



ROUNDTABLE

The Denver Radio Club Newsletter

Since 1917

October 2016

PRESIDENT'S MESSAGE

By Gerry Villhauer, W0GV

Hello DRC Members,

Fall weather is upon us with those cool evenings and super nice days, my favorite time of the year. I did get my loop antenna off my roof and ground mounted for testing. Now I just need time to do the testing. Well, at least I met my goal of getting it relocated before the first snow.

Our September annual meeting for the election of officers was completed in record time...about 15 minutes. There were no changes to the officer line and one change to the board of directors. Larry Irons (K0LAI) made the decision to not run for re-election to the board. Dave Baysinger (WG0N) was elected to fill the vacancy. On behalf of the board of directors; I want to thank Larry for his service on the board. Dave (WG0N) is a past president and vice president of the DRC and will quickly fit back into the board routine.

Immediately after the elections, we went right into our program. I encouraged everyone not to let the elections keep them from coming to the meeting; we had a near full house in attendance. Darryl Hedges (KD9AUK) put on an outstanding program on high altitude ballooning. He had a very informative and entertaining presentation with a very well prepared video to supplement his presentation. Darryl answered many questions from the floor and also had several static demonstration items for show and tell like cameras, tracking radios, balloon material and accessory items. I am sure we will schedule Darryl back for another presentation.

Our October meeting presentation will be given by Dave O'Farrell (WB0IXV) and is titled; *Morse Code, your first QSO, and more!* Morse code, the first mode of Ham Radio, is also the first digital mode! Interested in learning Morse Code? What are the best ways to learn it? What's a straight key, a single paddle, and an iambic paddle? How do you conduct a QSO on the air? Did Morse really invent the code named after him? How did it come about? What's a word when calculating 'Words per Minute' (wpm)? What Colorado Morse Code record exists that will probably never be broken? How can you increase your code speed? Come to the October presentation to find the answers to all these questions!

Thanks to all of you who recently joined and made the DRC "Your Club". Please stay active on the air, come to meetings, programs and events. Your name and call will be listed in the body of the Round Table.

73 for now,
Gerry (W0GV)
President



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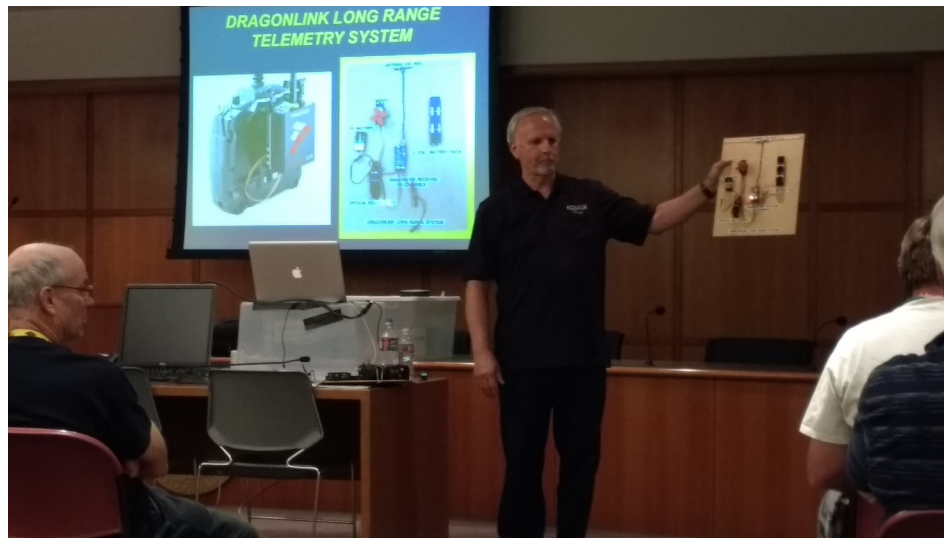
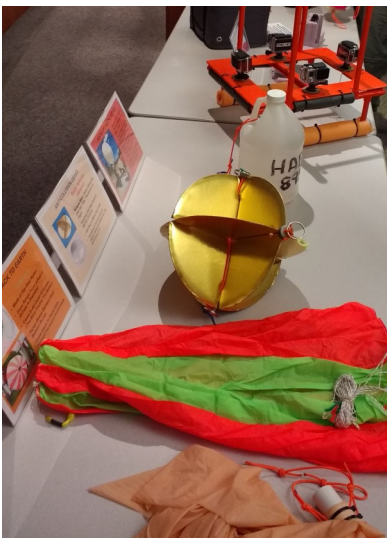
SEPTEMBER MEETING – WHAT'D I MISS?

By Brennan Pate, AD0UZ

President Gerry Villhauer (W0GV) kicked off the evening by starting the nomination process for the four board member spots that were up for reelection. Larry Irons (K0LAI) had requested that someone replace him and Dave Baysinger (WG0N) was nominated and confirmed to take his place. Jim Beall (K0TOR), Jason Smallwood (AC0UA) and Orlen Wolf (WW0LF) were renominated and confirmed to continue in their board member positions.

Next, Darryl Hedges (KD9AUK), who recently moved to the area from Chicago, gave a presentation on High Altitude Ballooning (HAB). He explained that HAB can be integrated into education (STEM (Science, Technology, Engineering and Math), in particular), is used by NASA for weather and other scientific experimentation and in ham radio for both fun and education. He explained that with a relatively basic setup one could get a balloon into the Stratosphere (~100k feet) and showed some pictures and videos of missions he had done or participated in while in Illinois. He went on to talk about the various FAA regulations and then had a Q&A session. The final piece was a video from a [Project Michelangelo](#) STEM initiative that he was a part of earlier in the year.

If you would be interested in helping Darryl with future HAB missions, please email him: darrylray@mac.com.



HAB gear display and Darryl Hedges (KD9AUK).

WHO'S NEW IN THE DRC?

By Bob Willson, KC0CZ

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. 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.

Jake Schroeder	KE0KCE
Walt Hane	W4HXC

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 7:00 p.m. For new hams we have the Elmer session which starts at 6:00 p.m. before the regular meeting.

More information can be found on the Denver Radio Club website at www.w0tx.org.

TECHNICAL COMMITTEE REPORT

By Bill Rinker, W6OAV

The following is an overview of the subjects discussed at the September Technical Committee meeting. The project coordinators' call signs are in red.

AllStar Link Voter System (W0GV)

Goal: Establish an AllStar Link Voter network.
Status: **W0GV is looking for volunteers to assist him.** One voter is in test mode. Three remote receivers are built but not tested. The server is installed at Station 4 and on the internet. W0GV is looking into getting the server connected to the radio.

AllStar Link Voter System (W0GV)

Goal: Locate possible remote sites.
Status: W0GV has located some possible sites. W6OAV will develop propagation coverage maps to determine if the possible sites will fill in the 147.33 transmitter's "dead spots."

DRC/TSA Aurora Site (W0GV)

Goal: Maintain contact with TSA relative to establishing a "communications room" for the DRC.
Status: W0GV is attempting to meet with the new TSA contact. K0TOR worked with Burnie and did locate some of our equipment stored there. The site is still being remodeled.

Redesign Packet Gateway (W6OAV)

Goal: Replace the KAM and the TS-430, which has an intermittent HF transmitter failure.

Status: AC0UA has given the DRC a long-term loan of a FT-950 transceiver. W6OAV has drawn the schematic for the FT-950 to PK900 interface cable. AC0UA will wire the interface, time permitting. The DSP filtering in the FT-950 and the PK900 should improve the gateway's performance.

Fusion Repeater Upgrade (AC0UA)

Goal: Equip the Fusion repeater with a Wires-X Link unit to connect it to the Wires network.
Status: AC0UA has the Wires X plugged into a computer at his house and has the new node number. He is testing Wires X at his house.

DRC TRBO Move (K0HTX)

Goal: Move the TRBO repeater to Centennial Cone to provide better coverage.
Status: We have the coordination approved and are waiting for a new antenna which has been ordered.

DRC TRBO Upgrade to BrandMeister (W6OAV)

Goal: Determine the feasibility of upgrading the TRBO to BrandMeister.
Status: We plan to upgrade the TRBO to BrandMeister, connect it to the BrandMeister network and test it before moving to Centennial Cone. Investigation of programming and hardware requirements is in progress.

DRC TRBO Access to Station 4's Internet (KE0HFH)

Goal: Investigate the possibility of a microwave shot from St. Anthony's to Station 4 and to Centennial Cone.
Status: Investigation is in progress.

~ Editor's Note: The Technical Committee meeting is open to members of the DRC. It is held in the Arvada room, starting at 6:00 p.m. on the evening of the DRC monthly meeting.

ELMER SESSION START TIME

The Elmer Session Starts at 6 p.m. before the regular 3rd Wednesday DRC Meeting! All are welcome. Meet in Hearing Room 2.

Come join in on the sharing of information.

HAM SITE OF THE MONTH

[4x4 Ham.com](http://4x4ham.com)

EmComm Note

By Brennan Pate, AD0UZ

The EmComm community is vast and we would like your help in pulling together resources so that the DRC can help with EmComm related activities in the future. We need your expertise.

One of our goals, as the EmComm coordinators, is to act as liaisons between the Club and those DRC members who are involved with other groups that are strictly focused on EmComm related activities (i.e. ARES, RACES). Ultimately we'd like to have a core DRC team, with a certain level of training that would be available if EmComm groups in the area wanted some extra help during an event. The March 2016 [QST article by Rick Palm](#) (page 81) outlines the kind of training we would like the core group to have.

If you would be interested in helping out with the DRC's EmComm activities, please shoot us an email and we will send you a short "questionnaire" to get a handle on what training you currently have and where your Em-Comm interests lie. emcomm@w0tx.org

DRC's 100TH ANNIVERSARY

The club's 100th year anniversary is coming up in 2017. If you would be interested in creating, leading or helping the club with its centennial anniversary activities, please contact President Gerry Villhauer (W0GV). (See last page of newsletter.)

The following is from the [Club History](#) page on W0TX.org:

The Mountain States Radio Association of Denver was the forerunner of the Denver Radio Club, Inc. The first election of officers was held on January 19, 1917. The first President was Donal L. Clark, 9ADH. Colorado was the part of District 9, and, at that time, there was no assigned prefix to the calls.

It was during World War II that a group organized the Denver Radio Club, with Bob White, W0PDA (SK), as president and Walt Reed, W0WRO (SK) as Vice President. The first meeting was held in an old carriage barn in north Denver. Early locations for meetings were: basement of Radio Products Sales, West High School, at the Public Service Company at 3rd and Lipan, and at the Denver Federal Center. Later places were at the National Guard Armory, Clayton College, Sportland, Colorado General Hospital, Denver University Campus, and at the Mile-Hi Red Cross when it was at 2nd and

Steel.

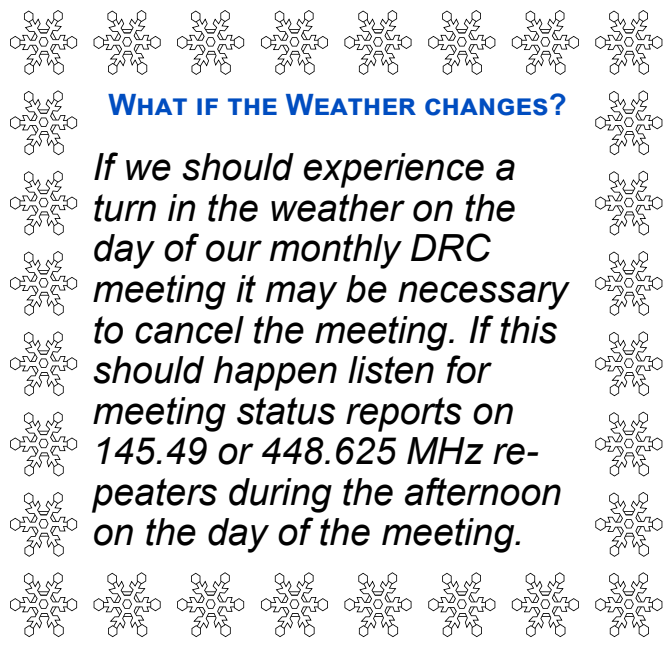
In 1959, Walt and Bob prepared a DRC Club history covering the period prior to WWII, through the war years, and into post-war rejuvenation. Unfortunately, the records of this bit of history were lost in the 1965 flood when Chet Peterson's, K0FXE (SK), print shop materials went down the South Platte river.

The Round Table was originally a mimeographed 8x11 sheet and took its present format (with some variations) as club publication in 1956, by the then printer, John Cox, K0RRS (SK).

The DRC is a general interest club, affiliated with the ARRL, and welcomes all persons interested in amateur radio to join in our activities.

"Sparky":

The club logo was originated by Miriam Juza, xyl of Marvin, W6FGD (SK), ex W0FYU. Miriam was looking for something to put on Marv's letterheads, and as a surprise for him, she drew "Sparky". Possibly in 1956, during the presidency of Carl Smith, W0BWJ (SK), permission was given to the club for its use as that was the year it first appeared on the clubs publication The Round Table. The original design of Sparky riding a lightning bolt, and holding a code key, has not been changed - but other alterations have been made in past years, namely the addition of "Denver Radio Club" encircling him and a coat of arms by Roy Raney, K0OVQ (SK).



WHAT IF THE WEATHER CHANGES?

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.

OCTOBER MEETING PRESENTATION

By Dave O'Farrell, WB0IXV

Morse Code, your first QSO, and more!

Morse code, the first mode of Ham Radio, is also the first digital mode! Interested in learning Morse Code? What are the best ways to learn it? What's a straight key, a single paddle, and an iambic paddle? How do you conduct a QSO on the air? Did Morse really invent the code named after him? How did it come about? What's a word when calculating 'Words per Minute' (wpm)? What Colorado Morse Code record exists that will probably never be broken? How can you increase your code speed? Come to the October presentation to find the answers to these questions!

Biography

Dave O'Farrell, WB0IXV, is an extra class operator, originally licensed in 1963 as a 5 wpm Novice operator. He earned his General Class license a year later, back when the FCC required you to appear in person to receive and send Morse Code at 13 wpm. His past employment includes work as a railroad telegrapher with the Northern Pacific Ry.



Amateur Radio Parity Act: HR 1301 and Letters to the Senate

From the ARRL

We have an opportunity to positively affect Amateur Radio for years to come. H.R. 1301, the Amateur Radio Parity Act, has unanimously passed the House of Representatives and moved on to the Senate for consideration. All you need to do is spend two minutes of your time to send an email to your two Senators supporting the Bill. By doing so, you will have helped the future of Amateur Radio by guaranteeing our ability to have an effective outdoor antenna in a deed-restricted community.

The number of people living in such communities grows exponentially each year. Often, a ham homeowner has no choice but to live in a community restricted by covenants. There are nearly 3/4 of a million licensed hams in the United States, more than ever before. But that may change if we are forced to live in a community that refuses to allow an antenna.

Help yourself and help your fellow hams. Click [HERE](#) or search for "Parity Act" on the [ARRL homepage](#).

Enter your zip code and follow the prompts. The letters are there. All you need to do is fill in the blanks, hit save, then send. That's it. Under 2 minutes and you're done.

If you haven't yet done so, please do so today. Your voice counts!

[ARRL News Release](#)
[Pass Along The Info To A Friend](#)



The Denver Radio Club
 Is an ARRL
 Special Service Club
 Support your hobby
 Join the ARRL TODAY



LEARNING NET REPORT

By Fred Hart, AA0JK

Topics and activities this past month:

APRS: Automatic Packet Reporting System (www.aprs.org)

Coaxial cable: www.arrrl.org/feed-lines

Yaesu FT891: <http://forums.grz.com/index.php?threads/new-yaesu-radio-ft-891.519943/page-5>

Motorcycle mobile dual function Flexible Antenna Tour Pak Mount

Homebrew antennas: "Mighty Wolf" – 2m/440 Dual Band Fan Dipole (<http://www.hamradioschool.com/wbotges-mighty-woof-2m440-mhz-dual-band-fan-dipole/>).

Filters: Note response on Yahoo groups web page (<https://groups.yahoo.com>).

Ham Shack Set-up. Points to consider, personal preferences.

Details for making a great amateur radio station. (Presentation given during our monthly Learning Group meeting).

The YAHOO Learning Net web page <https://groups.yahoo.com> is a good resource for your questions. Note also that the American Radio Relay League is the best source for information on all topics related to amateur radio. There is a wealth of information available from past articles in QST. Publications are available on all aspects of the hobby. Some even come with software. If you are not already a member of the ARRL, its highly recommended. <http://www.arrrl.org/home>

We certainly enjoy, and appreciate everyone's participation. Thanks to all.

If you are listening and don't yet have your license, you can contact us at the W0TX website, or via w0tx@w0tx.org and elmer@w0tx.org. If we don't have the answer on the net, we have a lot of experienced hams in the club that can help.

Questions can also be submitted on the YAHOO Learning Net web page <https://groups.yahoo.com>. Here you will also find information from past activity that you might find of interest.

Getting that first Technician license? Upgrading to General or Extra? We're here to help. We would encourage those who have been Hams for several years to also join us. Your experience and input is welcomed.

What topics would you like to discuss? Join us Wednesday nights, 7:30 PM, 145.490.

(Note: The third Wednesday of the month is devoted to the DRC club meeting. See the [W0TX](http://www.w0tx.org) web site for additional information.)

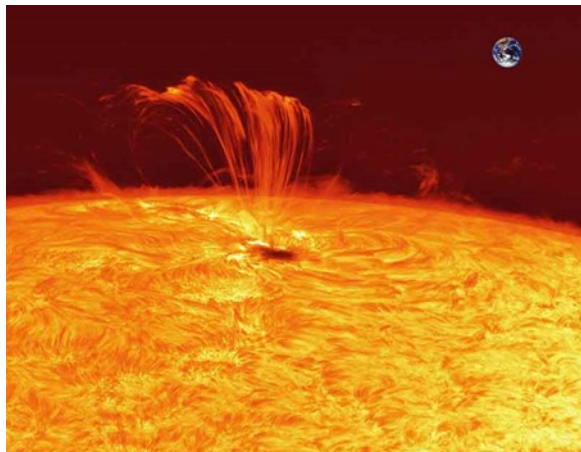


SOLAR UPDATE

Provided By Fred Hart, AA0JK

Week One

A Giant 450,000 km long solar filament growing since August 31, was expected to ignite an Earth directed [Hyder Flare](#) explosion. <https://youtu.be/urOnOX4gevY>



DARK SOLAR FILAMENT: A dark filament of magnetism was snaking across the sun, Measuring more than 450,000 km from end-to-end. The bushy structure was an easy target for [properly filtered](#) backyard telescopes.

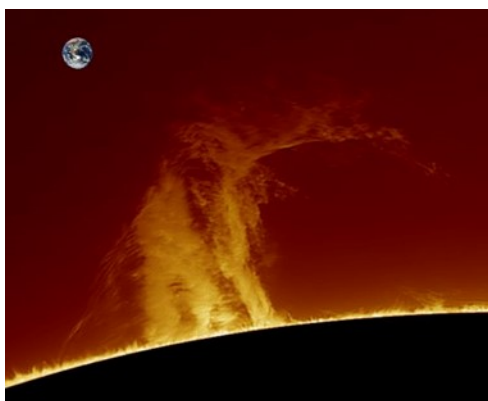
This filament was filled with plasma held above the surface of the sun by magnetic lines of force. Structures like this one tend to be unstable. If the filament collapses, it could fall to the surface below, igniting an explosion called a '[Hyder flare](#).' The blast, if it occurs, would be Earth directed. Astronomers with solar telescopes were encouraged to monitor further developments.



GEOMAGNETIC STORM: A [G1-class](#) geomagnetic storm was underway on September 5th as Earth moved through a broad stream of solar wind.

Week Two

A magnificent prominence on the western limb of the sun was showing its true height – almost 10 times taller than the Earth itself. Prominences are masses of hot plasma held above the surface of the sun by filaments of magnetism. Such structures are usually unstable and often collapse. This one however was intact for nearly two weeks, beating all odds.



Earth's Magnetic Field Rings Like A Bell:

During geomagnetic storms, magnetic fields as well as electrical currents running through the ground cause magnetic observatory instruments to go haywire.

On September 12th something unusual happened. They rang like a bell. Sinusoidal pulsations appeared on the instruments for close to 115 seconds.

Natural ultra-low frequency oscillations, "pulsations continuous" (Pc), resonate. Earth's magnetic field carves out a cavity in the surrounding solar wind. Pressure fluctuations in the solar wind can excite wave modes in this cavity. This can have an energizing influence on particles in Earth's inner magnetosphere because the waves resonate the natural motion of particles around the geomagnetic field.

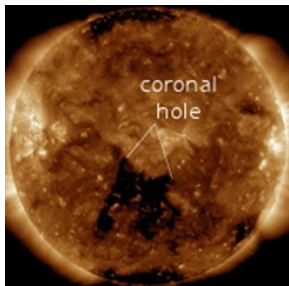
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Wednesday, September 14th - ALMOST NO CHANCE OF FLARES: With no sunspots actively flaring, the sun's X-ray output was flat lining. This was expected to continue for the remainder of the week. NOAA forecasters predicted no more than a 1% chance of strong flares for the following 3 days.

Saturday, September 17th - A solar wind stream filled with negative-polarity magnetic fields was expected to brush past Earth on September 19th-20th. Minor geomagnetic storms were expected as the solar winds arrived.

The leading edge of a solar wind stream was expected to reach Earth as early as Sept.19th or 20th.



Coronal Holes: 17 Sep 16
Credit: NASA/SDO.

Week Three

September 18th: A broad hole was opening up in the sun's atmosphere, and it was spewing a stream of solar wind into space. NASA's Solar Dynamics Observatory was monitoring the structure as it turned toward Earth.

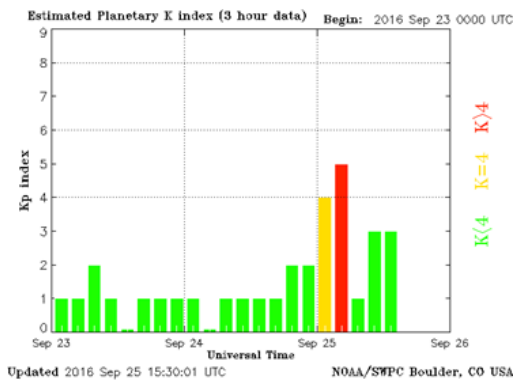
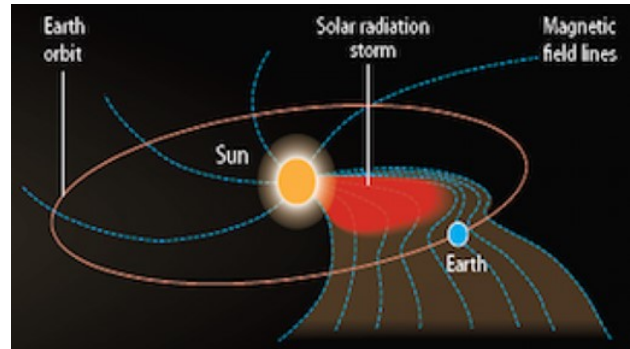
September 20th, Geomagnetic Storm Watch update: An anticipated high speed solar wind stream (near 600 km/s) was moving past Earth. A minor (G1) geomagnetic storm watch was in effect. K-Indices were expected to reach level 5.

Week Four

September 25th - A stream of solar wind flowing from a minor coronal hole was expected to reach Earth

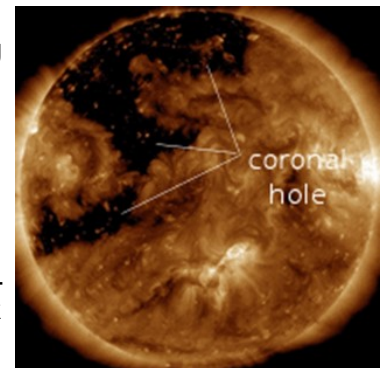
by September 29th.

BRIEF GEOMAGNETIC STORM: September 25th. Earth crossed through a fold in the [heliospheric current sheet](#) - a vast wavy structure in interplanetary space separating regions of opposite magnetic polarity. The crossing sparked a short-lived [G1-class](#) geomagnetic storm.



CORONAL HOLE TURNING TOWARD EARTH: A vast "coronal hole" opened up in the sun's atmosphere, and it was spewing solar wind into space. Coronal holes are regions in the sun's atmosphere where the magnetic field peels back and allows solar wind to escape. The coronal hole was a big one, and the emerging solar wind stream was broad. It was very unlikely to miss Earth when it was expected to arrive on September 28th - 29th.

Solar activity was at low levels. Region 2597 developed new intermediate spots while undergoing consolidation and dissipation in its trailer spots. The other spotted regions on the solar disk were in gradual decay. No Earth-directed CMEs were observed.



A large coronal hole is turning toward Earth. Solar wind flowing from the structure should reach our planet by Sept. 29th. Credit: NASA/SDO

Forecast: Solar activity is expected to be very low, with a chance for C-class flares throughout the forecast period (25-27 Sep).

73,
AAØJK
Fred

SHOULD U.S. HAM TESTS BE GIVEN ABROAD?

By Dan Romanchik, KB6NU

A couple of weeks ago, I received an e-mail from a reader who wanted my opinion about a thread on the HamRadioHelpGroup mailing list. The e-mail that started the discussion was a message from an American living in Italy who wanted to take the Technician Class exam. In her e-mail, she told of her troubles finding a test session, and then when she did find one, what she perceived as "irregularities" in the testing process. Reading the thread was a little disconcerting, and I blogged about this issue (<http://www.kb6nu.com/u-s-amateur-radio-license-exams-given-outside-u-s/>).

I understand why foreign nationals go to the trouble of taking the U.S. license exam. Some of them even buy my study guides. About a year ago, for example, I swapped some e-mail with a guy from Malaysia about why he purchased my study guide and why he wanted a U.S. license. He said that it was because a neighboring country offered reciprocal operating privileges to U.S. licensees, but not Malaysian licensees! He mentioned that he tested for the license in Thailand.

Basically, my Malaysian friend was using the U.S. licensing process to circumvent the Malaysian licensing process. Australians seem to do this, too. Apparently, according to one of the VKs who commented on the thread, getting a U.S. Tech license is easier than testing for an Australian Foundation license. So, some Australians get a U.S. Tech license first, then get the Australian government to issue them a VK Foundation license based on the reciprocal operating agreement between the U.S. and Australia.

Another reason that some outside the U.S. obtain U.S. amateur radio licenses is the challenge. That's the reason Martin Butler, M0MRB/W9ICQ, of ICQPodcast fame, gave when I spoke to him about this recently.

Are these reasons "good enough" to continue this program of licensing non-U.S. citizens? My first reaction was that no, it's not good enough, and I questioned whether or not the ARRL VEC should sanction non-U.S. VEs and whether or not the FCC should even allow testing outside of the United States.

I didn't see the need for conducting these test sessions or the desirability (to the U.S.) of licensing foreign nationals. I reasoned that not only was there a greater possibility of test fraud, this program could lead to foreign authorities claiming that the U.S. was meddling in their affairs.

This post garnered a lot of comments. Several of them took me to task for voicing this opinion and were in favor keeping the current licensing program in place. There were a variety of reasons.

One of the reasons in favor of using the U.S. licensing process is that in many countries, amateur radio license exam sessions are not very frequent. Another is that they often are quite expensive. This creates an artificial barrier to getting an amateur radio license. Using the U.S. licensing system breaks through this barrier and allows many more to enjoy amateur radio.

Of course, for everything to be on the up and up, the foreign authorities would have to condone the use of U.S. license tests. Apparently, this is the case in Thailand and Australia. I don't know about Italy, but I'm guessing that the authorities there don't really care about Italians obtaining U.S. licenses.

Perhaps the best comment came from Thida, HS1ASC/KH6ASC. He noted that the tests in Thailand were administered very strictly, and says, "The U.S. may lose some call signs, but what the U.S. and U.S. hams get from us is goodwill, very positive feeling. Everyone who gets U.S. license is so proud, and others look at them respectfully." Since Part 97.1(e) lists as one of the purposes of amateur radio, "Continuation and extension of the amateur's unique ability to enhance international goodwill," I'm now all in favor of offering U.S. ham tests abroad.

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Dan, KB6NU, is the author of the "No Nonsense" amateur radio license study guides, and blogs about amateur radio at KB6NU.com, and you can contact him by e-mailing cwgeek@kb6nu.com. When he's not pondering the vagaries of the U.S. licensing system, you'll find him working CW on the HF bands.

LOOKING BACK AT THE DRC PROVIDED BY WOUI) - ROUNDTABLE, AUGUST 1965

New meeting location and FCC enforcement of valid license addresses

BOARD OF DIRECTORS ACTION

At the June meeting of the Board, Al Auten WØECN, trustee of the DRC Club Station WØOUI, presented an excellent report of recommendations to improve the efficiency of the station. Experienced gained during the flood disaster revealed many possible improvements. Al's report to the Board was for information and comment since action on Al's recommendations will have to come from the Red Cross.

The Denver Police Department gave the Club \$50.00 for use of our generator during the flood. The Board discussed many ways to use the money since it was received in connection with Public Service. It was agreed that the money will be used to help equip WØOUI for public service efforts.

Appreciation was expressed to John Capone WAØAAD and the Burstein Applebee Company for use of an SBE Transceiver by WØOUI during the flood.

The DRC meeting place was discussed and is reported on elsewhere in this issue.

CLUB PROGRAM

First of all: Make a note of the new meeting place. We are no longer meeting in the Sabin Auditorium. The new meeting place is Room BW 10, Electrical Engineering Department, Engineering Building, University of Denver, 2050 East Iliff Avenue.

We are going to meet at that new meeting place, on Wednesday, August 18, 1965, at the usual time, 7:30 P.M. At that meeting, we are going to have an auction. Joe White, KØCNV, will be the auctioneer; and that means that everything will be done very efficiently, and that we shall have a good time. The proceeds of the sale of items donated to the Denver Radio Club will go into the club treasury in their entirety. Ninety per cent of the amount realized from the sale of an item auctioned off for its owner will be his, with only ten per cent going into the Club treasury. So bring the goodies to the August meeting (and don't forget to bring the green stuff).

We were delighted to have Thomas A. Clark, WØIUF, as the speaker at the June 16 meeting, and to listen, with him, to the stars. That, of course, was the night of the flood. Thus, the attendance was not up to par.

WARREN, WØDZN, Program Chairman

DRC MEETING PLACE CHANGED

On August 18 the DRC will meet at the Electrical Engineering Building of Denver University. The building is located at Iliff and Race Streets. Our meeting time remains unchanged—7:30 P.M. MDT.

We thank Colorado General Hospital for their past courtesies extended to the Club. Renovation of the hospital and elimination of the Sabin Auditorium made it necessary to find a new meeting place for the Club. The Electrical En-

gineering Department of Denver University graciously offered us the use of their building. We are most appreciative and we know that all DRC members will enjoy use of DU's modern facility.

ARRL DIRECTORS' LETTERS

The FCC has extended the time for filing comments on Docket 15928. The deadline for original comments is September 1, and for reply comments October 1, 1965.

Australia and the United States completed an agreement for reciprocal amateur operating privileges effective June 25. Agreements under Public Law 88-313 now exist with Australia, Belgium, Bolivia, Costa Rica, the Dominican Republic, Ecuador and Portugal. The first reciprocal agreement, with Canada, continues in force under a separate treaty.

A bill, S.1015, has been introduced in the Senate to amend the Communications Act by granting FCC additional authority to control radio frequency interference from non-communications devices. At the moment the Commission is empowered only to regulate the use of such devices after they cause interference. S.1015 would authorize FCC to solve the problem at the logical point of manufacture. If the bill is adopted, the Commission would move to prescribe technical standards for manufacture, sale, import, etc. First attention would probably be given to items currently presenting serious problems, such as industrial heaters, garage door electronic controls and low power walkie-talkies.

Early in 1963 the International Crystal Company filed with FCC a petition to create a new "hobby class" of amateur license, free of any examination, authorizing 10-watt channelized operation in our 10-meter band. The League's comment was strongly in opposition. The petition has now been denied by FCC.

NOTES AND QUOTES

FROM THE AUTO-CALL—"A WARNING to those operating portable for long periods of time. Better be very, very sure you understand the rules about having your mail forwarded. There are scads and scads of CB'ers and more than a few amateurs who are on the hot seat defending revocation of their license. The FCC doesn't fool around these days—they send a letter to the address of record. If it comes back, they slap a notice to show cause why the license should not be revoked and send it to the same address—first thing you know, you're without a ticket! And it has happened more than once. And even if you retain your license by explaining the why's and wherefore's, you are subject to a monetary forfeiture of \$100. Better be safe than sorry!

CANCELLED LICENSES—Because of its new forms 610 and its computer techniques, FCC is no longer able to return a cancelled license with its successor. However, realizing that many amateurs wish to keep complete files, the Commission will allow a photo-copy of a license to be submitted with Form 610 for renewal or modification in place of the original.

This puzzle is provide courtesy of Chris Codella - W2PA. The URL for his website is w2pa.com. The solution for the puzzle is on page 12.

Famous Hams

1	2	3	4	5		6	7	8		9	10	11	12	13	
14						15				16					
17						18				19					
20						21				22		23			
				24	25			26		27					
28	29	30				31	32					33	34	35	
36				37	38				39						
40			41		42			43			44				
45				46			47			48		49			
50							51				52	53			
				54				55	56						
57	58	59				60		61				62	63	64	65
66					67			68				69			
70								71				72			
73								74				75			

Across

- 1. VU metro (not meter)
- 6. Call to Bo-peep
- 9. T.O.M.
- 14. TN made rig
- 15. Rear panel label
- 16. 7X neighbor
- 17. Used before flip tops
- 19. More unwt
- 20. Infrequent frame rate mode
- 21. Major Armstrong, familiarly
- 23. Wiring harness parts
- 24. IT9 peak
- 26. Prefix with -tuner
- 28. Kind of drum
- 31. Contact plating solution?
- 36. Boatanchor unit
- 37. Part of ARRL: Abbr.
- 39. Enter

- 40. Suffix with reson-
- 42. In reserve
- 44. Produces radiator supports
- 45. Giving up
- 47. GM monster place
- 49. Viking partner
- 50. Callsign of 31 across
- 52. Overcome utterly
- 54. First QTH?
- 55. Hand (out)
- 57. Small fight
- 60. Field unit?
- 62. Competent
- 66. Loafed around
- 68. Nonphysical, say
- 70. Met show
- 71. Feed lines to
- 72. Partner of 9-across
- 73. Rocking ham

- 74. Hockey's Bobby
- 75. DXpeditioner's instruction

Down

- 1. Manuals, slangily
- 2. Times past
- 3. Fuzz
- 4. ARRL president, and president's grandson
- 5. Rev. of out.
- 6. Wound covers
- 7. All over again
- 8. Of a heart chamber
- 9. Cap. unit
- 10. Missile type
- 11. Ancient WARC band?
- 12. Prof. org. with many ham members

- 13. Elser-Mathes Cup objective
- 18. Poetic dusk
- 22. Pushes, gently
- 25. Leaves in a bag
- 27. The one above six?
- 28. Two or more yagis, say
- 29. Do and so
- 30. Tube terminal
- 32. Gasket
- 33. Possible Congo prefix
- 34. ___ alcohol
- 35. Malyj Vysotskij prefix
- 38. Suffix with electro-fasteners, say
- 41. Force-12 element
- 43. More lethal
- 46. Homer's neighbor
- 48. Pre-ham?

- 51. Int'l org. promoting learning
- 53. What the shack might do with the amplifier on
- 56. Crew tool
- 57. QRS
- 58. Between Oscar and Quebec
- 59. Kind of antenna aimer
- 61. A receiver annoyance, briefly
- 63. Arrest
- 64. 47-across is one
- 65. Exuberance
- 67. CW word
- 69. Zone type

FACT OF THE DAY

Earth Magnetic Field Distribution

Earth's geomagnetic field is rather weak at and above the surface of the earth, but complexly-structured magnetic fields inside earth's core that produce it are thought to be about 100 times stronger. The weaker field at surface is called a magnetic dipole, because it has two poles. That dipole produces an external magnetic field around the earth that is generally similar in shape to the field surrounding a bar magnet. However, satellite field-strength measurements show that earth's dipole field is not distributed evenly like a bar magnet field and that most of the field strength originates below Antarctica, Siberia, and North America. Furthermore, comparisons of magnetic field-strength maps made from accurate measurements taken 20-years apart show significant changes in field distribution.

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

SPEAKING OF MAGNETIC FIELDS...

Bill Morine (N2COP, ARRL Vice Director, Roanoke Division) had this interesting little ditty in the 8/17/16 ARRL ARES Newsletter: <http://www.arrl.org/ares-el?issue=2016-08-17#toc02> Synopsis: new pickups have aluminum roofs... As entitled, "Mag Mounts, Not So Much."

THE ROUNDTABLE ARCHIVE

Go to: <http://www.wotx.org/roundtables.htm>

THE ROUNDTABLE ARTICLE INDEX

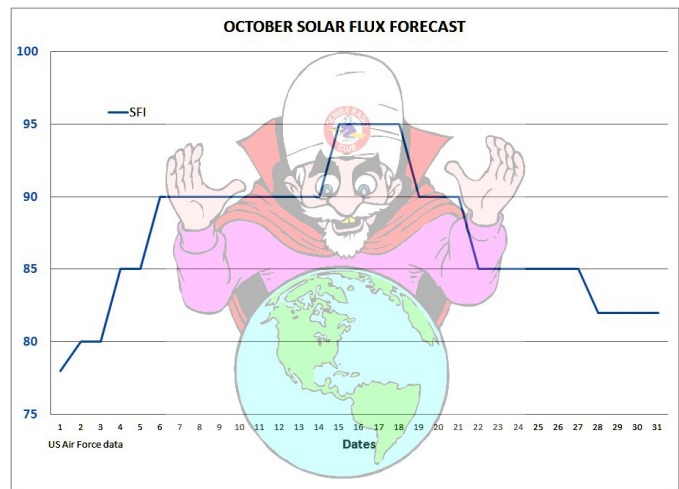
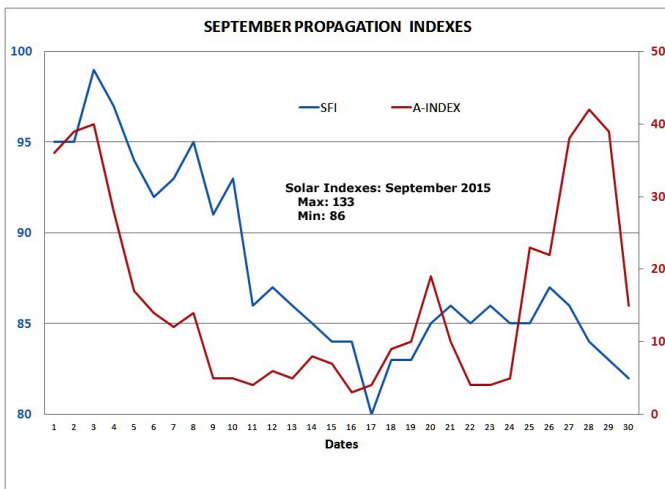
Go to: <http://www.w0tx.org/RoundtableArchive/-RoundTables-Index.pdf>

PAST & FUTURE PROPAGATION CONDITIONS

By Bill Rinker, 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/RoundtableArchive/2010-RoundTables/RT201009\(SEP\).pdf](http://www.w0tx.org/RoundtableArchive/2010-RoundTables/RT201009(SEP).pdf)



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UPCOMING EVENTS
HAMFESTS & CONVENTIONS

Event	Date	Location	Sponsor Website
BARCfest	10/02/16	Longmont, CO	Boulder Amateur Radio Club (BARC)
TechFest	10/05/16	Lakewood, CO	285 TechConnect Radio Club

UPCOMING ARRL CONTESTS [ARRL CONTEST CALENDAR](#)

Contest	Start Date	Start Time	End Date	Stop Time	Notes
School Club Roundup	10/17/2016	1300 UTC	10/21/2016	2359 UTC	
EME - 50 to 1296 MHz	10/22/2016	0000 UTC	10/23/2016	2359 UTC	

UPCOMING QSO PARTIES

The following are the Contests not sponsored by the ARRL. Please submit additions for future issues.

State/Province	Start Date	End Date	Sponsor Website	Notes
California	10/01/2016	10/02/2016	California QSO Party	
Pennsylvania	10/08/2016	10/09/2016	Nittany Amateur Radio Club	
Arizona	10/09/2016	10/10/2016	ARRL Arizona Section & Catalina Radio Club	
Iowa	10/15/2016	10/16/2016	Ottumwa ARC	Based on 2015 date.
South Dakota	10/15/2016	10/16/2016	South Dakota QSO Party	
New York	10/15/2016	10/16/2016	Rochester DX Association	
Illinois	10/16/2016	10/17/2016	Western Illinois Amateur Radio Club	
Kentucky	11/12/2016	11/13/2016	Western KY DX Association	

ATTENTION

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DRC REPEATERS

BAND	Freq / Shift / PL Tone	Additional Information
6m	53.090MHz (-1MHz) 107.2Hz PL	
Packet	145.05MHz<>14.105MHz	2 meter / 20 meter gateway. Useable by Technicians on 2 meters. See January 2015 RT.
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	449.775 MHz (-) 100Hz PL	Yaesu Fusion Digital / Analog, 100 Hz Tone Required for Analog.
70cm	446.7875MHz (-)	MotoTRBO Repeater Slot 1 – DMR-MARC WW, Slot 2 – Local



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



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OCTOBER 2016							<i>DRC Net Sunday's at 8:30 p.m. on 145.490 / 448.625 (No PL)</i>
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
						1  New Moon	
2	3	4	5 Learning Net 7:30 p.m. 145.490 / 448.625 (No PL)	6	7	8	
9  First Quarter	10	11	12 Learning Net 7:30 p.m. 145.490 / 448.625 (No PL)	13	14	15	
16  Full Moon	17	18	19 DRC Meeting Elmer 6:00 p.m. General 7:00 p.m.	20	21	22 ARRL EME 50 - 1296 GHz— Begins 0000 UTC  Last Quarter	
← ARRL School Club Roundup →							
23 ARRL EME Ends 2359 UTC  New Moon	24 / 30 	25	26 Learning Net 7:30 p.m. 145.490 / 448.625 (No PL)	27	28	29	

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Please Let Us Know

Over the years we occasionally hear from hams who have read the RoundTable in other states and countries around the world. We appreciate the comments and we would like to know where you are located. So if you live outside the Front Range or Denver Metro Area and read the newsletter either online, email or hard copy please send a short note via email with your *City, State or City, Country*.

We will publish it at a later date in our new regular feature called RoundTable RoundWorld.

To respond to this request send your information to drc.editor@gmail.com.

Subject: I'm located in...

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DRC members - this is your newsletter. Please email your club or amateur radio related suggestions to the editor. Members are the heart of The Denver Radio Club, so 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.editor@gmail.com. The submission deadline is the 20th of the Month. ~ Editor