



SINE WAVES

NEXT CLUB MEETING

Thursday April 16, 2009

SJARA CLUB MEETING March 19, 2009

Meeting was called to order by N8YPE at 19:40.
Eight in attendance.

Reading of the minutes of the previous meeting were waved due to minutes published in SJARA Sinewaves published earlier this week.

Treasurer's Report by K8TPH
Previous Balance last meeting: \$1725.19
Check paid to 3WLogic for Domain name/Web Site Hosting \$35.00
Deposit: \$38.00 from Dues
Interest added this month \$.15
Present Balance: \$1728.34

Introduction of all present.

New Business:
Get Well Card presented by N8YPE and was signed by everyone present

CLUB WEBSITE

Don't forget to check the club website for the latest club news and happenings

www.sjara.org

Check-in on the club net which is held every Tuesday at 9:00 P. M. on the 147.210 repeater. This repeater requires a PL Tone of 103.5 for access.

to send to Bill Williams, K8WWW in intensive care at Ruby Memorial Hospital. Bill had fallen and broke 7 ribs and punctured his lung. He is awake but very serious.

Report made by K8TPH on Echolink and being connected to HAMTALK system with reports of many DX contacts and increased activity on the repeater system. Jason's (KD8FDD) new Central WV Training and Traffic Net seems to be successful
With 5 check ins on first night and 14 check ins on second meeting of the net. Most

check ins were via HAMTALK with 1 via Echolink.

A note was made that Hal (N8FXH) may be available for a overview of written Messages via the NTS and handling of traffic and training at the next meeting on April 16, 2009.

Net controls listed for Tuesday Night SJARA Net, March 14 K8TPH, March 31 KD8FDD, April 7 K8TPH, April 14 WD8NSC.

Echolink

I keep getting questions about Echolink.

1. How does it work?
2. How do I use it?
3. Who can I talk to.?
4. How does it work with a repeater.
5. How do I get into Echolink from a repeater.

These are just a few questions I have heard concerning Echolink and Repeater use.

Repeaters are used to give someone utilizing a Hand Held transceiver with low power output or mobile units with limited range so signals can be sent over a greater distance.

First there are repeaters that use two frequencies to operate. A repeater is defined as system where a signal is received on one frequency and transmitted on another frequency, either simultaneously or immediately, depending how the FCC wants to define a repeater.

Second there are repeaters called simplex repeaters which receives a signal, records for a set amount of time then when the input stops, the repeater re-transmits the signal on the same frequency.

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Simplex repeaters are very popular with operators of Echolink, where a transceiver is attached to a computer where the input to the receiver goes to the computer thus sending your audio through the Internet to another computer and the audio coming back to the computer is then transmitter on the same frequency to the radio operator. It is a two way conversation while sending only one direction at a time, normally call the

“over procedure” just like talking simplex that hams should be very familiar.

If a two frequency repeater is used with a computer operator of Echolink then the signal input is received audio is passed to the computer and the audio returning through the computer link will transmit the audio on the input frequency of the two frequency repeater. This is also the “over procedure” talking one direction at a time. If you don’t you will be told you are “doubling”.

As everyone knows, repeaters or any signal transmitted over the air can be heard by anyone that has a receiver, thus this makes it just like the “old party line” on the telephone that many older people are very familiar.

Echolink is the same thing except it uses Voice Over Internet Protocol (VOIP) and anyone that has the Echolink software installed on their computer and is a register, licensed Ham Radio Operator can listen in. All of these computer links are called “Nodes” and is assigned a number. All registered Node can connect to another Node thus making all of the Nodes operate as a single “party line”.

If you install the software and you are registered with Echolink registry and on your computer you will see a list of Nodes. Usually as many as 4000-5000 at any given time.

Some are listed as just individual operators with just their individual call sign, others are listed as links (CALL SIGN-L), some listed as repeaters (CALL SIGN-R) and then last but not least the ones listed as CONERENCES (*NAME*).

To the radio operator (links and repeaters) appear to operate the same and the only difference is the type of connection that has been registered with Echolink.

If you do not want to operate Echolink from your computer you do not have to download the software and install it to get a Node listing. You can go the Echolink web site

HYPERLINK "<http://www.echolink.org>" <http://www.echolink.org> and click on “Current Logins” and you can obtain all Nodes that are currently active.

Some Nodes that are connected to repeaters and links have the ability to be controlled by the radio operator by the use of sending tones from the keypad on their microphone.

The tones are called DTMF (Dual *Tone* Multi-Frequency) not to be confused with CTCSS which are the sub audible tones sent by a radio to activate entry into a repeater.

Most Echolink Nodes that are connected to a simplex repeater system use DTMF tones, just like the touch tones on a telephone receiver by the radio operator to send Node numbers to connect. (The information of whether an Echolink Node accepts DTMF must be obtained from some source such as web sites or listings on QRZ.com under the call sign listed for the Node.

If you are on a repeater, either simplex or a two frequency repeater and the repeater is connected to a Node, when you talk your audio is going over the Internet and any anyone coming back on the Internet is heard by everyone that is listening to the repeater.

When you are connected to a CALLSIGN-L, CALLSIGN-R or a Conference anyone else connect to the same Node can hear everything you are saying and they can talk to you, this is the same as a “party line” as previously mentioned.

Nodes listed as CALLSIGN-L, CALLSIGN-R are normally limited to a small number of connections where CONFERENCES list the number of connections that it can handle which can be from a few to several hundred or thousands.

As an example, K8TPH-R allows a small number of connections and then will be listed as busy and no one else can connect to K8TPH-R, but K8TPH-R is normally connected to a conference, such as “USA” which allows 1000 connections, thus allowing up to the 1000 connected Nodes and all can hear each other. Also if you connect to K8TPH-R directly and it is connected to the “USA” Conference you are also connected to the “USA” Conference.

If you don’t understand the procedure just ask your 6, 7, or 8 year old and they can explain to you how a “Chat Room” works. Echolink is just a great big Audio Chat Room. All you have to do is know which Node (Chat Room) you want to join.

I hope this helps explain a little about Echolink.

NET CONTROLS		
April 7, 2009	Dick Wilt	K8TPH
April 14, 2009	Dave Morris	WD8NSC