills, WM2U Have you ever tried SSTV? Are you looking for a new mode to play with?

well I was but who has money for a fancy Robot type SSTV system? I was rag chewing with a friend of mine, Frank VE3ZN, who put me onto a web site that will let you download a free (unregistered) version of their SSTV software, and the hardware requirements, other than a computer system and an HF rig, are zero. That's right! you don't need fancy Modulators, Demodulators or even a TNC. We had found W95SSTV.

W95SSTV is, in a nutshell, a Slow Scan TV Program written for computers running WIN95 or NT. It uses the computers sound card as an Analog-to-Digital converter for receiving or a Digital-to-Analog converter for transmitting. It is a true 32-bit program and will share processor time and resources with other 32-bit programs such that you could surf the web, run a word processor or whatever at the same time as running SSTV. You will find this at: <u>http://www.siliconpixels.com/w95sstv/</u>

But first check out your Computer. The System requirements are:

CPU, 80486-DX/2/66 or higher. Pentium preferred. RAM, 8mb minimum, 12mb or more preferred. SOUND CARD, 16-bit sound card with true Windows 95 drivers installed. VIDEO, HighColor or TrueColor video at 640*480 res. Or higher. The more muscle your system has, the better it will be!

It supports most of the common modes, Scottie 1&2, Martin 1&2, Robot 36&72, AVT 24, 90&94 and Wrasse. It stores 60 thumbnail images for TX and handles 4 on RX. You can prepare a picture while you are receiving or transmitting another. It has the ease of full windows conveniences like drag-and-drop, mouse control, Save and Load windows, and many more functions. The system can Auto-Receive pictures, modes, and will even sequentially number the images in Auto-Save Mode.



B-PLUS+ Jan. 1999

Connecting it up is very simple. My friend Ian, VE3CZ has simply connected the Audio from the rig's speaker to the Line IN of the sound card, connected the Line OUT to the rig's Mic input and adjusted his VOX to trigger the PTT line. I bought small transformers from Radio Shack, \$5 tops, and isolated my Line IN and Line OUT on the sound card from the Rig. I used a 2N2222 transistor to trigger the PTT line from the accessory socket at the back of my rig and use the RTS line from the serial port to control the Transistor. Although this software handles 13 image formats the unregistered version only permits BMP formats. I used AdobeDeluxe to convert some GIF files to BMP.

It works. It works well. The freq's are 3.845, 7.171, 14.230, 21.340 and 28.680. It is no use me continuing with this epistle as Jim, N7CXI has done an excellent job with the help files. Please read Release.txt. Greater details on the interfacing will be coming soon!. 73, Ernie

edited by Mike Bergman, WD2AJS, 45 Swartson Ct., Albany, NY 12209 489-3110 and April Stack, K2ZCZ. **Articles** and B-PLUS+ **Swap Shop items** accepted and solicited via mail, phone, or e-mail at michaelib@aol.com. Permission to reprint is granted if credit is given for article source as "Albany Amateur Radio Assoc. B-Plus"; and credit for specific bylines to the author when so identified. The contents of this publication are copyrighted in all other respects.