

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:

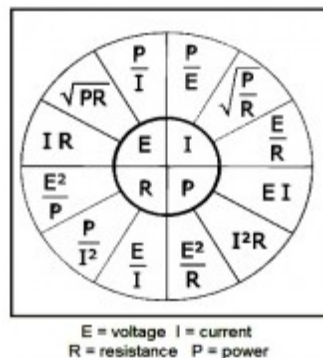
President: Sandy Meadowcroft KF4JHC

Vice-President: Tom Shehan W7TGS

Secretary: Erv Perelstein, KE7QFI

Treasurer: Pat Traber, KE7QFG

PIO: Janice Enloe, KI6WCK



Calendar of Events for 2015:

11/14	Girls On The Run	Sandy Meadowcroft
12/5	Skywarn Recognition	Mike Clever
12/6	Christmas Party @ 1400	Meadowcrofts

Girls on the Run November 14:

We are once again supporting the Girls on the Run race in Buffalo Park. This is a fun/easy event. We arrive around 9 AM and the race is over before noon. If you can assist with event, please contact Dawnelle, KG7LTR at dawnelle@shehans.net or 505.715.3121 (cell) 928.526.5580 home.

Skywarn Recognition Day, December 5:

The Coconino Amateur Radio Club and the Flagstaff Weather Forecast Office will celebrate Skywarn Recognition Day, Saturday, 5 December. The event will begin at zero hours UTC (5 pm Friday) and last for 24 hours. We plan to operate high frequency 40 through 10 meters and 2 meter VHF. There will be control operators available, so all interested people will be able to make radio contacts.

Contact Mike, KD8RQV, at mclever_2@msm.com for schedule information. The weather office call sign is WX7FGZ. Information about Skywarn is at: <http://www.nws.noaa.gov/skywarn/>

CARC Club Christmas Party Dec. 6

The CARC 2014 Christmas Party will be on December 6, 1400-1730, at Bob and Sandy Meadowcroft's house. 4517 W. Laskin Tr. Go west on Hwy 180 (North Fort Valley Rd) one block past Snowbowl Rd. Turn left on N Lake Tr. Turn right on LaskinTr. That is the house. CARC will provide ham and chicken and drinks. Please bring a side dish and a toy (if you wish) for the Toys for Tots drive.

Thank you and Help Wanted:

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

Flagstaff: Tom W7TGS, Erv KE7QFI, Mike KD8RQV

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:

January 16, 2016 North Country Health Care on 4th Street

April 16, 2016 North Country Health Care on 4th Street

Remember to bring your license and a copy, a government issued picture ID, a black ink pen, and fifteen dollars.

<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 November 12, 2015 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

10/8/2015

Meeting Started: 7:00 pm

Guests: None

Secretary's Report: Since the minutes of the Aug meeting were published in the newsletter there was no need to read them. J.D. Ward moved to accept, Janice Enloe seconded the motion. Minutes were approved unanimously.

Treasurer's Report: Pat Traber, our club treasurer, gave the treasurer's report. The closing bank balance as of 10/8/2015 was \$2,925.48. Membership is 59 members, consisting of 55 paid members and 4 lifetime members. Erv Perelstein moved and Bobbi Brunner seconded a motion to accept the Treasurer's Report as written. Unanimously accepted.

President's Report: After Introductions, (we welcomed several new attendees, again), Sandy Meadowcroft informed the club that we joined the Amateur Radio Council of AZ (ARCA) organization, as was voted on during the September meeting.

Sandy reported that we held our first License Class on Oct 3rd. We had 10 students sign-up but only 6 showed up for class. It was decided that we would not charge for the class. The first lesson went very well.

Sandy set the date for our Christmas Party, which will be hosted by Bob and Sandy Meadowcroft again this year. It will be held on Sunday, December 6th at 2:00 pm. Further directions will be sent by email.

Sandy gave a quick calendar update of upcoming events:

Oct 10 Soulstice Run, Bob Meadowcroft said he had all the radio positions filled but that any other members, with or without a license, would be welcome to come and help.

Nov 14 Girl's - On -The - Run, Sandy and Dawnelle Shehan co-coordinators, need volunteers,

Dec 5 Skywarn Recognition Day, NWS Belmont, Mike Clever/Scott Martin coordinating. Mike asked if anyone can bring their HF radio to the Recognition Day. The NWS personnel offered to provide antenna hook-ups for additional radios so that we can make more contacts with other NWS offices throughout the country. He said that NWS personnel asked if we could provide additional HF operators at their offices during the larger, real disasters as they are short handed with HAM operators during those times.

Dec 6 Christmas Party, Sandy & Bob Meadowcroft hosting in their home, @2:00 pm.

ARES Report: Joe told us that the Williams Labor Day Run was fun and very successful for us

as well as for the Williams community. Total manpower expended was 27 hours.

On the other hand, the Emergency Preparedness Day event, sponsored by NAU was a total bust. He said there were more people hosting tables than visitors. It appears that there was insufficient advertising for the event. The club expended a total of 30 hours for this event.

In preparation for the State-Wide Disaster Exercise scheduled for Nov 4th, six CARC members were invited to tour the new alternate EOC near Buffalo Park and make suggestions for radio and antenna installations. The members were: Joe Hobart, Janice Enloe, Bill and Marylou Hagan and Erv & Kay Perelstein. Mark Christian, the deputy Emergency Manager for Coconino County and a CARC club member, directed the tour. Several options were discussed. Mark will push for a permanent VHF installation including an antenna and a permanent cable installation for HF. We all agreed that if the managers of the Alt EOC would put a flagpole up near the front of the building, we could put a center fed dipole up each time we needed it fairly quickly. Mark will keep us informed as to the progress of that project.

The exercise on Nov 4th will most likely feature a natural disaster event with the loss of all commercial communications and internet connectivity. We will be providing VHF and HF connectivity to the State and County EOCs and assisting with a simulated Red Cross shelter activation. Emergency Management would like to try Digital Messaging this year for the first time. Anyone having experience with Digital is requested to try and participate in the exercise. Please let Joe know. In order to work in the EOC, operators must have completed the ICS 100, 200, 700 and 800 courses. For this exercise, HF frequencies will be on both 40 meters and 80 meters to the State EOC in Papago Park in the valley. For VHF we will use the linked repeaters on Rim Link to talk to the State EOC.

Joe reminded us that we will hold VE Testing sessions on Oct 17th, Jan 16, 2016 and April 16th. All three sessions will be held at North Country Health Care on 4th Street.

OLD BUSINESS: Sandy reminded us that we should be looking for a replacement trailer for our CARC trailer, which is falling apart. We agreed that a used trailer, in good shape, for about \$1,000 would be ideal. Please keep your eyes open for one.

Ken Held updated us on the status of the new Yaesu Repeater. He said that things are moving along with Yaesu because they asked him for a credit card reference. He was told to expect the repeater to be delivered in the next week or so and that we will use pre-approved frequencies of 440.400 with a + offset and 67.0 PL Code.

Joe provided a review of the Grand Canyon Race (100 miler). He said it went pretty well, the only problem being we lost the HF link from Babbit Ranch. We were able to fill in using the Williams repeater. He asked all members to review the procedures for making radio calls, that is: always state the call sign of the station you are calling **FIRST**, then say "**This Is**" followed by **YOUR** call sign. It becomes very confusing when stations reverse this order. He also asked, on the longer races, to use the 24 hour clock on transmissions so there is no confusion between AM and PM times. It was pointed out that some of the sweeps assigned were not performing the sweep until 5-6 hours after their section was finished, which means that if someone is hurt, they may be out there for 5-6 hours with no help. He said he will bring that up with the race organizers. We expended 258 person hours on this race with 16 volunteer operators.

Ron Gerlak announced that the Route 66-On-The-Air that was held from September 12-22, was a huge success. They set up Station W6T in Williams for 4 days then moved it to Belmont for 6 days. Both locations were part of the Old Route 66. They had 8 operators, 10 visitors, and made 2,338 contacts. In addition to those 2 locations, David Schaubert worked in the Petrified Forest area at 7 locations out of his pick-up and made 2,255 contacts. The DX Club logged over 8,000 contacts.

Ron invited all members to take part in next year's Route 66-On-The-Air Event.

Joe reminded everyone that we need volunteers to act as NCS on the Skywarn Net on Monday night and the ARES Net on Wednesday night. He told us that we actually run 2 Skywarn nets and 2 ARES Nets (one for each on our Elden Repeater and afterward, one for the people up north).

Janice told us that the new CARC mail list is operational. Contact her or Sandy for help.

Sandy reminded everyone that CARC Name Tags can be ordered from Flag Stamp & Engraving, 2534 E 7th Street on the corner of 7th and 4th Streets.

Bob Meadowcroft told us he still has CARC Hats, T-Shirts, and Vests for sale

NEW BUSINESS: Sgt Aaron Dick, the Search & Rescue Coordinator for the Sheriff's Office, requested that a delegation from CARC meet with him at the SAR Building at the Law Enforcement Administration Facility. Al and Pat Traber, Phil and Bobbi Brunner and Sandy met with Sgt Dick and discussed the CARC role in Search and Rescue. Sgt Dick said that he needed communications people to go along with searchers and to run the SAR Communications Trailer during larger searches. He outlined some of the training we would have to take in order to provide those services. Sandy asked for volunteers who were interested. She will provide more details about the training requirements.

50/50: J.D. won the 50/50 raffle.

There being no further business, Bobbi moved and Dawnelle seconded a motion to adjourn. Passed unanimously.

Meeting Ended: 8:18 pm.

Presentations: No additional presentations this month.

State Wide Exercise November 4, 2015:

Wednesday, November 4, AZ Emergency Management staged a drill to prepare for a major emergency event. This year's simulation event was an "earthquake" in Pauldin, just north of Chino Valley. The scenario included several major aftershocks that crumbled the bridge over the I-40 at State Highway 89, loss of communications and internet, road closures and more. This drill aides in preparing the state and counties for real emergencies, highlights areas of concern and allows for improvement of procedure protocols and training of staff, and opens the doors for volunteer and community support for emergencies.

CARC aided in the event by reporting to the alternate EOC on the mesa near Buffalo Park to provide emergency communications when the phone and internet systems failed. We had HF established using 40 meters and 2M using the Mt. Elden repeater and Rimlink in operation. Using these frequencies, we communicated with Phoenix, Prescott, Verde Valley, Forest Lakes, Sierra Vista, Page, Fredonia (K7OCR was in Kanab simulating being in Fredonia to check radio

propagation). We could pass messages relaying information regarding Red Cross shelters, State EOC, APS, Sheriff and EMS.

Club members were out in the snow erecting antennas and tuning the Buddipole for optimal performance. Others set up radios inside, manned the radios for hours listening for important messages and others were relaying them to the proper staff for replies. This was no small event but we proved how use and important HAM radio can be in time of emergency. Sure- we would have needed more help if it had been a real emergency as shift work would be needed but we showed them our stuff and they were quite impressed.

Flagstaff Team:

Bill	KG7TPM
David	NJ0W
Diane	KF7ZCO
Erv	KE7QFI
Janice	KI6WCK
Ken	KF7DUR
Marylou	KG7TPK
Ron	KG7OH
Sandy	KF7JHC

Fredonia/Kanab Team:

James	K7OCR
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Page Team:

Dan	Helped erect the Page antenna
Henry	KG7MHF Page
Lee	KF7YRS Page
Vince	WB7UWW Page

Special thanks go to James, who took off from work to represent Fredonia, and to Janice, who helped haul all my equipment and antennas to and from the EOC.

For those of you that have not tried HF, please consider it. Learn it, use it and stay current. In times of emergency, we will need all the good, practiced and available General and Extra HAM we can get.

The New Munds Park Repeater:

The CARC repeater in Munds Park is up and running using the 70 cm band at 440.400, +, tone 67.0. It can be accessed by a 5 watt hand held radio from much of the forest to the east and anywhere in the park including the church which acts as the area's Emergency Shelter location. It can also be accessed from Willard Springs to Fox Ranch Road (I-17), the Alternate Emergency Operations Center at the southwest corner of Gemini and Forest/Cedar and some spots in Flagstaff with a mobile radio/antenna. We are working on improving the coverage throughout the Flagstaff

area, especially in the area of the CCSO, Flagstaff Police building (LEAF) at 911 Sawmill Rd and the American Red Cross facility on Route 66. It is important that the planned improvements do not result loss of the coverage we have already established. The testing and changes will continue to optimize area coverage. Future plans also include making the repeater easily relocatable to a remote site for use as a communications link in emergency situations. The repeater has battery backup adequate for a few hours of operation during a power failure. Try it out-there is often someone monitoring to return a call. Best 73's

Ron Gerlak KG7OH
[480-356-3663](tel:480-356-3663)
rbgerlak@gmail.com

Just so we are all speaking the same language for our public service, exercises, and any actual emergency events- AM/PM can be very confusing and inaccurate:

The 24-hour clock is the convention of time keeping in which the day runs from midnight to midnight and is divided into 24 hours, indicated by the hours passed since midnight, from 0 to 23. This system is the most commonly used time notation in the world today, and is used by international standard ISO 8601. In the practice of medicine, the 24-hour clock is generally used in documentation of care as it prevents any ambiguity as to when events occurred in a patient's medical history. It is popularly referred to as military time in the United States, English-speaking Canada, and a handful of other countries where the 12-hour clock is still dominant.

In the 24-hour time notation, the day begins at midnight, 00:00, and the last minute of the day begins at 23:59. Where convenient, the notation 24:00 may also be used to refer to midnight at the end of a given date – that is, 24:00 of one day is the same time as 00:00 of the following day.

The notation 24:00 mainly serves to refer to the exact end of a day in a time interval. A typical usage is giving opening hours ending at midnight (e.g. "00:00–24:00", "07:00–24:00"). Similarly, some railway timetables show 00:00 as departure time and 24:00 as arrival time. Legal contracts often run from the start date at 00:00 until the end date at 24:00.

While the 24-hour notation unambiguously distinguishes between midnight at the start (00:00) and end (24:00) of any given date, there is no commonly accepted distinction among users of the 12-hour notation. Style guides and military communication regulations in some English-speaking countries discourage the use of 24:00 even in the 24-hour notation, and recommend reporting times near midnight as 23:59 or 00:01 instead. Sometimes the use of 00:00 is also avoided. In variance with this, the correspondence manual for the U.S. Navy and U.S. Marine Corps formerly specified 0001 to 2400. The manual was updated in June 2015 to use 0000 to 2359.

24-hour clock**12-hour clock**

clock	clock
00:00	12:00 a.m. midnight (start of the day)
01:00	1:00 a.m.
02:00	2:00 a.m.
03:00	3:00 a.m.
04:00	4:00 a.m.
05:00	5:00 a.m.
06:00	6:00 a.m.
07:00	7:00 a.m.
08:00	8:00 a.m.
09:00	9:00 a.m.
10:00	10:00 a.m.
11:00	11:00 a.m.
12:00	12:00 p.m. noon
13:00	1:00 p.m.
14:00	2:00 p.m.
15:00	3:00 p.m.
16:00	4:00 p.m.
17:00	5:00 p.m.
18:00	6:00 p.m.
19:00	7:00 p.m.
20:00	8:00 p.m.
21:00	9:00 p.m.
22:00	10:00 p.m.
23:00	11:00 p.m.
24:00	(midnight) (end of the day)

Upcoming Hamfests You May be Interested in Attending:

Oro Valley Hamfest: Oro Valley Amateur Radio Club, November 7, 2015. Marana, AZ
hamfest@tucsonhamradio.org

HARKfest: Hassayampa Amateur Radio Klub, Nov. 14, 2015. 8AM-Noon, Congress, AZ. Free.

Superfest 2015: Superstition Amateur Radio Club, December 5, 2015. 7:00 AM – 2:00 PM. Mesa Community College, Mesa, AZ. Admission \$5.

Field Day Results are in:

This past June we participated in the ARRL Field Day 2015.

The Contest is much more than just a points event.

The Northern Arizona DX Club and Coconino Amateur Radio Club joined together to work this event. It is an exercise to show we as a group or even as an individual that we can use Ham Radio to communicate.

An opportunity to be in the Community Eye so to speak.....

Well this is how we did.....

Our Score 5142 points. 1141 Qso's.

Standings:

257th out of 2720 participants.

54th of 391 in 2A class

24th in the Southwest Division

6th of 2A class in Southwest Division

7th in Arizona Section

First in my book!

A very good Job done by all!

Scot KY7A

A Note from a HAM in Yavapai County:

Here is the comment Bud, N7CW, posted in the weekly Yavapai ARES/RACES newsletter:

As some of you know, I enjoy other aspects of ham radio besides ARES/RACES. In particular, I like to chase DX and to participate in contests. I believe that contesting has helped develop my radio communications skills and those skills

apply directly to working for ARES/RACES. A recent issue of the ARRL ARES E-Letter addressed this issue much more eloquently than I can. Check out <http://www.arrl.org/FandES/field/ares-el/?issue=2015-10-22> and scroll down to "Putting Contesting to Work for Your Public Service Team". The article was written by Ward Silver, N0AX, a well known QST author. You don't have to compete to win to benefit from the on-the-air practice.

Putting Contesting to Work for Your Public Service Team

Operating skill is not something that can be tested on a license exam or learned from a book. Emergency managers know that practice - lots of it - is required for operators to be sharp when they are really needed. Repeating drill after drill can get old but there are other enjoyable ways to give your equipment a good shakedown and build on-the-air know-how. Just as sports keep you physically fit, "radiosport" or contesting can serve as a training ground while having fun at the same time.

First, you don't need a huge, multi-tower station to participate. A comm trailer or EOC probably has everything you need for success, particularly if you choose the right contest. You can start simply with any of a number of regional FM simplex contests that encourage the use of mobile and handheld FM radios for an afternoon or evening. Just search the Internet for "FM simplex contest" to find several. For example, in the St Louis area, the St Louis and Suburban Radio Club sponsors an occasional "ZIP code contest" in which hams operate from home or a car and count the different ZIP codes as multipliers. Operation takes place on the usual simplex FM channels from 147.42 MHz to 147.56 MHz for four hours on a weekend evening. This is a great way to learn about squelch management, copying weak signals, using phonetics, and the effectiveness of good locations and antennas! No contest in your area? Work with the local clubs to start one.

Instead of jumping into a big DX contest, try the domestic contests such as the upcoming November Sweepstakes or December's 10 Meter Contest. The low dipole you use for regional communications will work lots of stations - more than you might imagine. A multiband vertical will work great on 10 meters or put up a temporary dipole for the weekend. Farther in the future, check out the North American QSO Parties with their easy name-and-state exchange and low-power signals. Look up

your own state's QSO party and activate your county or parish for hours of fun with callers chasing YOU for a change. If your club has VHF SSB gear, there are regular VHF contests. If your team uses digital modes to exchange text and files, try a digital mode contest with RTTY and PSK keyboard-to-keyboard operating.

Trying to pack an entire team into the shack can be counterproductive. A couple of people have a lot of fun while the rest watch and get bored. If you have enough interest, divide your group into two- or three-person teams that operate in shifts with an experienced operator to mentor and guide (and log). Better yet, put the teams at different stations and let them go head-to-head in a short challenge. No one says you have to operate the entire contest, either. Pick times that work - maybe about as long as your regular drills - and get together afterward for the usual "hot wash" or maybe just a little story-telling session over pizza.

A "contest Elmer" can help those new to contesting with scripts guiding the operators through a QSO. Start each team of operators with a period of listening so they have some time to get up to speed. Show them how to tune in an SSB signal, operate the necessary receiver controls, and the abbreviated style of calling and answering. Using paper log sheets can work at first but you'll find that simple logging software like that available from N3FJP is easy and intuitive to learn. Let one operator talk and one operator log - then swap.

Once your team gets up to speed, reinforce the reasons why we have contests in the first place: accurate, effective operating. Place a special emphasis on getting call signs and exchanges 100% correct. Making a lot of contacts is good but not at the expense of errors. Help operators make good use of primary radio controls to increase clarity on receive and transmit: filters, RF gain, AGC, RIT/XIT, and others can make a surprising improvement in copying ability. Watch for teachable moments such as unusual and changing propagation, small pileups of callers, confusing letters, and clean vs distorted signal audio.

The hours will fly by and when it's over, you'll have some operators anxious to try again. It's a good way to introduce non-hams to Amateur Radio, too. Why not invite a CERT or SKYWARN volunteer to sit in and make a contact? Don't forget to

submit a log - no matter how small - and watch for your team's call sign in the final results. You might even get lucky and win a certificate. Could a Worked All States award be in your team's future?

Regardless of how many contacts you make, when interspersed with your regular drills and exercises contesting offers a great change of pace while advancing everyone's abilities at little or no cost. See you in the pileups! -- Ward Silver, NØAX, St Charles, Missouri; Member, St Charles Amateur Radio Club and ARES Rapid Response Team; QST Contributing Editor