



ROUNDTABLE

PRESIDENT'S MESSAGE

By Gerry Villhauer – W0GV

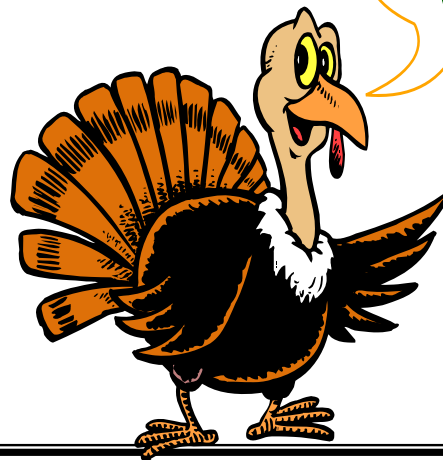
Hello DRC Members,
 Unusual weather this fall, as I write this, it is nearly November and no snow (so far) in my neighborhood. Speaking about the weather, what a beautiful day we had on October 25 when we took down the antennas at The Salvation Army garage. It was perfect weather for working outside and it made the job much easier. The work party consisted of: Dave, K0HTX, Bill, W6OAV, Jack, W0JMC, Doug, N4ATA, Jason, AC0UA, Jim, K0TOR and Gerry, W0GV. Thanks guys, Great Job! We are currently on hold for installing a station at the new Salvation Army garage in Aurora until remodeling is completed; which is way behind schedule. I've had several conversations with The Salvation Army officials and I feel confident that they want and need the service that DRC can provide them.

Bad News, Good News...As I previously announced, our Round Table Editor, George, AG0S, has decided to relinquish the RT Editor position, effective the end of this year. I think we all agree George has done a wonderful job as Editor of our monthly newsletter. I get regular comments on the quality and content of the Round Table. Please join me in thanking George for his years of tireless service. As much as I am sorry to see George move on, the good news is we have a new Editor coming onboard. Jessie King, N0HI, has stepped up to take on the Editor's duties. Jessie will have the help of George and our Associate Editor, Bill, W6OAV, to get him up and running. The Round Table is one of the most valuable assets to the success of the DRC. Jessie, thank you for stepping up and thanks George and Bill for your mentorship.

Last month Bill, W6OAV, presented a program on Winlink. I thought it was very interesting to see many of the members taking notes. Since the meeting I have heard lots of comments on the air about Winlink; which I think confirms the interest in this mode of communication. Great Job Bill! I think another similar class would be in order. This month's program will be presented by Berry, KA0BBQ, and the subject is D-STAR. D-STAR technology is a digital communication mode created by the Japan Amateur Radio League for digital voice and data communications. This technology is quite rich in features and its use is expanding here in Colorado and throughout the world. Berry is quite knowledgeable on D-STAR; so come to the November 19th meeting and learn about this fascinating communication mode. Finally, mark your calendar for our annual Holiday Party, December 17th; don't miss the Food, Fellowship, Program and Prizes.

73,
 Gerry, W0GV
 President

Happy Thanksgiving!
 But Don't forget the
 Holiday Party in
 December!



INSIDE THE ROUND TABLE

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OCTOBER MEETING - WHAT'D I MISS?

By Bill – W6OAV

There were 52 attendees. After W0GV completed introductions, he announced that the Christmas party would take place at the Golden Corral on Santa Fe in Sheridan. During the party, K0LAI will present his experiences when he worked for two seasons in the Antarctic.

The meeting was then turned over to the guest speaker, Bill, W6OAV. Bill started with a PowerPoint presentation covering Winlink. He explained why it is important for emergency communications, how the network functions and the different applications users can use to access Winlink. He presented several examples showing using the club's 2 meter to 20 meter packet gateway and N4ATA's BPQ system to send and receive Winlink emails.



After the presentation Bill and Gary, KD0SQA, demonstrated sending and receiving Winlink emails over a 2 meter packet link to N4ATA's BPQ system. (This BPQ provides access to the Winlink network). They began the demonstration by setting up a temporary 2 meter link to the BPQ. Two problems required setting up this temporary link. First, Green Mountain blocked direct access to the BPQ. Second, it was basically impossible to radiate a signal out of the building. To setup the network, Gary parked his jeep equipped with a packet node outside the building. Bill was able to setup a packet link to Gary's node. From there he setup a packet link to AG0S's node in Aurora and from there a he setup a packet link to the BPQ. This effectively setup a packet radio link around Green Mountain to the BPQ. Using this temporary packet link, emails were successfully sent and received between several members of the audience using their email providers and the Winlink network.

This demonstration illustrated how "packeteers" can quickly setup a temporary packet network to provide email services to emergency responders in isolated areas, such as mountain canyons, where there are no communications available.

NOVEMBER MEETING ANNOUNCEMENT

By Berry – KA0BBQ

What's all the noise?

Well if you're on digital radio you might be asking the same question. So as digital radio becomes more prevalent on Amateur Radio you now have Quiet, Crisp Communication choices. We have all heard about Motorola's DMR Radio as its commercial radio system as made inroads into the Amateur Radio ranks. But by nature MOST Hams like to experiment and that is one reason why the Japan Amateur Radio League (JARL) created specification standards for a FDMA and GMSK digital voice and data protocol for Amateur Radio. ICOM being an early adopter of the technology coined the term D-STAR® (Digital Smart Technologies for Amateur Radio) for its line of radios. ICOM came out early with 1.2, UHF and VHF repeaters and controller to support their line of mobiles and hand held radios with this new technology. The ID-1 Radio remains the only Digital Data (DD) mode radio which allows users to directly connect and search the internet through amateur radio. But it doesn't stop there with this new technology. Robin Cutshaw AA4RC created routing schemes to allow connectivity to the Internet via Gateways which connect DSTAR Repeaters to each other allowing you to select individual repeaters or call signs (Individual users) to any other station anywhere around the world in the DSTAR Network. Then came Reflectors (Nodes) allowing from several to hundreds of these systems to connect simultaneously to each other.

Currently DSTAR in Colorado is linked on the XRF719C Reflector to repeaters in Denver, Boulder, Colorado Springs, Boulder, Ft. Collins, Monument, Salida, Parker and Cheyenne, WY as well as repeaters in Douglas County (no Internet connection), Broomfield (DPlus) and Grand Junction which may soon be linked back to the Front Range. Using DSTAR radios and Digital Voice Access Points (DVAP), a computer and an Internet connection you can create your own local simplex repeater to the DSTAR Network. With the Digital Ham Access Point System (DHAP) and a Wi-Fi connection you can access the DSTAR Network with your DSTAR Radio from any Open WiFi connection.

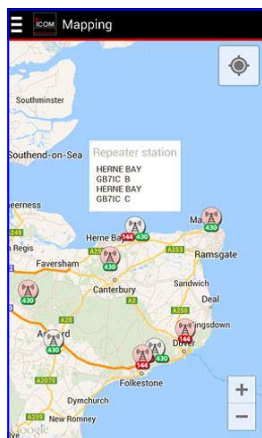
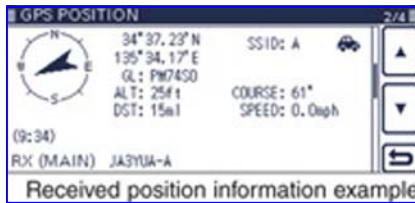
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Come out to our November DRC Meeting and see and hear what new technologies are available on DSTAR such as the ID-5100 Dual Band Mobile with Blue-

tooth. And learn how to search for Nearest Repeaters in both Digital Voice (DV) and Analog Voice (FM) Modes. Find repeaters anywhere in the world on Google Maps using an Android Smartphone or Tablet and with a few screen taps be talking on remotes systems worldwide. Transfer Hi-Res photographs in DV mode while speaking at the same time to other users or send simple text messages to users. That and more coming to a club meeting this November.



Welcome to our newest members. We have a number of activities throughout the year and we'd like very much for you to participate in serving your community. If you have questions please feel free to ask on any of the repeaters or see the contact information on the last page of this publication. Also please join us once a month at the regular club meeting on the 3rd Wednesday at 7pm. For new hams we have the Elmer session which starts at 6:00pm before the regular meeting.

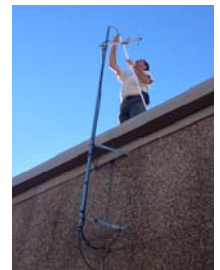
More information can be found on the Denver Radio Club website at <http://www.w0tx.org>.

TECH COMMITTEE NEWS

The DRC/TSA Station Is No More

By Bill – W6OAV

This month the Salvation Army (TSA) moved from their temporary facility at 70th and Washington to their new permanent facility in Aurora. This move necessitated dismantling the DRC/TSA HF/VHF/UHF station at the original facility. Early this month, Jack, WOJMC, dismantled and stored the station equipment. On October 25th a work party took down the antennas, disconnected all the ground cables and pulled all the transmission lines. The station will be reinstalled in the new facility once the TSA has completed the building construction.



The photo, at above, shows our tower climber, KOHTX, dismantling the antennas. At left photo shows the work party volunteers. From left to right: KOHTX, K0TOR, WOJMC, W0GV, W6OAV and

N4ATA. Thanks guys for doing a fine job.

Who's New In The DRC

The DRC is a very active club in the Denver metro area and we'd like to have all of our members listen for these new calls and personally to make them feel welcome.

Dick Palmer	KG7GII
Mike Hunter	K0EMU
Harold Hurst	AD0IT
Jon Caples	NORDE
Randy Haugen	KE0BWT
Vernon Kercher	KD0WDE

OCTOBER ELMER SESSION

By Jessie – N0HI

Every month at 6pm, before the regular club meeting, there is an Elmer session.



(Continued on page 4)

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I have attended this meeting the last two months and there was high participation each month. The "Head" Elmer so-to-speak, at the past two sessions was Larry, K0LAI. He does an excellent job of informally answering a broad range of questions, in a very non-pretentious manner. Of course there are other Elmer's in attendance and often times they will "chime-in" to provide another perspective on topics that come up during the session. For the October session, there were approximately 20 attendees. The actual attendance is a bit difficult to gauge as people arrive in piecemeal and the session sort of melds right into the regular club meeting.

I for one sure wished I had attended these sessions when I was working myself up through the license levels. I believe these sessions are an excellent supplement to the Learning Nets that the club provides on the 145.490 repeater at 7:30pm Wednesdays. There is no shortage of topics, which keeps the discussions lively and provides many opportunities to learn something new or different. Come out and join the group.

Kudos to Larry and the other Elmer's who provide this friendly and helpful resource for our club.

In the 50's, as shown in this example, Radio Shack sold military surplus equipment. This ad shows BC-312 and BC-348 HF receivers, a BC-187A HF transmitter, a Command BC-253 HF receiver and a Command BC-358 HF transmitter. The Command units were extremely popular with hams. They were very inexpensive, easy to modify and worked well. Also shown is the BC-221, a very stable and accurate frequency standard for its day. The last item shown is the then very popular PE-105 dynamotor which converted an automobile's 6 volt system to the various high voltages required by the tube gear. This ad should bring tears of fond memories for "old timers" like me that spent a lot of time modifying and using this gear!



In the 60's, Radio Shack sold ham gear as depicted in the advertisement at left. Radio Shack sold all the major brands of ham receivers and transmitters (National, Hallicrafters, B&W, etc.).

REMEMBER WHEN?

By Bill – W6OAV

The purpose of this article is to bring back memories to old time hams like me and to let newer hams know what ham radio was like in the 50s and 60s.

Many of us "old timers" remember when Radio Shack was a "ham's store". Radio Shack stocked about everything a ham could want. To give one an idea of what Radio Shack was in the 50's and 60's let's look at some of the ads they ran in QST back then. (These ads will also give an idea of what hams worked with in those days, especially in the area of military surplus).



This graphic shows an ad for one of their annual catalogs. This catalog contained over 200 pages. Note the categories listed on the right side of the cover. This list doesn't begin to illustrate all the "goodies" contained in the catalog!

As shown in the ad at right, Radio Shack not only sold gas engines but also sold ham tools, such as soldering irons, chassis hole punches, etc., they also sold many other "non-ham" workshop tools as shown in the ad below.



Sure is a far cry from what we find in a typical Radio Shack today! That is, if you can find that is still open.

SOLAR UPDATE

Excerpted from www.Spaceweather.com

SUPER-SUNSPOT PREPARES TO DEPART

The biggest sunspot in nearly 25 years is about to leave the solar disk. This picture from Sergio Castillo of Corona CA shows AR2192 approaching the western limb on Oct. 27th:



"For its final trick, AR2192 is going to treat us by mimicking a Giant Skull," says Castillo, one of many readers who have noted the resemblance between the sunspot and a skeletal face. "Say Happy Halloween as it gets ready to turn away from us."

As AR2192 approaches the sun's horizon, it is no longer facing Earth. However, the odds of an Earth-directed radiation storm are higher than ever. The reason is, the western limb of the sun is well-connected to Earth. Solar magnetic fields springing out of that region spiral back to our planet. If a sunspot passing through the area explodes, those spiraling magnetic fields can funnel energetic particles in our direction.

In only a few days, the behemoth sunspot will begin a 2-week transit of the far side of the sun, carried around by the sun's 27-day rotation. However, that doesn't mean we've seen the last of this magnificent active region. Big sunspots typically persist for two or three solar rotations before they decay. After it leaves, AR2192 will return in November.

TECH QUESTION OF THE MONTH IS YOUR ANDROID SPYING ON YOU?

Over 500 million Android smart phones are spying on their users. If you've downloaded a flashlight app, your Android is probably spying on you. For the story, go to: <https://www.youtube.com/embed/Q8xz8xKEFvU>

Information listing the spy apps is available at: <http://www.snoopwall.com/threat-reports-10-01-2014/>

SOLAR SECTOR BOUNDARY CROSSING

On October 27th, Earth was expected to pass through a fold in the Heliospheric current sheet. It didn't happen. The overdue encounter, called a "solar sector boundary crossing," might happen October 28th instead. NOAA forecasters estimate a 25% chance of polar geomagnetic storms if and when it occurs.

So what is the Heliospheric current sheet?

The **Heliospheric current sheet** is the surface within the Solar System where the polarity of the Sun's magnetic field changes from north to south. This field extends throughout the Sun's equatorial plane in the Heliosphere. The shape of the current sheet results from the influence of the Sun's rotating magnetic field on the plasma in the interplanetary medium (Solar Wind). A small electrical current flows within the sheet, about 10^{-10} A/m². The thickness of the current sheet is about 10,000 km near the orbit of the Earth.



The underlying magnetic field is called the interplanetary magnetic field, and the resulting electric current forms part of the Heliospheric current circuit. The Heliospheric current sheet is also sometimes called the *interplanetary current sheet*.

WHAT IF THE WEATHER CHANGES?

As every Coloradoan knows our winter weather can take a sudden change for the worse. If we should experience a turn in the weather on the day of our monthly DRC meeting it may be necessary to cancel the meeting. If this should happen listen for meeting status reports on 145.49 or 448.625 MHz repeaters during the afternoon on the day of the meeting.

TV SHOW SPARKS CROP OF NEW HAMS

By George – AG0S



Are you a fan of the ABC Television show “Last Man Standing”? Then you may know that “Mike Baxter” played by Tim Allen is an amateur radio operator, a HAM, in his case in more ways than one. In reality, he “Tim Allen”, is a licensed HAM. His call is KK6OTD.

“Last Man Standing” producer John Amodeo, NN6JA, told ARRL that the agreement with Allen was that “we would not publicize his license until he approved it.”

If you watch the show you know that ham radio has been a feature in at least one of the shows.

However on Friday November 22nd, Mike takes his grandson “Boyd” to the basement and introduces him to amateur radio. While Mike is on the air the resulting pile-up is a compilation of hundreds of real hams who sent recordings to the production company.

More than 2 dozen members of the “Last Man Standing” crew — and now Allen, its star — have been inspired by the show’s Amateur Radio component to get licensed.

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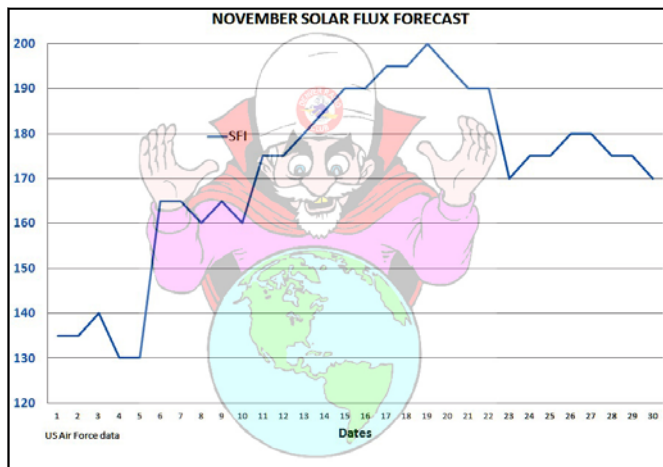
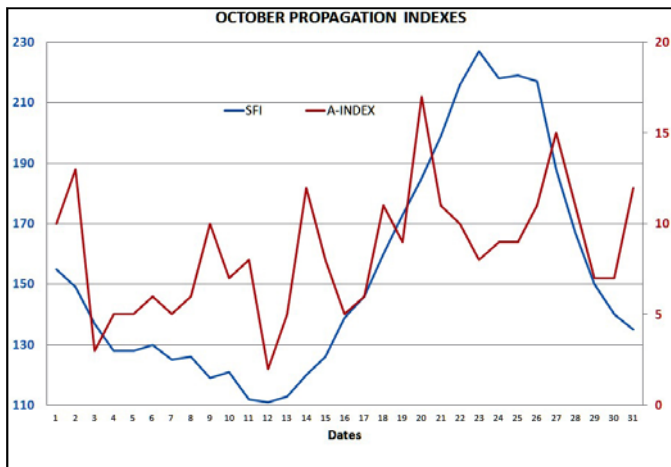
8400 E. Iliff Ave #9, Denver, CO 80231
303-745-7373 800-444-9476
24 HOUR FAX 303-745-7394
e-mail: denver@hamradio.com

PAST & FUTURE PROPAGATION CONDITIONS

By Bill – W6OAV

The charts below show the Solar Flux and “A” indexes for last month and the forecast for this month’s Solar Flux index.

Refer to the September 2010 *Roundtable* for more complete information on interpreting these charts. Issues of the *Roundtable* are available at <http://www.w0tx.org/RoundtableAccessPage.htm>.



UP COMING EVENTS

HAMFESTS & CONVENTIONS

The following are the HAMfests & Conventions which have been registered with the ARRL so far. More information can be found on www.arrl.org/hamfests.

November 1 – 285TechConnect RC, Fall TechFest
Lakewood Elks Club (See info on right)
<http://www.na0tc.org>

December 17 – DRC Holiday Dinner Meeting
Watch for more information in the December issue.

2015

January 17 – NCARC Hamfest
Loveland, CO Larimer County Fair grounds. 1st National Bank Building.
<http://www.ncarc.net>






February 8 – The Swapfest
Brighton, CO Adams County Fairgrounds
<http://www.n0ara.org>

LAST MINUTE Notice: NAØTC – 285 TechConnect Radio Club 2014 Fall TechFest

The 285 TechConnect Radio Club (NAØTC) is pleased to announce its 2014 Fall TechFest. This event will be held on Saturday, Nov. 1, 2014 9:00am. - 3:00pm. Check-In: 8:00 - 8:45am at the Lakewood Elks Club, 1455 Newland Street, Lakewood, CO 80214

Topics include:
MFJ-259 - Operation and Calibration - Bill Leonard, N0CU
DXpedition Dry Tortugas - Pete Fountain, WD4IXD
Go Take a Hike (Portable QRP) - Shel Radin, KF0UR
Estes Park CO Flood Communications - Douglas Tabor, N6UA (President Estes Valley ARC)
Amateur Radio Mesh Networking - Brian Mileschosky, N5ZGT

For more information go to: www.na0tc.org.

NOVEMBER 2014							<i>DRC Net Sunday's at 8:30pm Local on 145.490 & 448.625 (No PL)</i>
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
						1 ARRL November CW Sweepstakes Begins 2100U	
2 Mountain Stand Time Begins 	3 ARRL November CW Sweepstakes Ends 0259U	4 Election Day Go VOTE!	5 Learning Net 7:30pm	6 	7	8 ARRL EME Sweepstakes Begins 0000U	
9 ARRL EME Sweepstakes Ends 2359U	10	11 Veteran's Day 	12 Learning Net 7:30pm	13	14 	15 ARRL Nov. Phone Sweepstakes Begins 2100U	
16	17 ARRL Nov. Phone Sweepstakes Ends 0300U	18	19 DRC Meeting Elmer 6:00pm General 7:00pm	20	21	22 	
23/30	24	25	26 Learning Net 7:30pm	27 	28	29 	

DRC BOARD OF DIRECTORS

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Board Member	AC0UA	Jason Smallwood	<i>Check Roster</i>	<i>Check Roster</i>
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Board Member	K0LAI	Larry Irons	303-763-8112	<i>Check Roster</i>

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Web Master	N0LAJ	Bill Hester	<i>Check Roster</i>	

DRC REPEATERS

BAND	Freq / Shift / PL Tone	Additional Information
6m	53.090MHz (-1MHz) 107.2Hz PL	
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	Test Mode Operation. Send signal reports to Tech Committee.
1.25m	224.380MHz (-) 100Hz PL	
70cm	447.825MHz (-) DCS-073; NB 12.5; +/- 2.5	Saint Anthony's Note: This is a narrow band repeater requiring DCS.
70cm	448.625MHz (-) 100Hz PL	Linked to the 2m - 145.490MHz machine.
70cm	449.350MHz (-) 100Hz PL	Wide area coverage with Echolink Node # 4140.
70cm	446.7875MHz (-)	MotoTRBO Repeater Slot 1 – DMR-MARC WW, Slot 2 – Local

EDITOR'S NOTE

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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 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 AG0S@arrl.net. Submission deadline is the 25th of the Month. **Editor**