

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.

CARC MISSION STATEMENT :

The Coconino Amateur Radio Club will promote the Amateur Radio Service by: demonstrating good operating practice; providing technical advice to its members; encouraging the licensing of new Amateur Radio operators; seeking opportunities for public relations; providing communications for public service events; and volunteering for emergency communication assistance to state, county, and local agencies.

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.

Calendar of Events for 2015:

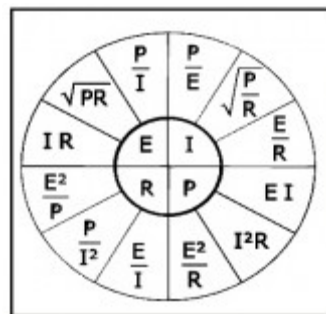
3/ 12:	Northland Prep Balloon Launch, 3/13, 3/25 alternated dates	
4/29:	PFAC Exercise- Wildland Fire Exercise - alternate 5/6	
5/15-17	Overland Expo, Licensing Exam	
6/6	Sacred Mt. Prayer Run	Sandy Meadowcroft
6/27-28	Field Day (Outdoor Mkt)	Ron Gerlak
7/19	Snowbowl Run	Janice Enloe
8/1	Fat Tire Bike Race	Ron Gerlak
8/8	Big Brothers Big Sisters	
9/26-27	100 Mile Stagecoach Run	Bill Smith
10/10	Soulstice Run	Bob Meadowcroft
11/?	Girls On The Run	Sandy Meadowcroft
12/5	Skywarn Recognition	Mike Clever
12/?	Christmas Party	Meadowcrofts

Officers:

President: Sandy Meadowcroft KF4JHC

Vice-President: Tom Shehan W7TGS

Secretary: Erv Perelstein, KE7QFI



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

Treasurer: Pat Traber, KE7QFG

PIO: Janice Enloe, KI6WCK

Did you name all of the components of this circuit correctly?

1. Field Effect Transistor
2. NPN junction Transistor
3. Diode/rectifier
4. Voltage variable capacitor
5. Zener diode
6. Multiple-winding transformer
7. Tapped inductor
8. Fixed capacitor
9. Fixed Resistor
10. Fixed capacitor
11. Adjustable resistor

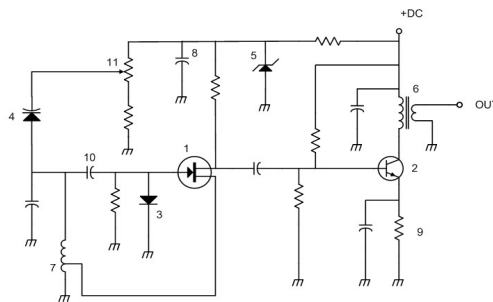


Figure G7-1

Reminders:

Club membership dues for 2015 are due at the January meeting: \$25 for individuals and \$30 for a family. Please plan to pay the treasurer at the February meeting

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:

17 May	Overland Expo/Mormon Lake
30 May	License Class
18 July	Williams Hamfest
17 October	TBA

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

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

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

Next Business Meeting:

Our next business meeting will be March 12, 2015 at the East side Sizzlers at the corner of Highway 66 and Fanning.

CQ Field Day, CQ Field Day, CQ Field Day

Anyone interested in participating in 2015 Field Day please call now.



Please call anytime or send an email and let it be known what you did last year - or - what you would like to do this year – or – Just let it be known you are interested. If it comes up at the club meeting would be another good place to show your interest.

Field Day is a perfect place to start operating HF or contesting if you have never done it or if you are a seasoned veteran. All CARC members are encouraged to participate.

There is a need for people to help set up, operate, work special event booths, take down, coordinate activities, and so on and so on. Everyone is needed.

This is a special request to help set up, operate and take down the 6 meter station. We need at least 2 operators that are familiar with 6 meters to commit to working the 6 meter station for the duration of operations (no overnight time). You don't need to commit to everything – just anything. The 6 meter station will be utilizing an Elecraft K3 with a Panadapter. This is a very high tech rig and display which will provide a unique experience. Anyone that would like to borrow a 6 meter station prior to Field Day so they can practice using the station, please contact Joe Hobart, W7LUX for details.



Field Day 2015 will be on June 27 – 28, 2015, We will start set up on Friday (June 26) so mark your calendars for any or all of the days.

The ARRL Field Day web site with all of the official Field Day information is a good source for detailed information.

<http://www.arrl.org/field-day>

Much more CARC local information to follow.

Best 73s to all,
CARC 2015 Field Day Chairman
Ron Gerlak
623-256-8753
rbgerlak@gmail.com

Minutes of the Coconino Amateur Radio Club 2/12/2015

Meeting Started: 7:00 pm

Guests:

1. Guest Speaker: Kaci Heins, Northland Preparatory Academy: Kaci talked about

the upcoming High-Altitude Balloon Launch that NPA is sponsoring. It is now scheduled for Thursday, March 12, at 9:00 am with a backup date of Friday, March 13. The launch will be assisted by the Arizona Near Space Organization and the Civil Air Patrol. She talked about how her classes have worked to build the pay load and how much they learn from this activity. She asked if we could once again ask us to help with the payload retrieval. She has written a Grant Request for funding for a larger balloon which would hold a larger payload. The current payload is limited to a radio beacon, 2 cameras, 2 GPS units, temperature sensors, and an APRS Radio. The launch will be at the airport from Bruce Sidlinger's X3 hanger. We explained that even though several members volunteered to help, this is not an official CARC activity. Volunteers are Bruce, Phil, Tom, Joe. Kaci thanked the club for past support and for our continued support.

Secretary's Report: Since the minutes of the January meeting were published in the newsletter they were not read. Tom asked if there were any changes of corrections to January's newsletter. There being none, Tom moved and Bobbie Brunner seconded a motion to accepted the minute. Unanimously accepted.

Treasurer's Report: The closing bank balance for 2/12/2015 was \$2,916.77. Membership is 36, consisting of 32 paid members and 4 lifetime members. Erv moved and Kay seconded a motion to accept the Treasurer's Report as written. Unanimously accepted.

President's Report: Sandy thanked all attendees for coming to our meeting. We all introduced ourselves to attendees. She introduced a topic that will be covered in the NEW BUSINESS paragraph concerning the definition of "Official Club Events."

ARES Report: Joe reported that the license testing session on Jan 17th at the Bilby Facility on NAU campus went very well. Janice upgraded to a General Class License and Mathias Rupp now has a Technician Class License.

Joe reminded us about the PFAC Exercise scheduled for April 29th with a weather back-up of May 6th. We will be providing radio support to CERT personnel.

Scott reminded us that he could make business cards for each SKYWARN member.

Joe reviewed the schedule of activities for the 2015 season:

4/11	Williams Hamfest VE Licensing	Joe
4/24-26	Girl Scout Campout (Non-official project)	Joe/Janice coordinating
4/29	PFAC Exercise	Assisting CERT with Radio Joe coordinating
5/15-17	Overland Expo (Call sign W7E)	Tom coordinating Testing Sun morning
6/6	Sacred Mt Prayer Run	Dawnelle/Sandy coordinating
6-27-28	FIELD DAY	Ron coordinating
7/19	Snow Bowl Run	Janice coordinating
8/1	Fat Tire Race	Ron coordinating
8/8	Big Brothers/Big Sisters 1/2 Marathon	NEED COORDINATOR
9/26-27	100 Mile Stagecoach Race	Bill Smith coordinating
10/10	Soulstice Race	Bob Meadowcroft coordinating

11/??	Girls-On-The-Run	Sandy coordinating
12/5	Skywarn Recognition Day	Mike Clever coordinating
12/?	CARC Christmas Party	Bob and Sandy

OLD BUSINESS: Sandy reminded members once again to check out the newly modified CARC Website, much improved by Phil and Ron. They had intended to project the web site during the meeting to facilitate discussion but the projector did not have the correct cable to allow this.

Sandy announced that we have 5 people signed up for the Licensing Classes we will offer starting March 7th. She also announced that we have a new location, North Country Health Care at 2920 N. 4th Street, 86004. This location gives us a larger room and it is free. We reviewed the class schedule as follows:

3/7	1st Class, Introduction, Radio Waves & Signals	Tom/Sandy
3/14	Modulation & Bandwidth	Erv/Phil
3/21	Electricity & Components	Phil/Erv
3/28	Types of Radio Waves & Propagation	Joe/Tom
4/4	EASTER next day - NO CLASS	
4/11	Antennas, Feedlines, Practical Antennas	Jack Lundsfort
4/18	Radio Equipment & Power Sources	Ron/Erv
4/25	Communicating with Other Hams	Tom/Phil
5/2	Licensing Regulations, FCC Regulations	Bobbie/Sandy
5/9	MOTHER'S DAY next day NO CLASS	
5/16	Operating Regulations Part 2 & Safety	Tom/Ron
5/30	LICENSE TESTING	Joe

NEW BUSINESS: Sandy opened a discussion concerning Official Club Events. She pointed out that events outside of our CARC Mission Statement may not be covered by our Liability Insurance. The issue is that if we participate in events that do not directly support our RADIO mission, we may be held responsible for injuries sustained by event participants and the insurance may not cover those events for us. As it is, Pat pointed out that our insurance only covers Club Officers for events that are within our CARC Mission Statement. Scott moved that we write a Mission Statement for each activity, vote on whether to participate or not and publish the Mission Statement in our Newsletter to limit our responsibility to RADIO support only. Erv seconded the motion and it passed unanimously.

Scott moved to adjourn, Sandy seconded and it was passed unanimously.

50/50 Drawing Nathan Vince won the 50/50 drawing this month.

Meeting Ended: 9:10 pm.

Tom provided a talk and demonstration of a solar-powered generator including a deep-cycle battery, an inverter to run a computer and various Anderson Power pole connections for charging the battery from a Solar Panel and for powering equipment. The presentation was excellent, providing very good ideas for building an emergency power source for use during our disaster support mission.

CARC website: Hello to all CARC members, others who read the newsletter and everyone that views our website. We have updated some of the information on the website and made technical changes to improve it. Now we need your input. If you see anything that is incorrect or if you have ideas on how the website could be improved upon please let us know. Phil Brunner and I are committed to making the site informative and user friendly. Forward your ideas to Ron Gerlak <mailto:rbgerlak@gmail.com>. Visit the CARC website at CocoRadio.org.

Are You Ready for an Emergency?

Recently the Yavapai Ares Net had a practice drill to test the capability of its members. All members were to use emergency back up power sources for the evening. At check in, one member was not able to make contact on the battery system. The radio was operating on low and medium power but was unable to transmit under high power. After some troubleshooting, it was found that the fuses were not making good connections with the fuse holders. Re-seating the fuses corrected the problem and communication was restored. Lesson: Test your emergency equipment regularly to be fully prepared for the real thing.

Northland Preparatory Balloon Launch- March 12 (13, 25 backup dates)

CARC MISSION STATEMENT:

The Coconino Amateur Radio Club will assist with NPA Balloon Launch to: promote the Amateur Radio Service, demonstrate good operating practice; provide technical advice; assist with public events and the education of youth and adults and encourage students' pursuit of science and technology.

The NPA balloon launch is fast approaching. The balloon will be launched from Pulliam Airport at 9:00 AM with tracking and recovery efforts lasting for several hours afterward. If you are interested in participating with this event, please let Kaci Hines know ASAP. She will need your contact information so you can be let in at the gate. Volunteers will be needed to assist with the chase and recovery efforts. You can follow the progress on APRS.fi or findU.com

Kaci Hines
928-266-6829
runsemo@hotmail.com
KF7RCV-11

A Request for Help From Northland Preparatory Academy

We received a grant from SeaPerch for 8 underwater ROV kits. SeaPerch is sponsored by the Office of Naval Research and is a great step up from our Lego robotics that wraps up in December. The students started working on the ROV kits in January. Here is a



website with more information. <http://www.seaperch.org/index>

We will be soldering in the coming weeks and need additional help with this project. Students have some experience with soldering but need adult supervision for safety for this project. We meet every Tuesday from 3:30-4:45. We might have some Saturday meetings depending on our progress. Please let Joe Hobart W7LUX know if you can help.

Another event you might be interested in volunteering for- please note- this is not an official CARC event.

Last January, Joe and Janice visited the Cadette Troop of the Verde Valley Girl Scouts to teach and demonstrate Morse code. The Scouts really enjoyed this activity and the troop leader asked us to present Code and HAM radio to all of the scouts at their spring camp out April 24-26. Here is a wonderful opportunity to promote Amateur radio to over 80 girls and adults. They have asked for us to return with a Morse code station, HAM radio stations and amateur astronomy for the girls. If you are able to help bring the world of HAM radio to scouts, please contact Joe Hobart, W7LUX or Janice Enloe KI6WCK. We will need help April 25 for learning centers and possibly some help with set up on Friday. Your meals will be provided. Overnight accommodations are limited and most help will be needed for Saturday only. The camp out will be at Jackpot Ranch, Camp Verde.

Joe Hobart
W7LUX
nova@npgcable.com

Janice Enloe
KI6WCK
KI6WCK@gmail.com

Ham Radio Licensing Class: Technician Level

March 7: Introduction to the ARRL, CARC
Chapter 1- Introduction and Welcome to Amateur Radio
Chapter 2- Radio Waves and Signals

March 14:
Chapter 2- Modulation and Bandwidth
Chapter 3- Electricity

March 21: VOM Operation, Battery, Diode and Resister
Chapter 3- Ohms Law. Power and the Metric System
Chapter 3- Electronic Components

March 28: HF and DX
Chapter 3- Types of Radio Circuits
Chapter 4- Propagation

April 5: No class

April 11: Antennas and Feed Lines
Chapter 4- Antennas and Feed Lines
Chapter 4- Practical Antenna Systems

April 18: Presentation of Radio Equipment, Digital Communications

Chapter 5- Basic Amateur Radio Equipment
Chapter 5- Power Sources and Interference

April 25: VHF, UHF, Repeaters, Cross Band
Chapter 6- Communication with Other Hams Parts I & II

May 2: QSL Cards
Chapter 7- License Regulations and License Privileges
Chapter 7 & 8- Call signs and Operating Regulations Part I

May 10: No class- Mother's Day

May 16: Station Grounding
Chapter 8- Call signs and Operating Regulations Part II
Chapter 9- Safety and Amateur Radio

May 30: License Exam

- Cost: Ages 21 and over- \$25, Under 21- \$10
- CARC members may audit at not charge if space available
- Ham Radio License Manual Level I Technician, 3rd edition required. Available through ARRL.org or from Joe Hobart W7LUX (928) 525-9222
- 10 Saturday mornings including testing
- Class time- 10:00AM to 12:00 Noon
- Lab time available to enhance your learning- 8:00AM – 9:50AM each class day
- Homework assignments- pre-read chapters for discussion
- **New Location:** North Country Health Care, 2920 N. Fourth St. in the Education building
- For additional information contact- Sandy Meadowcroft (928) 660-8323

First Meeting Begins at 9:45 AM.
There is no lab prior to the first meeting.