Eastern Arizona Amateur Radio Society

EST. 1974 INC.

www.eaars.com

facebook.com/k7ear

Club Address: EAARS, PO Box 398, Solomon, AZ 85551

December 2016

LIKE EAARS on Facebook

EAARS has a presence on Facebook and you are invited to **LIKE** the page. This is a great media to quickly share news, photos and events that are EAARS related or might be interesting to the members. If you utilize "Notifications" on the EAARS Facebook page, you can receive club updates AS THEY HAPPEN. To reach the page, please visit **facebook.com/k7ear** and **LIKE** the page. Face book accounts are not needed to "visit" the page, you will only be able to read and not participate.

Welcome New EAARS Members!

Dave W7DLM
Victoria KI7GFK
Steve NM2J
Joseph KI7HZG

EAARS Open Repeaters

PL 141.3 unless noted otherwise

Echolink: 614350 **IRLP:** 7787

Heliograph Peak at Safford, AZ:
146.860, 440.700 Linked
146.900
Jacks Peak at Silver City, NM:
145.210 Linked
West Peak at Ft Thomas, AZ:
145.350 Access to link to network
Pinal Peak at Globe, AZ:
145.410 Linked
South Mt at Alpine, AZ:
145.270 Linked
Caballo Mt at TorC, NM:
145.470 Linked
Greens Peak at Show Low, AZ
146.700 Linked
Little Florida at Deming, NM:
147.060 Linked
Mule Mt at Bisbee, AZ:
147.080 Linked
Mt Lemmon at Tucson, AZ
147.160 Linked
Guthrie Peak at Clifton, AZ:
147.280 Linked

Gals on the Air!

Calling all Gals of any class ... Join us every Monday night for the

Gals Night Net @ 7:30 pm (AZ) on the EAARS system!

Upcoming Events

Would You like to see your event posted for the membership to see? Email your information to emberfire@cox.net.

December 10, 2016 - Tucson Marathon

Did you know that you can see the Public Service Opportunities on soazhamservice.net? The events are posted by dates and who leads them. If you are interested in participating or have any questions, please feel free to contact them.

WEEKLY EAARS' NETS

Every day:

Down Under Net - 4:15 am
Weather Net - 5:30 am
NTS Traffic Net - 6:30 pm

Sunday:

EAARS Net - 7:00 pm

Monday:

Gals Night Net - 7:30 pm

Tony KG7YTS is trying to start a Youth Net on Saturdays at 5:00pm, here on EAARS. Get your kids on the and let's support this youth net!!

Wednesday:

Skywarn Net - During Monsoon, Every Wednesday at 7:30 pm, Off Season, every second Wednesday of month at 7:30 pm

Saturday:

ERC (Emergency Response Communications) Net -8:45 am , 2nd Saturday of the month (20-25 min duration)

2016 Officers and Staff

Board Officers		
President	Dave Wells	N7AM
Vice President	Dan Quaintance	AF7EF
Secretary/Treasurer	Larry Griggs	N5BG

Staff		
Site Trustee	Joe Montierth	K7JEM
Net Manager	Chris Buchanan	N7JND
Newsletter Editor	Angie Buchanan	N7EMB
ARCA Rep	Byron McCabe	AA7BM

Net Control Operators		
Rick	KE7EDP	1st Sunday
Angie	N7EMB	2nd Sunday
Bob	KD7LMV	3rd Sunday
Chris	N7JND	4th Sunday
Karl	N7DMA	5th Sunday and fill in

2017 ARCA Young Ham of the Year (from the ARCA website)

Nominations for the 2017 ARCA Young Ham of the Year are currently being solicited. Nominees must be under the age of 18 years and should have made contributions to the hobby. Letters of nominations must be made by an ARCA Affiliated Club on club stationery and signed by a club officer (not related to the nominee). The letter should list the reason(s) the club feels the nominee is deserving of the honor. Nominations must be received by ARCA no later than May 1, 2017 to allow time for compilation of the nominations, voting, and plaque preparation. Voting is done by the last 11 recipients of the Ham of the Year award. Results will be announced at the 2017 July hamfest.

Letters of nomination should be sent U S Mail to:

ARCA - Young Ham of the Year Award
16845 N 29th Ave., #312
Phoenix, AZ 85053-3041

Remember - Nominations must be received by ARCA no later than May 1, 2017.

The EAARS Courtesy Beep

By Chris – N7JND

We've all heard the courtesy beep after every transmission on the EAARS system. But why is it there? What's its purpose? And most of all, why should we pay attention to it? WHY WHY WHY???

If you ask a group of people what they think of a courtesy beep, it will probably be split in half. Some people like it and some people don't. But whether you like it or not, it does serve two valuable functions on the EAARS system. I will explain the two main purposes below…

First of all, you will notice there's a timed space between the time the person un-keys their microphone and the courtesy beep sounds. It's this timed space that provides a moment of silence to allow any emergency traffic to break in. If someone urgently needs the frequency, it's that space where they will most likely call. Although it's more commonly used for "COMMENT", "BREAK", ETC… We've all accepted that there are going to be those that must break in with constant COMMENTS. But, the space should ALWAYS be reserved for EMERGENCY break-in's. Please keep that in mind if you are always breaking in with a COMMENT. Our number one purpose for Ham Radio, is to handle emergencies. We should always be on the alert for such a call.

Secondly, there are so many times I hear people key up immediately after someone un-keys their microphone. THIS IS BAD RADIO PRACTICE. First of all, you are not allowing time for Emergency Traffic to break in. You are also preventing the repeaters the chance to reset their TOT's (Time Out Timers). It's only after the courtesy beep sounds, that the time out timers are reset. If you and the party you are talking to continue to "Quick Key" and continue to ignore the courtesy beep, you WILL time the system out after approx. three minutes. And then someone will usually come on and have to educate you on the courtesy beep. Also, with that in mind, you are NOT required to wait for the repeater to drop out to take your turn. That in itself can become quite annoying. Just simply wait for the courtesy beep and continue and enjoy your conversation.

So, that's the TWO main reasons there is a courtesy beep on the EAARS system. It serves a great purpose for being there. Please respect it and ALWAYS listen for it.

MEMBERSHIP

Greetings EAARS members:

It is once again that time of the year that EAARS conducts its annual membership renewal campaign. We would like to say thank you all for your support of the club. As the saying goes "We cannot do this without the help from people like you". We ask for your continued support for the 2017 calendar year.

As we have done in previous membership renewal campaigns, those members renewing their 2017 dues by December 15, 2016 will be entered into a drawing for a gift certificate to Ham Radio Outlet. This drawing will be held at our first meeting in January of 2017. You do NOT need to be present to be drawn.

Membership dues can be paid in several ways:
***First:** Just send a check, m/o, or cash for $24.00 with your call sign and name noted, to our club address as follows:
EAARS, PO Box 398, Solomon, AZ 85551

***Second:** Come to the next EAARS meeting on November 15th in Thatcher. Mainly for local members.

***Third:** We have paypal available for those desiring to use that service. **Go to our website: www.eaars.com/pay**
Follow the instructions and be sure to include your callsign on the form. Note there is a $2.00 fee for using the paypal option. This option is for your convenience if you so desire to use it.

Thank you to those who have already renewed! Way to stay on top of it! EAARS wishes to Thank ALL of YOU for your continued support of the club, and its linked repeater system.

Larry Griggs N5BG
Secretary/Treasurer

Santa Is A HAM!!

I bet you didn't know that Santa is a Ham! Yes, he has had his license for quite some time and his call is **Winter Wonderland 6 Frosty**, WW6F! I heard he does a lot of nets around the world so I reached out and made contact with his elf, Chippie. Chippie stays with us for the month of December. He helps me out a lot with the kiddos at Soleng Tom Elementary and he hooked me up with Santa! Santa has agreed to link in to two nets here in Arizona! Yes, he will be talking to the parents and kiddos of the EAARS system! Wow! I am so excited! We get to talk to Santa on the Air!

Santa will be on these two nets coming up! Mark your calendars.....

SANTA RADIO HOUR ON EAARS!

Tuesday, December 20th, 2016 7:00 pm (AZ time)
Friday, December 23rd, 2016 7:00 pm (AZ time)

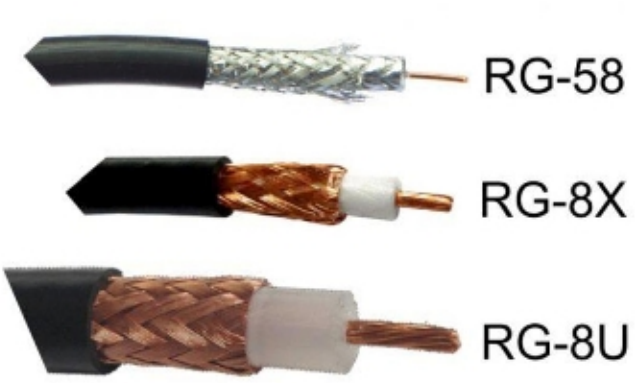
I, Angie N7EMB will host the net and introduce Santa. Parents will be required to check in and your child can talk to Santa as third party traffic. Santa will talk to the parents first to ask if the child has been naughty or nice. If you would like to personalize the conversation a bit, you can send some personal information about your child (remember over the air) that you would like to share with Santa to my email address (emberfire@cox.net, no links please) at least one hour before the net so I can get the info to Santa.

We hope to make this fun! I don't know how many will participate but let's be prepared for at least an hour net, just in case. So if your kiddos aren't making good choices, you can use this as a threat! We get at least a month to try to keep them on the straight and narrow. Hi Hi Hope we can make these fun for the kiddos (and parents)!

Which Coaxial Cable Should I Use?

Coaxial cables are the most popular form of transmission line for getting our signals to and from our antennas. There are many types of cable to choose from and it can be confusing to choose the best one. In this article, we'll cover the most common choices of cable to get you started. We'll focus on the most popular cables, with 50-ohm impedance to match the output impedance of our transceivers.
Here's the really simple, short story:

Type	Diameter	Usage
RG-58 type	0.194 in	Standard cable for mobile installations
RG-8X type	0.242 in	Larger and lower loss than RG-58 but still convenient for shorter cable runs and jumpers, Up to 50 feet in length at 50 MHz or below (Rule of Thumb) Up to 25 feet in length at 146 MHz (Rule of Thumb)
RG-8U type	0.405 in	General purpose coaxial cable, best for long cable runs



At one time, RG-58, RG-8X and RG-8U were military standards but now these terms are used rather loosely and refer primarily to the size of the cable. Accordingly, I added "type" to the term to indicate that it is not a precise standard.

All three of these cable types will handle 100W or more at frequencies below 500 MHz, which covers most ham transceivers. If you are running more than 100W, you should check the power specification of the cable you are using.

Signal Loss

All coaxial cables will attenuate the signal as it travels down the cable and the signal loss can be significant. For example, 3 dB of signal loss means that you lost half of the transmit power as it

propagates down the line. This loss applies for both transmit and receive... we'll get less power out to the antenna and we'll have less signal showing up at the receiver.

The cable loss will be determined mostly by the size of the cable (bigger is better), the dielectric used in the cable (the insulator between the center conductor and the shield) and the frequency of operation. As an example, consider a 100 foot run of cable for use at 146 MHz, which is high enough in frequency and a long enough run such that we'll see some significant losses. According to the Times Microwave calculator, 100 feet of RG-58 style cable produces a loss of 5.5 dB, which means that only 28% of the power gets through the cable. (The percent power delivered is shown as *Cable Run Efficiency* in the calculator.) This is not good, so we would rarely (never?) want to use RG-58 for that long of a cable run.

Changing the able to RG-8X drops the loss to 4.5 dB, which is only a minor improvement. (4.5 dB loss corresponds to 36% of the power makes it through.) However, using RG-8U type cable decreases the loss to 2.4 dB (58% of the power makes it through the cable), so clearly the larger cable size has an advantage. Now let's change the dielectric. LMR-400 is a popular cable that has the same diameter as RG-8U but with a lower loss dielectric (Foam PE). The 146 MHz loss through 100 feet of this cable is 1.5 dB, or 0.9 dB better than ordinary RG-8U. A loss of 1.5 dB means that we still lose 30% of the power.

Now let's see what happens when we change the frequency of operation. If we use our 100 foot run of LMR-400 on the 20m band (14 MHz), the loss is only 0.5 dB. This means that 90% of our signal power makes it through the cable.

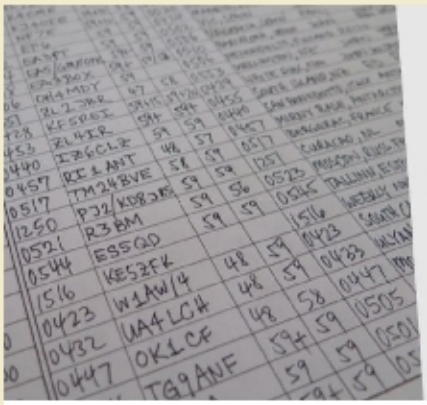
Other Specifications

There are a few other cable specifications that you may be concerned about, depending on application. Cables with solid center conductors are less flexible than those with stranded center conductors. The dielectric material and the outer insulating jacket can also affect the flexibility of the cable. For portable operations, I make it a point to get cable that is rated "flexible" because it is easier to handle and deploy. Direct burial cable has a durable outer insulation that will withstand being buried in the ground. The type of outer shield used in a cable can vary widely, with some cables providing much more shielding and isolation than others.

This is a quick introduction to choosing the right cable for your amateur radio station. I hope it points you in the right direction. It's always a good idea to buy quality cable from a reputable supplier and to read the specifications for that exact cable type.

73, Bob K0NR

URL: http://www.hamradioschool.com/coaxial-cable-use/



KF5TJP

Amateur radio logs: From paper to digital
Cost effective and 100% accurate

Why Use Electronic Logbooks?

Electronic logbooks offer a powerful way to manage and confirm your QSOs. Electronic logbooks are the way of the future and are used by a growing number of hams across the world. Nevertheless, transcribing years of paper logs to digital format can be a daunting and time-consuming task.

My Services

KF5TJP solves this problem. I offer convenient, cost effective, and 100% accurate transcription of paper logbooks to digital ADIF format. Your valuable paper logs are kept confidential and secure, and are returned to you with the ADIF file upon completion.

Take the Next Step

Visit my website at **kf5tjp.weebly.com** to request a quotation or contact me directly at **colin.hehlen@gmail.com**

EAARS Officers and Staff would like to Wish You and Yours a