



ROUND TABLE

October 2007

The Denver Radio Club Newsletter

Since 1917

President's Message

By Gerry Villhauer - W0GV

Hello DRC Members,

The weather is sure changing fast. What happened to summer? I still have my personal antenna projects to do that I mentioned last month. The tech committee has been real busy. They replaced the directional antenna at the 147.330 site in Lakewood with a non-directional antenna. Then installed the directional antenna at our new site located north of DIA. The 147.330 is presently still operating from Lakewood. Thanks to Dave - WG0N, Dave - K0HTX, Orlen - WA9TVH and Frank - KB0VGG, for putting in a long day completing this project. We are installing a system that will work well along the Front Range and into the mountain areas. We plan to incorporate our voting system into the 147.330 repeater from this site. The ultimate goal is to have up to 8 satellites receiving sites all around the metro area. When completed, this will provide hand held coverage from just about any location around town. It is a big project with many technical challenges but, when completed will be a big addition to our radio systems. More on this project as it progresses.

Last meeting was our annual election of board members and officers. Three of our board members chose not to seek re-election. They were Lance - N1ETV, Bob - KC0OUQ, and Charlie - N6LD. We were fortunate to have three members step up and volunteer to serve in these vacated positions. Joe - AC7SX, Dave - K0HTX and Robert - K0RCW were nominated and elected to a two year term along with Bryan - KC0CUA who was re-elected. Following that the offices of president, vice president, treasurer and secretary were re-elected to a one-year term. These persons in the same order as stated above are Gerry - W0GV, Dave - WG0N - Jim, K0TOR and Orlen - WA9TVH. Thanks to all those elected and re-elected. We have a very good group of folks and I am confident we will make progress in the

upcoming year. And thanks to Lance, Bob and Charlie for their service for the last two years.

This month I would like to welcome new members Ray Teets - W0RET and Clifford Walls - KA0ECB to the DRC. Thank you for choosing the Denver Radio Club as your club. Please come to the meetings and activities and be an *active* member.

Thanks to John - K4ZI, for presenting a great program on radio interference to air navigation at our September meeting.

Bill Leahy - K0ZL, will present this month's program. Bill gave a presentation at our hamfest on a systematic approach to trouble shooting problems in ham gear. This was well received at the hamfest and I have asked him to give the presentation to the membership. Bill has an associate degree in electronics engineering, 3 years as a radio station engineer (KIMN AM/FM), 30 years as a technician and electrician at Coors, and has been repairing ham radios for 25 years. I am sure you will get some expert advice that you can put to practical use the next time your rig gives you problems.

See you all at the meeting August 15th at the St. Joseph's Episcopal Church, 11202 West Jewell Ave., Lakewood. That is about two blocks West of Kipling on South Jewell. And remember to check our website, w0tx.org, for lots of important information about the DRC. The Elmer Session and Tech Meeting start at 6:30 p.m. followed by the Regular Meeting and Program at 7:30 p.m.

73,
Gerry - W0GV

Inside The Round Table

Tech Committee Report	Pg 2	Calendar	Pg 6
A Moment In Time	Pg 3	DRC Information	Pg 7
EmComm	Pg 4	Puzzle & Solar Watch	Pg 8
Events & Puzzle Key	Pg 5		

Technical Committee Report

Bryan - KC0CUA, Interim Chairman

Activities in September

The Salvation Army Projects

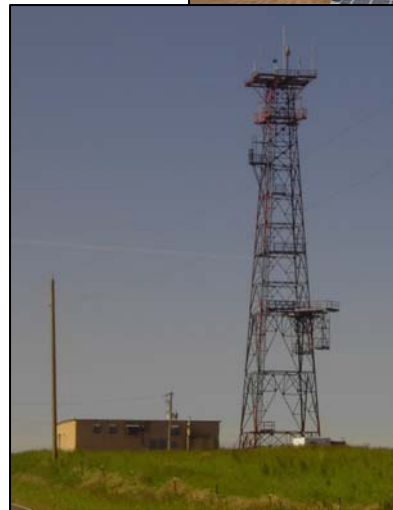
The NVIS controls and antenna system is in place. We have acquired a new SGC tuner to match the impedance to the radio. In order to do this correctly, and not "float" the tuner we are purchasing a 1:1 Balun which will match the balanced antenna with the unbalanced input to the tuner. N1ETV has mounted the new tuner and is in the process of adding a "tune" button and LED to the control panel at the radios.

We have experienced interference between the Kenwood and Drake HF radios. We expect once we swap the Kenwood HF radios between the TSA and Station 4 this situation may get worse. This will be due to both radios running off the same 12 volt supply source. N1ETV will look at adding some toroids on the power lines.

147.33 Repeater Relocation

We are in the process of relocating the 147.33 repeater from the Green Mountain area to a site we have obtained north of DIA. The new site, just South of Hudson, has a 180 foot tower with a clear shot of the front range. (see photo) The plan is to move the .33 antenna from Station 4 to the new site sometime in the next week or two. We will put another antenna in its place at Station 4 so the 147.33 will remain on the air. There is already some hardline that we can use to attach to the antenna and bring the signal down to the building. We also expect to be able to continue providing a phone patch on this repeater at the new location. You will probably experience brief outages of the 147.33 over the next month as we relocate the equipment. As you would expect our volunteer staff will do this work as their schedules and conditions allow. Once the new site is up and running we should have really good coverage into the foothills.

Orlen - WA9TVH
Dave - K0HTX



Pictures by
Dave - WG0N

On-Going Projects

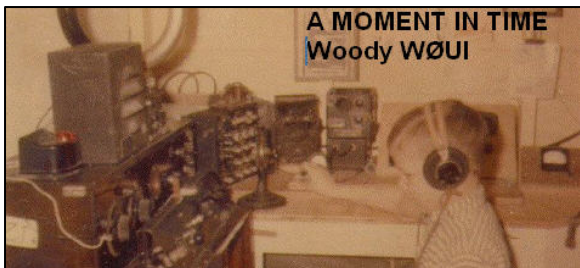
449.35 Repeater

The new Kenwood repeater continues to work well. The original GE Mastr II radio has been repaired and reinstalled up at Squaw so there is a backup radio readily available to switch over. The Tech Committee has decided to add a backup battery at the Squaw site to power the Kenwood radio and repeater controller. The Kenwood already has the capability to utilize the battery and provide a trickle charge current. Expect this to take place within the next week or so. We need to get up there before the first blizzard.

A Moment in Time

By Woody - W0UI

Have you ever wondered what it was like 60 years ago in the Denver Radio Club. Well here is glimpse into a club board meeting in 1947.



October 1, 1947
Henry Cook's residence

The meeting was called to order at 8:00 P.M.

Present were: Juza, White, Reed, Cood, Everett, McFord and committee chairmen: Marshall, Bliss.

A proof of the membership cards was circulated and a discussion of the adoption of the emblem on this card as a club emblem. It was decided that nothing definite would be decided until the cards are presented to the members and their reactions determined.

The subject of (Morse) code instruction was discussed and Mr. Reed reported that previously Sam Maynard agreed to give instruction but received no calls.

The Activities Committee was appointed and Bill Marshall was asked to contact Chuck Sterne as a prospect for this committee.

There was a general discussion of the duties of the committees.

The coming meeting at which A.L. Budlong will speak was discussed. It was decided that discussion after the talk shall be formal to eliminate an extended discussion.

Locating Mobile Ignition Noise

By Bill - W6OAV

Is your ignition noise covering up that elusive DX station? Are you driving a mobile pulse generator? If so, track down the source of the noise with a "noise sniffer".



To build the sniffer, wrap approximately 30 turns of insulated wire into a coil of 2 to 3 inches in diameter. See Figure 1. Tape the coil to the end of your wooden mop handle we assume your XYL has you well trained in its use. Solder approximately twenty feet of "transmission line" (lamp cord or coax) to both ends of the coil. Connect the other end of the "transmission line" to a suitable connector for your mobile rig. Tape the "transmission line" to the wooden handle.

Connect the noise sniffer connector to the mobile rig. Turn on the rig and start the engine, probe around the car body with the sniffer while listening to the rig. You may be surprised where you will hear the noise source. In my case the noise was radiating from the right front fender and the tail pipe. I had to bond the fender to the fire wall and the tail pipe at two places to the frame. The result was a decrease of noise on 15 meters from S9++ to S2.

Happy noise sniffing.

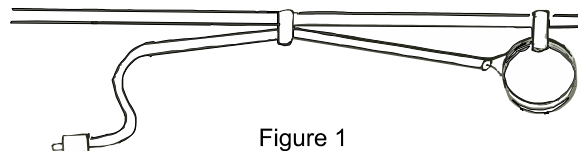


Figure 1

Getting Started In Emergency Communications

By Oscar - K0SSE

Several newly licensed amateurs have asked me recently how to get started in emergency communications. Most have already purchased one or more pieces of radio equipment and are anxious to become involved with some sort of first responders group but have no idea of who to contact or what is required. This article is designed to get the beginner started. It must be pointed out that things have changed drastically from the "good ole days". One cannot just walk into a situation and say I am here with a couple of handy-talkies and expect to be well received and be put to work. Organizations are expecting emergency communications personnel to be trained and certified and in some cases to have completed various background checks. So I would suggest you determine the organization or organizations you wish to support. Are you interested in supporting your local Red Cross chapter, your local Salvation Army Unit, Sheriff's Department, our Denver Radio Club, an ARES unit, and so on.

But at this point you are still not certain were to begin. All right, begin by reading the material (Introduction to EmComm) that has been compiled and put together by Pat Lambert, WØIPL. <http://www.w0ipl.net/ECom/ECOMIntro.pdf>. Search through Pat's files. You will find a wealth of material on emergency communication matters. He has a ton of information that will get you started.

From WØIPL's material, do an internet search on FEMA (Federal Emergency Management Administration) training course material. Look for NIMS course 100 which is a free course. This may be taken over the internet and can be completed in a mater of about two or three hours. FEMA has changed its course structure somewhat since I have taken the course so I will not go into detail at this time. But it does have to do with the command layout which

we must follow when the balloon goes up. So it is important for all of us who wish to volunteer or respond to an incident to have an idea were we fall in the pecking order.

From the above my next suggestion for the new comer is to enroll in the ARRL Emergency Communications Certification Courses Levels I, II and III. If you are a member of the ARRL the courses cost \$45 each. If you are not a member of the ARRL the courses cost \$65 each. Go to the ARRL web sit for details. Various organizations such as ARES may require you to complete one or more of these levels of the ARRL programs in order to take part in their activities. Of course there is more, I will follow up in the next month or so. Stay tuned. Some other sources for additional information include:

The ARRL Operating Manual for Radio Amateurs 8th Edition, Chapter 8
The ARRL Emergency Communication Handbook



WWW.ARRL.ORG

Events

By Rob - AJ0C

Hams gather for the first club breakfast. Everyone enjoyed a hearty breakfast and the camaraderie of like minded hams. The first club breakfast took place on September the 8th at the Country Buffet in Lone Tree near C470 and Quebec. Many thanks to Jeremy, KD0BDZ and Rob, AJ0C who set up this fun event.

Following breakfast a hands-on exercise in direction finding techniques was conducted with Mark, Jeremy, Joe, Jon, and Jerry participating and Rob providing training. The hands-on exercise took place at Lone Tree Park. Additionally, three "Tiger Tail" counterpoise antenna assemblies were constructed and passed out.



Front row (l-r): Mark - KD0BJV; Jeremy - KD0BDZ; Joe - KC0VXU
Back row (l-r) Rob - AJ0C; Bob - N4YHI; Joella - N4YJB; Jon - KC0WVY; Jerry - KD0BIK

If you would like to host a Club breakfast in your area, contact Gerry Villhauer. Then send all the information like place, date, and time to DRC_RT@comcast.net and we will add it to the Events page & Calendar.

UPGRADE BEFORE THE NEW SOLAR CYCLE

GENERAL CLASS LICENSE SCHOOL BEGINS

PLACE: In the center classroom, ground level.

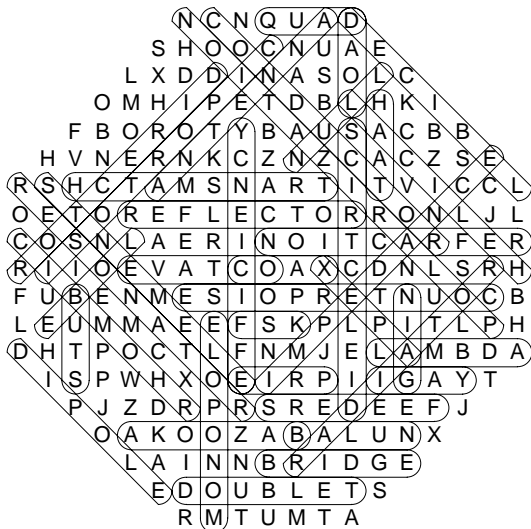
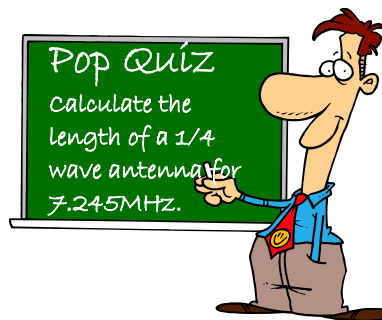
St. Joseph's Episcopal Church
11202 W. Jewell Ave
About 1½ blocks west of Kipling & Jewel, south side.

TIME: 7:00pm to 9:00pm, Friday Sept. 28th.

MATERIALS: "ARRL General Class License Manual, Sixth Edition"

NOTE: Cost of the manual is \$25.00 and is available through HRO or ARRL.

CONTACT: Jim, K0TOR, at 303-798-2351 or e-mail, general@frupac.net.



Swap -- Sell -- Trade

Have you got something HAM related you'd like to swap, sell, or trade?
Or are you looking for something special?

Email your heart's desire to
drc_rt@comcast.net.
In the subject line of your email put "SST"
this will direct to the correct in-box.

All ads will run in one issue only, so if you want to run the ad again just resend your email and it will be posted in the next issue. Inappropriate content will not be allowed.

Up Coming Events

By Bryan - KC0CUA

ARRL Rocky Mountain Division Elections

If you are an ARRL member you will have your chance to this month to select the new Rocky Mountain Division Director and Vice-Director. Unlike many previous elections this one features a real race. There are two candidates for each position.

The candidates for Division Director are:

Brian Mileshosky, N5ZGT, is the current region Vice-Director who is running for the Director position. Find more info at Brian's campaign website - <http://www.voterockymountain.org>

Jeff Ryan, K0RM, is the current Colorado Section Manager. Info on Jeff's campaign can be found on his website <http://www.k0rm.net/>

Warren "Rev" Morton, WS7W, who is the current Director is not seeking re-election.

The candidates for Division Vice-Director are:

Chris Howard, W0EP. More info about Chris can be found on his website <http://rockymtndivisionelection.blogspot.com/>

Dwayne Allen, WY7FD. You can find info on Dwayne at the website he shares with Brian <http://www.voterockymountain.org>

In case you are not aware of the roles these positions perform, the following is the definition from the ARRL website.

"ARRL's structure divides the United States into 15 ARRL Divisions. Every three years the ARRL full members in each of these Divisions elect a Director and a Vice Director to represent them on the League's Board of Directors. The Board determines the policies of the League, which are carried out by the Headquarters staff. A Director's function is principally policymaking at the highest level. Each division's Director and Vice Director represent their Division on ARRL policy matters."

Look for your ballot in the mail early in October. Remember to vote and remember whoever we elect they will represent the interests of all hams in the Rocky Mountain Division (Colorado, New Mexico, Utah and Wyoming) for the next three years. Every vote does count so please sure to return your ballot.

October 2007							DRC Net Sunday 8:30pm Local
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
	1	2	3 <i>Learning Net</i> 7pm	4	5 <i>General Class</i> 7pm to 9pm	6	
7	8	9	10 <i>Learning Net</i> 7pm	11	12 <i>General Class</i> 7pm to 9pm	13	
14	15 <i>School Club Roundup</i> Starts 1300UTC	16	17 <i>DRC Meeting</i> Elmer 6:30pm General 7:30pm	18	19 <i>General Class</i> <i>School Club Roundup</i> Ends 2400UTC	20	
21	22	23	24 <i>Learning Net</i> 7pm	25	26 <i>General Class</i> 7pm to 9pm	27 <i>ARRL International EME Comp.</i>	
28 <i>ARRL International EME Comp.</i>	29	30	31 <i>Learning Net</i> 7pm				

DRC Board of Directors

President	W0GV	Gerry Villhauer	303-467-0223	W0GV@hotmail.com
Vice-President	WG0N	Dave Baysinger	303-987-0246	WG0N@arrlo.net
Secretary	WA9TVH	Orlen Wolf	303-2791328	owolf@mines.edu
Treasurer	K0TOR	Jim Beall	303-798-2351	K0TOR@arrl.net
Board Member	KC0CUA	Bryan Steinberg	303-987-9596	KC0CUA@arrl.net
Board Member	K0HTX	Dave Gillespie	TBD	K0HTX@comcast.net
Board Member	AC7SX	Joe Delwiche	303-233-6229	lakewoodjoe@aol.com
Board Member	K0RCW	Robert White	TBD	TBD

DRC Staff and Volunteers

Trustee	WA9TVH	Orlen Wolf	303-279-1328	owolf@mines.edu
Net Control	K0TOR	Jim Beall	303-7982351	K0TOR@arrl.net
Emergency Coordinator	K0SSE	Oscar Hall	303-375-0627	oscarh@aol.com
Membership	KC0OUQ	Bob Proctor	303-986-0612	KC0CUA@arrl.net
Club Librarian	WG0N	Dave Baysinger	303-987-0246	WG0N@arrl.net
VE Team	AC0T	Wallis Gamble	303-202-0339	wallygamble@comcast.net
Swapfest Mgr	KC0CUA	Bryan Steinberg	303-987-9596	KC0CUA@arrl.net
Field Day	N6LD	Charles Wright	303-347-0188	cwright@haxsystems.com
Tech. Committee Chair	W6OAV	Bill Rinker	303-741-2537	W6OAV@arrl.net
APRS Chair	KB0MQQ	Lloyd Plush	303-277-0785	LloydPlush@aol.com
Benevolent		Carolyn Wolf	303-279-1328	
RT Editor	AG0S	George McCray	303-751-7246	AG0S@arrl.net
Education	AJ0C	Robert Rude	303-841-6443	AJ0C@comcast.net

DRC Repeaters

BAND	Freq / Shift / PL Tone	Additional Information
10m	29.620mHz (-100kHz) FM	Temporarily OFF The Air
6m	53.090mHz (-1mHz)	
Packet	145.05mHz<>14.105mHz	
2m	145.490mHz (-) 100Hz PL	Linked to the 70cm - 448.625mHz machine.
2m	147.330mHz (-) 100Hz PL	Members Auto-Patch
1.25m	224.380mHz (-) 100Hz PL	
70cm	448.625mHz (-) 100Hz PL	Linked to the 2m - 145.490mHz machine.
70cm	449.350mHz (-) 100Hz PL	Wide area coverage with Echolink Node # 4140.

Editor's Note

*DRC members - this is your newsletter. If there is something which is club or amateur radio related that you'd like to see as a regular feature, email suggestions to the editor. Members are the heart and sole of The Denver Radio Club, if you have an expertise or an interest in a particular segment of ham radio that you'd like to write about you may email your submissions to DRC_RT@comcast.net. **Editor***

All HAM no Eggs

N C N Q U A D
 S H O O C N U A E
 L X D D I N A S O L C
 O M H I P E T D B L H K I
 F B O R O T Y B A U S A C B B
 H V N E R N K C Z N Z C A C Z S E
 R S H C T A M S N A R T I T V I C C L
 O E T O R E F L E C T O R R O N L J L
 C O S N L A E R I N O I T C A R F E R
 R I I O E V A T C O A X C D N L S R H
 F U B E N M E S I O P R E T N U O C B
 L E U M M A E E F S K P L P I T L P H
 D H T P O C T L F N M J E L A M B D A
 I S P W H X O E I R P I I G A Y T
 P J Z D R P R S R E D E E F J
 O A K O O Z A B A L U N X
 L A I N N B R I D G E
 E D O U B L E T S
 R M T U M T A

- ANTENNA
- APEX
- BALUN
- BAZOOKA
- BRIDGE
- COAX
- CONDUCTOR
- COUNTERPOISE
- DECIBEL
- DIELECTRICS
- DIPOLE
- DIRECTOR
- DOUBLET
- EFFICIENCY
- EIRP
- ELEMENTS
- FEEDERS
- FSK
- GAIN
- HAAT
- HELICAL
- IMPEDANCE
- ISOTROPIC
- LAMBDA
- LOAD
- LOBE
- MONOPOLE
- NULL
- OCTAVE
- POLARIZATION
- QUAD
- RADIATOR
- REFLECTOR
- REFRACTION
- RESONATOR
- RHOMBIC
- STUB
- TRANSMATCH
- YAGI

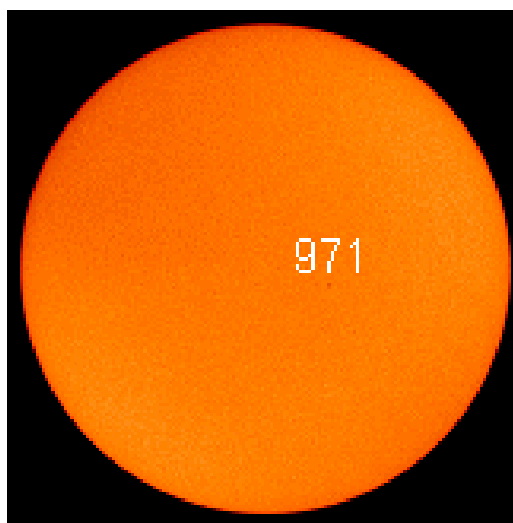
NOTE: Answer key is located on page 5.

Solar Watch

George - AG0S

“Are we there yet?” If you’ve ever traveled with children you’ve heard that over and over. But it applies here too. Many of the experts who watch and forecast solar activity are not sure we’ve hit the bottom of the solar cycle. If you check the current solar flux forecast you’ll see it’s forecast to hover around 67 & 68 through mid-November.

When there is at least one visible sunspot the solar flux is normally 70 or higher but the string of zero sunspot days makes it seem that we are still at the bottom of the cycle, or haven’t quite reached it yet. Sunspot number 971 which emerged a few days ago is barely visible and hasn’t had any affect on the solar flux numbers. Looking to the horizon, I suspect we won’t see much in the way of visible sunspot activity for a number of weeks yet. All I can say is I hope I’m wrong.



Credit: SOHO/MDI