



ROUNDTABLE

PRESIDENT'S MESSAGE

By Gerry Villhauer-W0GV

Hello DRC Members,

The weather seems to be changing fast in to winter. I always hope for that Indian Summer in November as I have some antenna work to do at home before hard winter sets in.

The election of DRC board members and officers was done at our September meeting. There were no changes to the board member line up. Thanks to these members for taking another term. In our officer lineup the only change was Bryan Steinberg, KB0A, was elected as Vice President. Dave WG0N, made the decision not to run this time but remains an active board member. Thanks to all the board members and officers for the extra effort and time they donate to make the DRC the active club it is. Please visit our website at www.w0tx.org to see the board and officer lineup.

Welcome to new DRC members Ben Barefoot, KD0IRP and Jim Pope, KG0PP. Please check in on the nets, come to the meetings and activities and remain an active member.

Bill, W6OAV, stepped in last month with an interesting video on the men who made radio, when our scheduled presenter had to cancel at the last minute. Bill has finished his long awaited and asked for presentation on SWR. He will be giving us all the answers and raising some interesting question on the subject of Standing Wave Ratio (SWR) at this month's meeting. This is a premier presentation; please make sure you don't miss it. For more details on Bill's presentation check page 2 of the RoundTable.

See you all at the meeting October 21st at the St. Joseph's Episcopal Church, 11202 West Jewell Ave., Lakewood, CO. That is about two blocks West of Kipling on West 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 pm. followed by the Regular Meeting and Program at 7:30 pm.

Gerry, W0GV
President

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SEPTEMBER MEETING - WHAT'D I MISS

By Bill – W6OAV

As usual there was a great turnout at the monthly meeting. W0GV began the meeting with introductions. After introductions, the yearly board member elections were held. Members in the following three positions were re-nominated and elected. They were:

President – Jerry, W0GV
 Secretary – Orlen, WA9TVH
 Treasurer – Jim, K0TOR

Dave, W0N, our Vice President, nominated Bryan, KB0A, to fill his position. Bryan accepted and was elected.

A big **THANK YOU** to the board members for all the time and talent that they donate to the club.

After the elections, the meeting was turned over to Bill, W6OAV. He gave a short introduction covering the contributions and inventions of De Forrest, Armstrong and Sarnoff. A very interesting video followed detailing their lives, inventions, frauds and conflicts.



The meeting concluded with several lucky attendees winning door prizes.

TECHNICAL COMMITTEE REPORT

By Bill – W6OAV

This report provides an overview of items discussed during the September Technical Committee meeting.

Voter System

Goal: Design and build a 147.33 voter system:

- WA9TVH is in the process of assembling the system for Station 4. Once he has completed making a custom cable he will give the cable to W6OAV. W6OAV will arrange to have other committee members build the duplicate cables required for additional remote stations. W6OAV will get together with WA9TVH to determine what other processes the committee members can do to off load WA9TVH.

- N1ETV has installed the antenna system for the first remote voter test site.

147.33 - Hudson Site

Goal: Repair bad audio:

- Several committee members will conduct “listening” tests to determine if the tinny audio is present at all times or just after the repeater is used for a while. This will help determine the issue...is it pre-emphasis/de-emphasis or some other problem.

TSA Battery Backup Project

Goal: Automate the station battery backup system using two West Mountain Radio PowerGate modules:

- KB0A and N1ETV will get together to complete the system design and then implement the installation. KB0A has two modules. A third module may be required.

145.49/448.625 Controller Upgrade

Goal: Replace the S Comm controller with a 7330 controller:

- KB0A has the 7330 and is looking at beginning to program it as time permits.

TSA HF Antenna Project

Goal: Configure TS430 to transmit on NVIS antenna and to receive on T2FD.

- WA9TVH will get the TS430 schematic to N1ETV so that N1ETV can determine if the receiver and transmitter can be “split”. Hopefully, the TS430 can be configured to receive on the T2FD and transmit on the NVIS loop.

OCTOBER MEETING PRESENTATION

You won't want to miss this month's presentation which will cover many misunderstood facts about SWR. Some examples are:

- Low SWR is not always desirable.
- High SWR is often very desirable.
- It is a waste of time trying to reduce SWR below 2:1.
- Changing the feed line length does not change the SWR. All power fed into a feed line (minus line loss) is radiated by the antenna no matter what the SWR.

Bill, W6OAV, will give a presentation covering these and many other facts. He will also show animations of various SWRs developing on feed lines.

RAIN GUTTER III LIKE A STEPPIR – ONLY DIFFERENT

By Jack Ciaccia – WMØG

This is the third and latest version of the all band Rain Gutter Antenna used at my new QTH. These antennas can get really expensive when you move every few years. HI!

We moved into a new house in a golf country club community and of course, it has HOA CC&R restrictions regarding ham radio antennas, just like the other developments we have lived in here near Boulder, Colorado. But, this time I have a home with a nice tall rain gutter on the SE corner of the house. The home is built into a hillside and the rear of the house has rain gutters that are over 25' tall.



The radio shack is located in the basement and I was able to drill a couple of discrete holes through the wall to get the lead-in antenna and ground wires to the venerable SGC-230 antenna coupler.

I laid out a series of radial wires extending about 60' each radiating from the corner of the house, as I had in my previous installations. I am still using the same transceiver, an old Icom IC-745 running about 80 watts.

Signal reports are similar to what I had been getting at the other QTH. I can work any DX that I can hear, and I am able to work on the WAS nets as I had before, with approximately the same signal reports (plus or minus propagation and conditions). As you all probably know from your own experience this past year, conditions have been generally poor (OK lousy) for DXing.

I managed to work the 160 meter contest this past December (2003) and logged 80 QSO's from the east to west coast as well as three DX countries in the Caribbean in just 5 straight hours of operating time. Not a great contest 'run rate' by any means, but at least I was participating. Again, I'm sure most of the work is being done by the other station's antenna BUT. You still have to put out some sort of signal on that band to be heard.

On 80 meters I still work the "GERATOL WAS" net from time to time and although I didn't spend much time there this season, I did manage to work all states (again) in a couple of months of casual operating.

On 40 meters the antenna works great. I can work any of the DX that I hear and reports are consistently very decent (from S7 to S9).

On 30 meters, where all stations are created equal (power wise, at least), I can usually break a pile up for the rare DX station. Signal reports from 559 to 599 are typical, with most DX reporting 579. Of course, these reports are also tempered by the conditions at the time.

On 20 meters the rain gutter performs very well and I am able to again work anything I can hear. Competition on this band is keen and if there is a pile up, I usually am down in the 'pecking order' a bit, but I still get them.

On 17 meters I have had a lot of QSO's with stations that find it unbelievable that I am using a rain gutter for my antenna. Once I start a QSO on the subject, I usually get two, three and sometimes, four QSO's in succession with all sorts of questions and compliments on my signal. The rain gutter antenna subject is definitely a good QSO topic for discussion.

On 15, 12 and 10 meters the antenna works well again. I don't spend too much time on those bands as most of my operating is done during the evening hours. The few

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times I have been on those bands though, the antenna worked well and I was getting consistently good reports.

The only interference I have noticed is with my fax machine in my home office. The RFI played havoc with it at first, but a couple of well placed RF chokes on the line cord and telephone line cured that fairly easily. I haven't noticed any other interference nor have I received any complaints from my new neighbors. Of course, they don't even know I have a ham radio station as there aren't any tell-tale signs outside! I am operating a stealthy, yet effective, amateur radio station and everybody is happy. Including the "CC&R Nazi's" that run the local HOA and enforce the dreaded covenants.

I recently was asked by the SGC folks if they could reprint the previous articles I had written on my rain gutter antenna. I was only too pleased to have them include my articles in their newsletter and it has since inspired a few hams around the world, who face similar restrictions, to use their rain gutters as antennas too.

I'm not sure if this will be my last rain gutter antenna, as the XYL and myself have been discussing 'downsizing' to a smaller home as we get nearer to retirement age. So, I will probably be shopping for a new rain gutter antenna (and a home to install it on too) in the coming months. Now that I am sure that I can duplicate my rain gutter antenna system performance from the previous versions, I will be less apprehensive about a new QTH. Of course, I could go out and spoil all of this fun by building in a non-CC&R subdivision and put up a tower, beam and verticals like other hams do, but what's the challenge in doing that?

SATERN INFORMATION

From Mike Gelski – KBOPVD
303-906-4695
Metro Denver Emergency Disaster Services and
SATERN Coordinator Western Territory USA
The Salvation Army

Important Dates for SATERN volunteers:

- October 3, Saturday, EDS Garage/ Warehouse packing and prep 8am to 5pm (includes ham equipment)
- October 10, Saturday, 8:30am to 4pm Salvation Army Incident Command System training, Location: The Salvation Army, 802 Quari Court, Aurora CO no charge and lunch will be provided.

Contact Mike Gelski – KBOPVD if you would like more information.

SALVATION ARMY NEWS

The Salvation Army Women's Auxiliary Supports Emergency Preparedness For Hams With Financial Grant

The Salvation Army Women's Auxiliary is an organization of women who assist The Salvation Army through service and grants. This year Emergency Disaster Services Metro Denver received a \$1000 grant.

Thus far Denver SATERN (Salvation Army Team Emergency Radio Network) has purchased several machined J Poles to go various Salvation Army buildings, a TNC and Heil Headsets compatible with the existing Salvation Army mobile ham radios.

Each year, the Auxiliary allocates grants to various Army projects. Our primary means of raising these funds is the annual Holiday Festival & Doll Tea each November. The "Doll Tea" is being held at Colorado Community Church, 3651 S Colorado Boulevard, Englewood CO 80113 - November 6 & 7, 2009 - 10 am - 4 pm. Workshops are held year round to create items for this benefit.

This event includes great baked goods, exhibits of doll houses and model trains. If you are planning to buy a new radio, you might suck up to your significant other by attending the event with her. Call Judy Schmaltz (303) 866-9292 for more information.





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SO WHAT HAPPENED TO THE AUTO-PATCH ON THE 33 MACHINE?

On the 22nd of September, Bryan – KB0A stopped by the Station 4 site to check on the phone line for the auto-patch, suspecting the construction crew. Well, as you can see by the pictures it is pretty obvious what happened.



The contractor did some grading between the tower site and the phone pedestal. As a result they cut the wire that ran underground to the shed. Qwest only buries their wires a few inches deep and it wasn't on any site plan. The grading in that area is now complete so Qwest will have to come back out and replace the line. *(Note: As of the publication date the line has been repaired and the auto-patch is back up and running.)*

It looks like the tower site will be above grade, consequently they will slope the soil or put up a retaining wall. The contractor will also remove the pole next to the tower, just outside the fence, which was used to bring power and phone to the shed. Thanks Orlen for removing all connections it had to the tower.

Thanks Bryan for your efforts!



SHOW CLUB SPIRIT AND STAY WARM THIS WINTER

The back of the jacket is emblazoned with the DRC logo and the front will have your first name and call.



Price: \$ 60.00 + taxes

Call or email Doug and don't forget to give him your name and the size of the jacket you'll need.



Why not buy two one for the YL and one for you.

Contact: Doug Parker-N4ATA
 Phone: 303.922.3305
 Email: jtbembsvcinc@comcast.net



UP COMING EVENTS

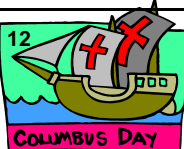



Nov 7, 2009 - 285 TECHCONNECT RADIO CLUB'S FALL TECHFEST

The 285 TechConnect Radio Club will host their 2nd annual Fall TechFest on November 7th. This series of workshops will include topics on everything from Digital Modes to Ohm's and Kirchoff's Laws to Block Diagrams and Schematics to Test Equipment to Buy to Taking the Mystery out of SWR and finally to Propagation Basics.

The actual workshop will run from 9 a.m. to 4 p.m. Check in is from 8-8:45 a.m. Pre-registration is strongly encouraged as our space is limited.

- Where: Inter Canyon Fire Station #1, Go to www.intercanyonfire.org. Click on "Our District", then "1", and then "Google Maps - Station 1". The address is 7939 South Turkey Creek Road, Morrison, Colorado. Carpooling is recommended.
- Cost - \$5 (cash) – pay at the door.
- Refreshments: Coffee and water is free. Rolls, donuts, muffins and pop can be purchased. Lunch is on your own so plan on bringing a sack lunch or driving the 5-6 miles to Conifer for take out.

Check out our website – www.na0tc.org - for additional information including the schedule, a flyer and a map to the facility. Pre-register to k0nnc@arrl.net.

OCTOBER 2009							<i>DRC Net Sunday 8:30pm Local</i>
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
				1	2	3	☉ Full Moon
4	5	6	7 <i>Learning Net</i> 7pm	8	9	10 <i>ARRL Int'l EME Competition</i> Begins 0000 UTC	
11 <i>ARRL Int'l EME Competition</i> Ends 2359 UTC ☾ Last Quarter	12  COLUMBUS DAY	13	14 <i>Learning Net</i> 7pm	15	16	17	● New Moon
18	19	20	21 <i>DRC Meeting</i> Elmer 6:30pm General 7:30pm	22	23	24  United Nations Day	
25 ☽ First Quarter	26	27  יום כיפור	28 <i>Learning Net</i> 7pm	29	30	31 	

Check www.ARRL.org for Contests and Rules!

DRC BOARD OF DIRECTORS

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Board Member	K0RCW	Robert White	303-619-1048	rcwhitejr@mac.com

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DRC REPEATERS

BAND	Freq / Shift / PL Tone	Additional Information
10m	29.620mHz (-100kHz) FM	Not In Service
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	Local Area, Members Auto-Patch Does Not TX a PL!
2m	147.330mHz (-) 131.8Hz PL	NE Area Remote Does Not TX a PL!
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. Submission deadline is the 25th of the October. **Editor**

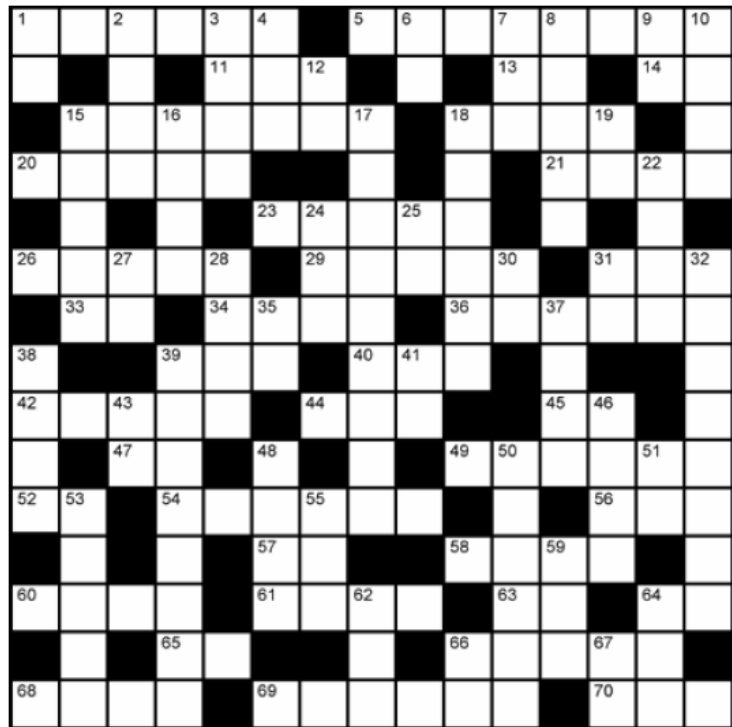
Puzzle Page

"I'm Not Dead Yet!"

By H. Ward Silver, NOAX

Even though propagation pundits predict a dismal lack of the pox peppering Ol' Sol, we continue to be pelted with positively pestilential peals of protonic pizzazz. Preposterous! While HF'ers are pensively perusing the bands, VHF+ patrons are passionately pursuing providential propagation above 30 MHz!

NOTE: Puzzle solution is located on page 5.



Across

1. Right-angle adaptor
5. Solar blemishes
11. Style of ac power connector
13. Write (abbr.)
14. Light, strong metal (chemical symbol)
15. Orbiting bodies
18. Fail to hold
20. 100% copy
21. At right angles to the boom
23. Prefix meaning "of space"
26. Ionospheric level
29. Of the earth
31. Broken
33. Inductor loss resistance (abbr)
34. Electronic contact confirmation service
36. Peaks
39. Gamble
40. Visible path (abbr.)
42. Place into service
44. Diode used for switching
45. Just do this
47. Prefix for Norway
49. When the ionosphere is not quiet
52. Broadcast bands (abbr.)
54. Repetitive solar behavior
56. What's left after hamfest expenses
57. Prefix for Hungary
58. Type of flare
60. Orbiting solar satellite
61. Possesses
63. Maximum tubing diameter (abbr.)
64. Pacific continent (abbr.)
65. Ionizing radiation from the sun
66. Locations of terms in a book
68. Where the asteroids travel
69. Sky lights
70. Three-phase power with ground

Down

1. Electromagnetic field components
2. Signals the start or alarm
3. Stream of solar particles
4. Visually observe
6. British countries (abbr.)
7. HF listener
8. Splits light into colors
9. That (CW abbr.)
10. Trigonometric function
12. Contest logging program
15. High-latitude path
16. One who assists
17. System in orbit
18. Disturbances in the ionosphere
19. Transcendental number
22. Early rotating memory
24. Space shuttle mission (abbr.)
25. Roger Roger (abbr.)
27. Girl friend (CW abbr.)
28. Type of relay
30. Send everything after (CW abbr)
31. Prefix meaning "two"
32. Slowly moving pole
35. Quiet (abbr.)
37. Transmit (abbr.)
38. Flying saucers
39. Loss of all signals
41. Powered up
43. Angular height (abbr.)
46. Very small
48. Reflected signal
50. Sun's hot outer layer
51. One who examines for free
53. Entire
55. Legal rule
59. Combine
62. Type of non-invasive RF imaging
64. Contradictory moron
66. Heat energy
67. Orthogonal to N-S