

High-Country Static

July 2016

News and Information Concerning
 Amateur Radio in Northern Arizona and
 Beyond

Welcome to the Coconino Amateur Radio Club (CARC) Monthly Newsletter. CARC is a non-profit club devoted to providing communication services to local volunteer agencies and events. Meetings are held the second Thursday of each month at the East side Sizzlers Restaurant Highway 66 at Fanning Dr. Flagstaff, at 7:00PM. All persons interested in amateur radio, whether licensed or not, are welcome to attend.

Coconino SkyWarn meets 1900 every Monday evening on the 146.98 repeater and at 1930 on the Navajo Mountain CACTUS repeater and 146.480 simplex.

Coconino ARES meets 1900 every Wednesday evening on the 146.98 repeater and at 1930 on the Navajo Mountain CACTUS repeater and 146.480.

Officers:

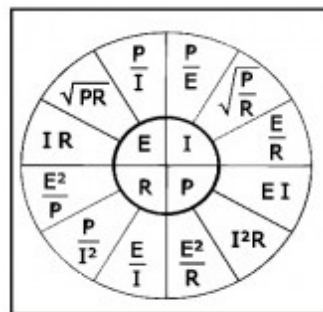
President: Sandy Meadowcroft KF4JHC

Vice-President: Tom Shehan KY7WV

Secretary: Erv Perelstein, KE7QFI

Treasurer: Pat Traber, KE7QFG

Newsletter: Janice Enloe, KI6WCK



E = voltage I = current
 R = resistance P = power

Calendar of Events for 2016:

- July: 4 Munds Park Parade
- 17 Snow Bowl Hill Climb (KF4JHC)
- 23 Amateur Radio License Exams at
 Williams Hamfest/Arizona State Convention (W7LUX)
- August: 6 Toys for Tots/Fat Tire Bicycle Ride (Mike, Ron & Tom)
- 13 Big Brothers/Big Sisters Run for the Magic (Bob Meadowcroft)
- 28 Arizona Trail Marathon at North Rim
- **Northland Preparatory Academy to ISS amateur radio contact during
 Aug-Sep-Oct
- September: 5 Williams 10K Labor Day Run
- 24-25 Flagstaff to Grand Canyon 100 Mile Run

October: 8 Soulstice Mountain Trail Run (KF4RKS)
15 Amateur Radio License Exams at North County Health Care (W7LUX)
?? Northland Preparatory Academy solar observing (W7LUX)

November: ?? Arizona Division of Emergency Management Exercise
?? Girls on the Run (KF4JHC)

December: 3 SkyWarn Recognition Day at NWS Belmont (UTC date) (KD8RQV)
11 Christmas party- Sandy and Bob Meadowcroft's home

Thank you and Help Wanted:

Thank you to all who have run the Monday and Wednesday night nets:

Flagstaff: Tom KY7WV, Erv KE7QFI, Mike KD8RQV, Bob KF4RKS, Janice KI6WCK

Page: Lee KF7YRS and Vince WB7UWW

If anyone one would like to help with the nets, please let Tom know. It is good practice for radio skills and the script is written for you to use.

Licensing Exams for 2015-2016:

July: 23 Radio Exam at Williams Hamfest

October: 15 Radio Exam. Location TBD

Remember to bring your HAM license and a copy (if you are upgrading your license), a government issued picture ID, a black ink pen, calculator with memory erased and fifteen dollars (exact change is appreciated).

<http://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp>

Arizona Newsletter: <http://www.arrl.org>

Tutorials: <http://www.arrl.org/tutorials>

http://www.arrl.org/exam_sessions/flagstaff-az-86004-1221-2

Next Business Meeting:

Our next business meeting will be July 14, 2016 at the East side Sizzlers at the corner of Highway 66 and Fanning. Dinner @1800 and meeting starts @1900.

Minutes of the Coconino Amateur Radio Club

6/9 /2016

Meeting Started: 19:00

Secretary's Report: Since the minutes of the May meeting were published in the newsletter, there was no need for Erv to read them. There were two changes recommended by Joe Hobart; correcting that Flagstaff Stamp and Engraving can provide name tags but not vests and that the new antenna for the Mt Elden 146.98 repeater will be replaced this summer or fall. These corrections were noted and corrections will be made to the May minutes. Scott Martin made a motion and Joe seconded the motion to accept the minutes as corrected. They were approved unanimously.

Treasurer's Report: Pat Traber, our club treasurer, gave the Treasurer's Report. The closing bank balance was \$3,771.75. Membership is 54 members, consisting of 50 paid members and 4 lifetime members. Pat discussed our CARC insurance situation. Since there was nothing additional for the Treasurer's Report, Tom Shehan moved and Bobbie Brunner seconded a motion to accept the Treasurer's Report. Unanimously accepted.

Guest Speaker: Larry Larkin from the Coconino Sheriff's Office Search & Rescue (SAR), talked to us about the details of having CARC members provide communications backup for SAR. He said the Sheriff's Office SAR Coordinator, Sgt Aaron Dick, strongly supports our assistance but feels that our members will need to have some training in the SAR equipment on the two Communications Vans, Public Service frequencies and radio protocols they use. Of prime importance will be the training of safety procedure SOP's that all SAR members receive. Larry said that SAR will require all CARC assistance to have completed ICS 100 and 700 courses and CERT training, as well. We will be required to be familiar with and use ICS Forms like the ICS 214 form and the ICS 309 radio log. Sandy and Tom said that these requirements were acceptable and they would develop a roster of qualified CARC members to undergo SAR training. Larry will get back to us concerning scheduling of classes after further discussion with Sgt Dick.

President's Report: After Introductions, Sandy reminded us that we are still trying to find a replacement location for our License Exams and Classes. After looking at the Pulliam Airport space suggested last month, it appears to be too small and parking could be a big problem. Nikki Orlosky recommended Finlay Auto near the Mall and volunteered to stop by and discuss our needs with them. She will report back next month. This past April, Jeff Hartig, WA7QPA, the teacher who is replacing Kaci Hines at Northland Preparatory Academy, (NPA), made a tentative offer of a room at NPA for us to use. Sandy said she would contact him and see if the offer still stands. Sandy said she would appreciate any other suggestions by members.

Vice President's Report: Tom told us that last month he asked members who had digital capability to try signing-in for the ARES net last night (6/8/16) using VHF Packet. This resulted in 4 digital sign-ins. This is a good start for getting more members interested in developing a digital capability for use in disaster response. He asked that members continue to use digital sign-ins when they can. He is working on putting together a presentation for the July meeting to get people started with digital communications.

Tom reminded us about the AUXCOMM class held on April 2nd and 3rd and said it was an excellent review of disaster communications and equipment. We are planning on providing a presentation of the AUXCOMM information at an upcoming meeting.

Tom reminded us that the National Parks On The Air (NPOTA) project is still active and will continue to be through the end of 2016. He urged HF Operators to try their hand at contacting

"activators" in as many National Parks as possible. It's fun and excellent practice. You can find the entire schedule at NPOTA.ARRL.org.

Old Business: Since this was the last meeting before Field Day, we spent most of the meeting in reviewing plans and assignments. Tom has circulated a sign-up roster for volunteers to man the SSB, Digital and GOTA stations. There are still some open times for these stations and he asked members to try to fill the vacancies.

In addition to the catered meal of Saturday evening during Field Day, we discussed other snacks and desserts. Betty Gerlak offered to bring vegetable finger food, Tom and Dawnelle will bring fruit, Erv will bring brownies, both Bobbie Brunner and Diane Martin will bring chips, and Sandy will bring Ice and water. A sign-up paper was circulated for those interested in the catered dinner at \$8.00.

Scott Martin reminded us of the tower and trailer maintenance day, to be held on Saturday June 11th starting at 9:00 am at the outdoor market. He also discussed the Field Day set-up day, Friday, June 24th, starting at 9:00 am. This will be a work day to get the market ready for Field Day, Saturday, June 25th at 11:00 am to Sunday, June 26th at 11:00 am. All help will be much appreciated.

Upcoming project review:

6/11 Trailer Maintenance Day, starting at 9:00 am at the Open Air Market. Scott coordinating.

6/25-26 FIELD DAY 2016. Ron Gerlak & team coordinating.

7/4 Munds Park Parade. Pat Traber coordinating. Pat said that the parade organizers might want us to use their cache of radio equipment rather than our ham equipment. She will let us know about the decision. Meet at 9:00 am at the Fire Station in Munds Park.

7/17 Snowbowl Run, Sandy coordinating.

7/22-23 Williams Hamfest, VE Testing on Saturday the 23rd. Joe coordinating.

? ISS communications at Northland Preparatory Academy. Jeff Hartig is NPA contact. The contact will be in Aug, Sept or Oct. We will get date from NASA. Joe coordinating

8/13 Big Brothers Big Sisters Run at Thorpe Park. Bob Meadowcroft coordinating.

8/28 AZ Trail Run

New Business: No new business this month.

ARES Report Joe told us that there are several ARES and RACES HF nets that we are all invited to either listen to or sign-in to. They are run on the State EOC frequencies. There is also a Southern AZ Digital Net on Saturday morning that provides good digital practice. The SATURN Net, (Salvation Army) is on Sunday morning.

Joe reminded us that we are into the wildfire season and there have already been several in our area. He asked us all to make sure we had enough food and water on hand to shelter in place and to keep our VHF radios on Mt Elden frequency to be notified of any immediate danger or help needed.

50/50 Raffle: Scott Martin won the raffle this month and a second drawing for a free Sizzler meal was won by Betty Gerlak.

Meeting Ended: 20:35. Scott moved to adjourn, Dawnelle seconded the motion. It was accepted unanimously.

Presentations: No additional presentations this month.

Morse Code Class Forming-

We have been learning about the newer technologies of digital communications but this class returns to the classic mode of Morse Code (or Code for short).....

W7ZIP- (ZIP) is offering to each code to those that want to learn the language of *...the code...* join us for this new, old style of communication. Classes are free but require a great deal of time with practice at home.

W7ZIP to teach Morse code to CARC members.

The course will teach Morse code and CW operating techniques. The 8-week course will get you operating at 5 words per minute or more.

We will practice actual "on air" techniques using the sample novice Code test format.

You might want to get an early start by downloading a Morse code application for your smartphone or computer.

There are many good applications offered at no charge. Snoop around and test drive different applications.

The classes will be held on Saturday or Sunday afternoons. The starting time will be 2 or 3 p.m. We will begin with a one hour session. I will be available for 30 minutes after class for clarifications, or questions.

There is no charge for the class. There will be take home exercises to be practiced between sessions.

You will need to bring your own:

- Telegraph key
- Pencil or pen and paper
- Headphones or earbuds
- *Code Practice Oscillator*

(* this might be the most expensive component required to learn the code.)

The MFJ -557 Code Practice Oscillator with built-in key and headphone jack can be purchased for about \$40.*

*We will discuss other options for Code Practice at home with your key.

??W7LUX will poll people interested in taking a class.
We need a minimum of 5 devoted individuals.
I could do a short intro and explanation at one of the club meetings.

A little history about telegraphy and identifying operators and transmitters.

As the former owner of Vibroplex (1994-2009) I spoke with thousands of hams and hundreds of former railroad and WU telegraphers at hamfests over the years, many at the Dayton, OH hamfest.

Also, one of my friends was Harold Kaplan, W4KVO (sk), who was a Signal Core intercept operator in WWII. Harold spent three years in Newfoundland copying high speed German telegraphy. The monitoring station had rhombic antennas aimed at the North Atlantic, Europe, Africa, and the South Atlantic, with banks of Hammarlund receivers, state of the art at the time. The Germans had mylar tape recorders (Ampex after the war), they recorded code at 35-40 wpm, 5 letter code groups, and retransmitted the code at 70-100 wpm. The Signal Core recorded the German transmissions on wire recorders, slowed the code down to 30-40 wpm to copy and put the copied 5 letter code groups on a landline teletype circuit to a decryption facility. Some of the operators could copy the code directly off the wire recorder at 50-60 wpm straight to the teletype without having to transcribe!

Of course, the intercept operators were copying 5 letter code groups for many hours a day, for months on end. They became very proficient.

Harold related to me how they could identify individual German operators sending the code, and occasionally would get personal information on the operators and their locations when the operators would chat with each other. They assigned all of the German operators nicknames, based on the particular operator's "fist" and the characteristics of their transmitter. So even with a new German operator, the characteristics of the transmitter 'sound' could give away the transmitter location.

As a new general class ham in 1963, I joined Army Mars – that was how I met Harold. The first thing the local Mars director did to a new member was assign them as net control for a cw net. And, what a way to get your code speed up. Some of the net members would 'check in' to the net at 20-25 wpm, some at 50-60 wpm, almost all using Bugs. As the protocol of the net was fixed, you could muddle through as net control if you could copy at ~20 wpm. However, it only took a couple of months and you were up to at least 30-35 wpm for self preservation. Also, by the time a net member sent their first character or two of code, you knew who the member was. Identification was a combination of the operator's fist, and the characteristics of their transmitter. There would be a slight signal chirp, key click, power supply hum, etc. etc. on the signal. All of the transmitters were tube, of course, and they all sounded a little different.

The old time hams and telegraphers who came by the Vibroplex booth at

hamfests always stopped to chat and send a few characters on one of the display bugs. And every single one of them would say, "this bug needs adjusting", and proceed to make adjustments. That is one of the reasons each operator sounded different on the air, their bug was adjusted just the way they liked it. I spend a lot of time readjusting bugs! A favorite diversion of mine was to have a left handed display bug. People would come up to the display, not notice that the bug was left handed, and try to send with it. They would complain, something is wrong with this bug. I would reach across the table, the bug being 'right hand' for me and send a few characters, and say no, this bug is just fine.

Not many people left who know how to properly adjust a bug, it is a simple 1, 2, 3. I need to make a YouTube video on how to do it.

Mitch W4OA

Also:

I saw on the history channel a story about a British radio installation in France (IIRC) that was taken over by the Germans, who proceeded to masquerade as British operators, hoping to gather intelligence. The British became suspicious and someone got the bright idea to append "HH" to the end of a transmission. The German operator at the other end instinctively replied in kind "HH" out of habit, and blew his cover. "HH" being Heil <you know who>.