



THE ROUND TABLE

Monthly Newsletter Of The Denver Radio Club

Since 1917

June 2021

PRESIDENT'S MESSAGE

BY GERRY VILLHAUER, W0GV

Hello DRC Members,

I hope you all are staying well and safe. There seems to be a lot of confusion out there over the issue of wearing masks or not. In my opinion, the news media is a big contributor to the confusion.

Field Day...YES, we are going to have one. The details are being worked out and, we will be at a new location in the West Arvada area on W 52nd Ave. near Eldridge Street. Keep your eye on our website and tune in to the Sunday evening net and the Wednesday evening Learning Net for more details as they develop.

Congratulations to our meeting night drawing winner, Alex Acerra (KS0E). He received a \$25 HRO gift certificate.

We have added a remote receiver to our 6-meter repeater system. This eliminates the power line noise that we are unable to get rid of. The system is now working very well. If you have 6-meter FM capabilities, give it a try. Also, the 6-meter invitational net is on every Sunday morning at 1000; join in, you will enjoy this friendly group.

Thanks to Bill (W6OAV) and John (W6NBC) for their joint presentation on stealth antennas and John's Super Coil. This was a very informative presentation for hams with small spaces and covenant controls. Hopefully some of their ideas will help get more hams, with these restrictions, on the air.

The program for our June meeting is titled "Everything you need to know about USB and Serial Interfaces". Presented by Bob (N6TV). This is a bit different but applicable, since about everything these days connects to a computer and/or the internet. Mark June 16th. on your calendar and remember the Elmer session at 6 p.m., prior to the regular meeting.

Thanks to all of our new members who have recently joined the DRC. Your support is very much appreciated. Please come to meetings and events and stay active. Your name and call will be posted in this edition of the Round Table.

73 for now,

Gerry
W0GV
President



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 welcome them to the club and repeaters. Welcome to our newest members:

George McCray Jr.—AG0S	Clyde Hoadley—KB0AMJ
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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 7:00 p.m. For new hams we have the Elmer session which starts at 6:00 p.m. before the regular meeting.

TECHNICAL COMMITTEE REPORT

BY BILL RINKER, W6OAV

All projects are currently on hold. However, the tech committee members are discussing possible projects for this year.

The following is an overview of current issues for the Tech Committee.

DRC/TSA Aurora Site.

Goal: Work with the TSA relative to establishing a "communications room" for the DRC.

Status: This project shelved until Covid-19 is over.

Replace 220 Repeater Antennas

Goal: Improve coverage for the repeater.

Status: WW0LF is constructing the coax harness. Once completed, a work party will be scheduled.

Install a Remote 6 Meter Receiver

Goal: Investigate the possibility a remote receiver to resolve the high noise level at Station 4.

Status: WG0N and W0GV will check out conditions at a possible site.

LEARNING NET REPORT

BY FRED HART, AA0JK

Purpose:

We are here to help introduce, and promote, a variety of topics of interest to all amateur radio operators.

Our intent is to help participants get more active, involved, and engaged in amateur radio.

Topics of interest we encourage:

Personal Communications

-Getting started in the various modes, of communications.

Emergency communications

- Participation in public service.
- Training in emergency communication for volunteers.



Radio electronics, and technology
- Kit building, understanding signal propagation. and building antennas.

We strive to put experienced members / volunteers, at the forefront, as a regular source of knowledge-sharing in the Denver Radio Club. We hope members participating in the DRC learning net will find it rewarding to share experiences, and learning, that will motivate more of our amateur radio community toward lifelong journeys as Hams.

If you have experience in, and have a passion for, any amateur radio related topics, please consider providing the DRC with presentations that will motivate other Hams to share your interests.

May Topics we have discussed:

- Field Day
- ISS Contact - K7AGE
- Fox Hunting - N0CFM
- EME
- A Basic Approach to Moonbounce (arrl.org)
- DRC 6 Meter repeater maintenance and upgrade
- QSL cards, digital and hard-copy QSL bureau card processing requirements for QSL Service (arrl.org)
- Digital logbook logging and keeping a Log (arrl.org)
- Area clubs and activities
- June and July six meter band openings for DX
- On antennas: Lew McCoy W1ICP. ISBN-10: 0943016088. ISBN-13: 978-0943016085
- ARRL Code Practice Files (arrl.org)
- Morse Code Operating for Amateur Radio: arrl.org/shop/Morse-Code-Operating-for-Amateur-Radio
- Now simply called "CW", this is the perfect introduction to radio communication by Morse code. Item No. 0004
- RTTY and the sounds of Radio Teletype

Great topics from our group. We certainly enjoy everyone's participation. Thanks to all.

If you are listening and don't yet have your license, you can contact us at the W0TX web-site, w0tx@w0tx.org, or elmer@w0tx.org.

If we don't have the answer here on the net, we have a lot of experienced Hams in the club that can help.

Getting that first Technician license? Upgrading to General or Extra? We're here to help. You may also find Dave Casler's Amateur Radio Licensing Guides helpful: <https://dcasler.com/ham-radio/>

We would encourage those who have been Hams for several years to also join us. Your experience and input is welcomed.

Finding your place in the amateur radio community - -> Are you looking to be more involved, learn new skills, find a mentor or friends to share your amateur radio interest? Check out your local Denver Radio Club, and start making the most of your amateur radio license.



arrl.org/public-service

Use your communication skills to help keep your community safe!



weather.gov/marine/ham
warrenares.org/home/skywarn-weather-spotting
SKYWARN Spotter Training Updates: weather.gov/bou/spot_training



During severe weather events, amateur radio operators bring significant resources to storm spotting, including an established communications system that can function in an emergency. They provide real-time information to partners like emergency management and forecasters at the national weather service. The data received from hams helps issue weather watches, warnings, and advisories.

What topics would you like to discuss? Join us Wednesday nights, 7:30 PM, 145.490, 100 Hz PL tone & linked to 448.625, 100Hz PL tone.

73,

Fred
AA0JK
elmer@w0tx.org

JUNE PRESENTATION ANNOUNCEMENT

BY BILL RINKER, W6OAV

The world of USB is rapidly changing and getting more complex! Plan to attend the DRC June 16th Google Meet's to learn all about the latest USB technology. Bob, N6TV, will give a presentation titled "Everything You Need to Know about USB and Serial Interfaces".



SIREN TESTS

BY BRENNAN PATE, AD0UZ

I received a report that the Lakewood test went well and the Wheat Ridge siren test is still on.

Wheat Ridge in on 6/9 (Wednesday) at 11 AM

As usual, if you have helped with siren tests in the past, please contact Jim (K0TOR, 303-798-2351, k0tor@arrl.net) to let him know of your availability and preferences. We will try to get you on the same site you worked last time. We will be making calls as well.

For those who have not helped in the past, we help the Lakewood and Wheat Ridge Emergency Manager with the emergency siren tests. We have at least one ham at each site who provides observations to net control about the siren, site and test. The data is aggregated and forwarded to the Emergency Manager.

It is a great opportunity to use and hone your radio skills while helping your community. If you are interested but a little hesitant to volunteer, please let us know and we can assign you to a site with another experienced ham. They'll be happy to show you the ropes.

Compensation is in the form of refreshments after each test.

Let us know if you're interested!

CELEBRATING 10 YEAR OF SUMMITS ON THE AIR IN COLORADO

BY BOB WITTE, K0NR

The Summits On The Air (SOTA) program originated in the United Kingdom but has propagated to most countries around the world. The program came to Colorado on May 1st, 2010 with Steve/WGØAT sending a CQ from Mount Herman, just west of Monument. Today, the SOTA program in Colorado (called WØC-SOTA) is very active with roughly 180 activators that operate from Colorado summits.

To celebrate our 10th Anniversary, [WØC-SOTA](#) is organizing a **10-10-10 Event** with a challenge for Activators and Chasers alike. (Activators operate from summits, Chasers try to contact them.)

Activator challenge: Activate **10** (or more) **10K** feet (or higher) summits (in Colorado/WØC) within **10 days**.

Chaser challenge: Chase Activators on **10 different** (or more) qualifying WØC summits (**10K** or higher) within the **10 days**.

Event Date: We will kick-off the event in conjunction with the [Colorado 14er event](#) on August 7th, 2021 and conclude on August 16th.

Everybody is invited to participate, either as an Activator or a Chaser. Block off these days in your calendar now and start planning for how you can participate. Feel free to operate as much or as little as you would like. It is all about having fun messing around with radios. Any HF, VHF or UHF band can be used for making SOTA contacts, with the most popular ones being 40m (CW & SSB), 20m (CW & SSB) and 2m (FM).

There will be a leaderboard on the [WØC-SOTA](#) website showing all participants who meet one of the challenges. More details will be announced on the [WØC-SOTA Website](#) as soon as they are hashed out.

For more information on the SOTA program in general, see the [worldwide SOTA website](#).

Full Disclosure: May 1 is actually the 11th Anniversary, but the COVID-19 Pandemic interfered in 2020, so we are catching up.



LIMITED SPACE HF DIPOLE ANTENNAS

PROVIDED BY FRED HART, AA0JK

The following links are for a couple good articles on HF antennas for use in a limited space scenario and a good primer on dipoles.

<https://www.hamradiosecrets.com/ham-radio-hf-antenna.html>

<https://www.hamradiosecrets.com/ham-radio-dipole.html>

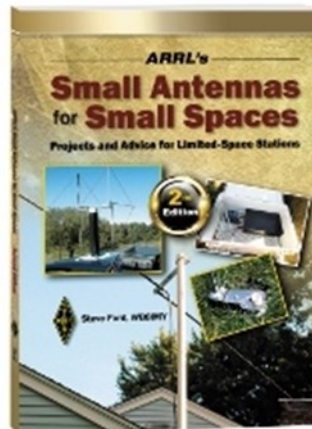
Some good Dacron antenna rope at HRO: <https://www.hamradio.com/detail.cfm?pid=H0-013980>

Also, a good book by Steve Ford (WB8IMY) on Small Antennas for Small Spaces.

SBN:978-1-62595-051-2. Link: <http://www.arrl.org/shop/Small-Antennas-for-Small-Spaces-2nd-Edition>

73,

Fred
AA0JK



HAM RADIO A HOBBY, A UTILITY, OR BOTH?

By BILL RINKER, W6OAV AND TOM KOICIALSKI, KC2CAG

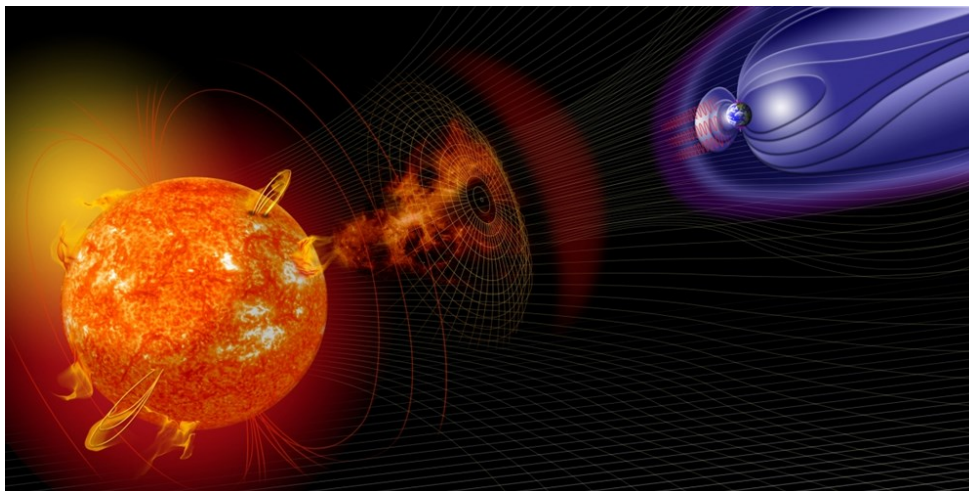
A very interesting article appeared in the July 8th, 2019 issue of the IEEE Spectrum magazine. The IEEE Spectrum is the flagship magazine of the IEEE (Institute of Electrical and Electronics Engineers). The article is titled "Is Ham Radio a Hobby, a Utility, or Both? A Battle Over Spectrum Heats Up". The article can be accessed at: <https://spectrum.ieee.org/tech-talk/telecom/wireless/is-ham-radio-a-hobby-a-utility-or-both-a-battle-over-spectrum-heats-up>.



Photo: iStockphoto

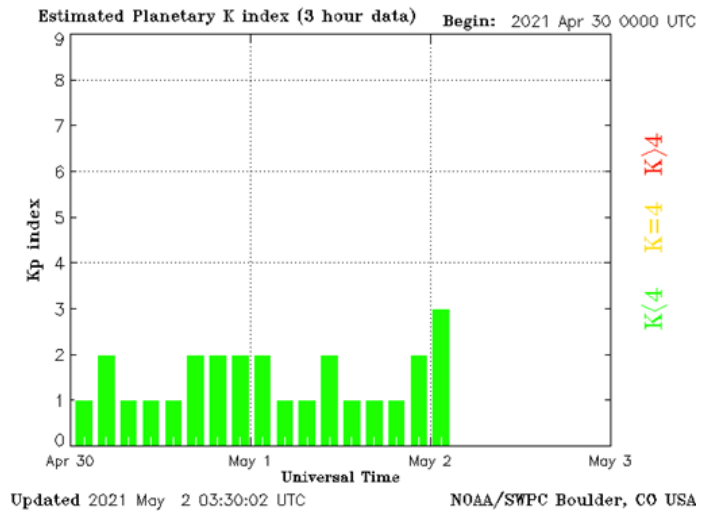
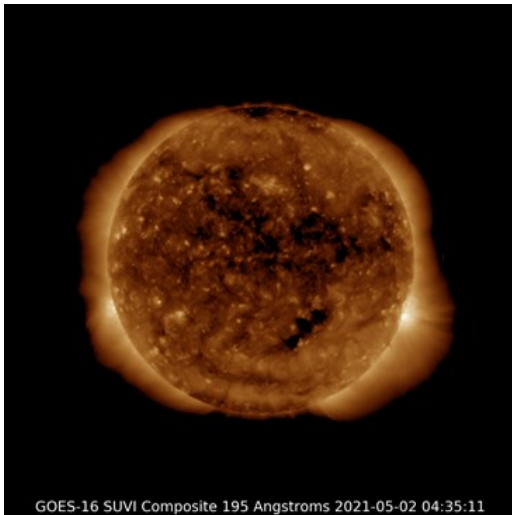
SOLAR GEOPHYSICAL ACTIVITY REPORT

PROVIDED BY FRED HART, AA0JK



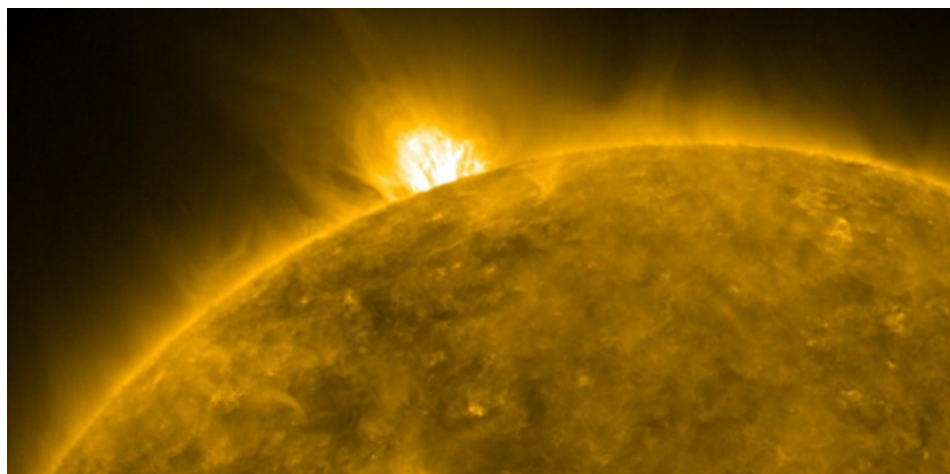
Little filaments were dominating the solar disc in the limb regions. Solar wind from large coronal holes were expected to reach Earth in the following 24 hours.

Bright spots around the limb were showing the return of sunspots. Otherwise, May solar activity was starting out quiet.

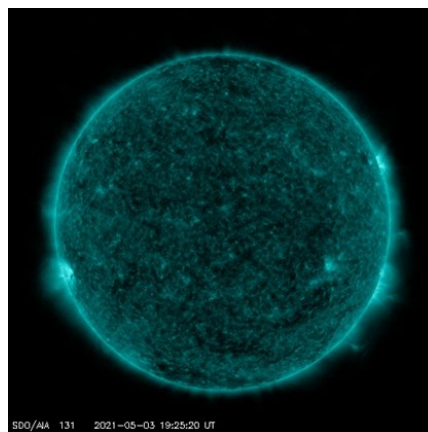


Sunday, May 2nd - We were seeing the magnetic canopy of an approaching sunspot group. It formed days prior on the far side of the sun now, solar rotation was turning it to face Earth.

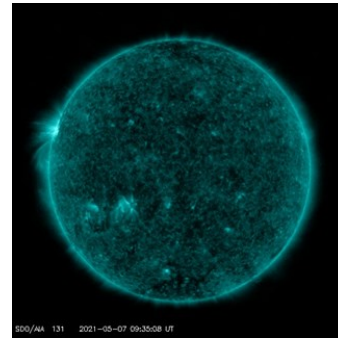
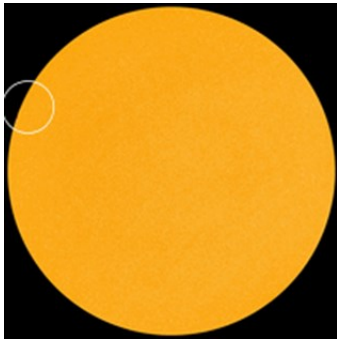
A spray of hot plasma was towering over the sun's southeastern limb.



May 3rd - New bright regions were coming into view on the east limb. High filament and prominence activity were present, but none in geophysical longitude.

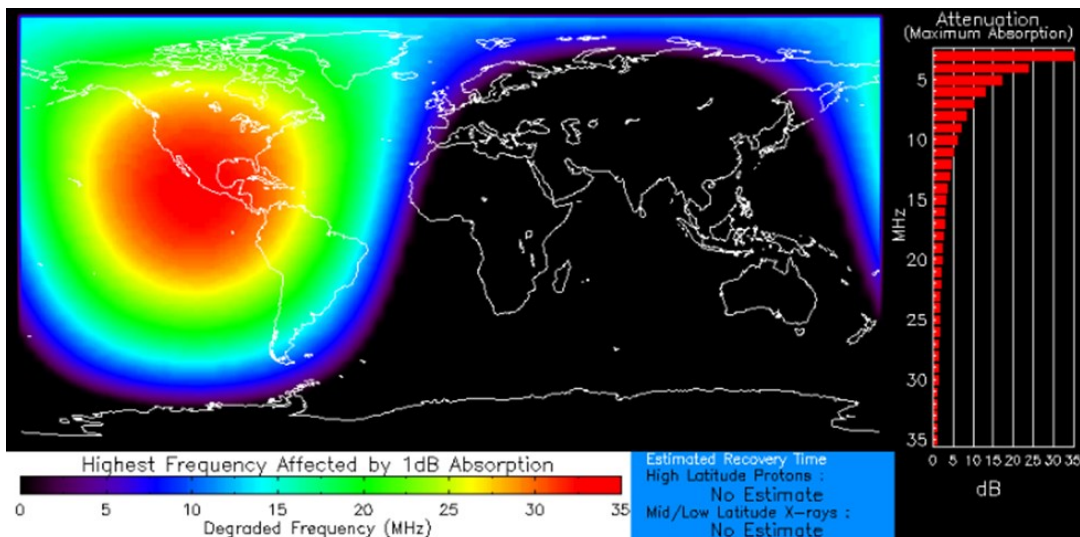
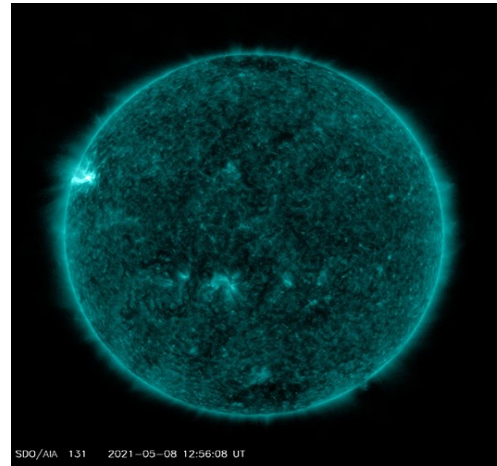
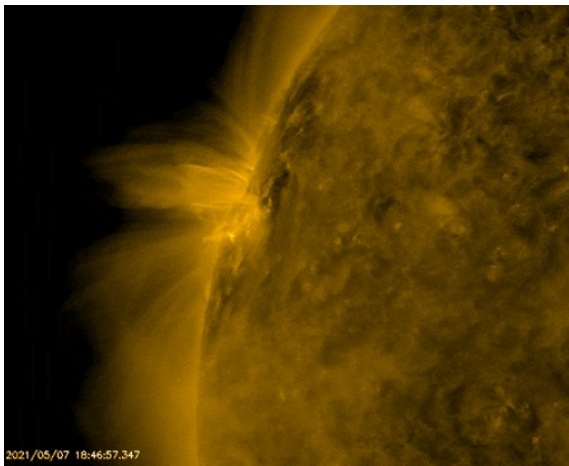


Friday, May. 7th - New active sunspot. A large sunspot was emerging over the sun's northeastern limb. Provisionally numbered AR2822, the sunspot likely would herald an increase in solar activity. In recent days it had hurled multiple CMEs into space. Future eruptions were expected.



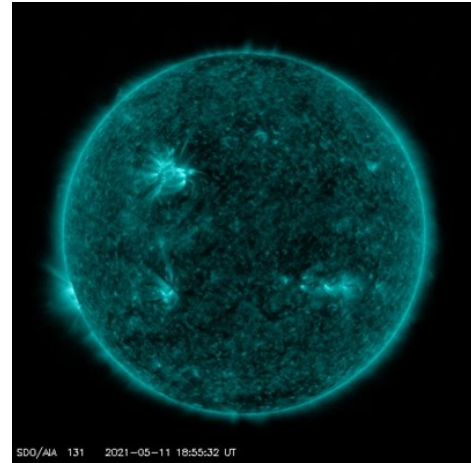
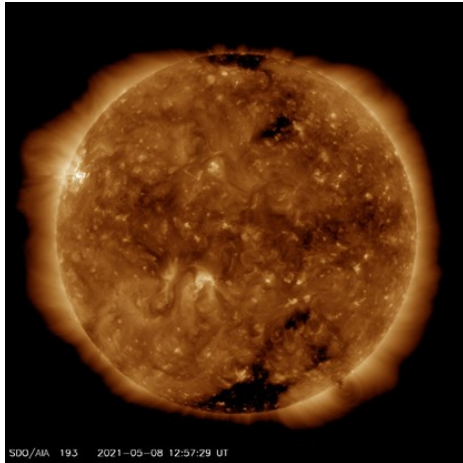
A new sunspot was emerging at the circled location. Credit: SDO/HMI

Strong solar flare and radio bursts. New sunspot AR2822 exploded on May 7th, producing an M3.9-class solar flare, one of the strongest flares of young Solar Cycle 25. NASA's Solar Dynamics Observatory recorded the explosion near the sun's northeastern limb. Below Image: AR2822



The shadowy wave emerging from the blast site was a “solar tsunami”, a swell of hot magnetized plasma about 100,000 km tall racing along the sun's surface at 250 km/s (560,000 mph).

A pulse of ultraviolet and X-radiation from the flare ionized the top of Earth's atmosphere. This, in turn, caused a shortwave radio blackout over North America. Ham radio operators and mariners may have noticed strange propagation effects at frequencies below 30 MHz, with some transmissions below 15 MHz completely extinguished.

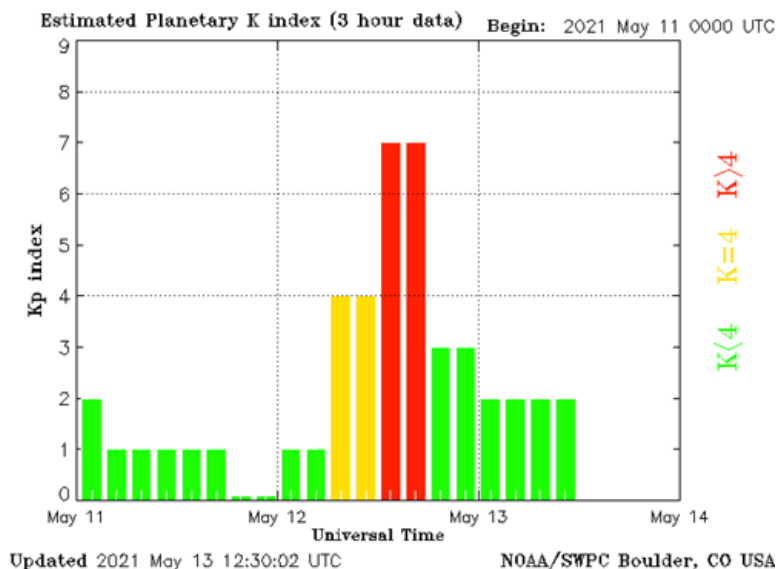


Two active, center and top left regions, erupt as they rotate into geophysical longitude. The first was a plasma filament eruption, the second, a C-class solar flare CME.

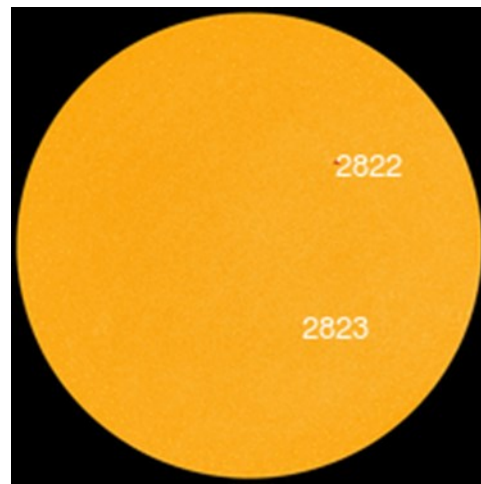
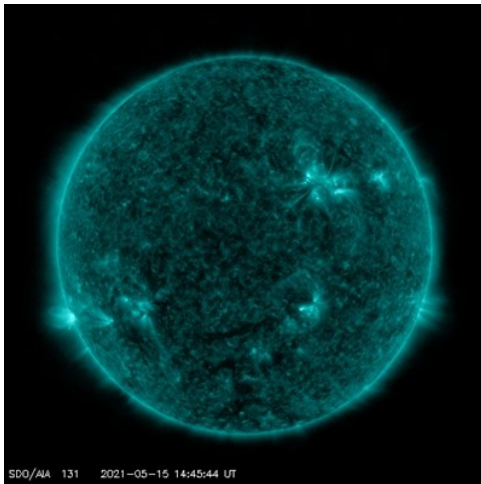
A CME was expected as erupting filament magnetism hurled towards Earth. A class G1-class geomagnetic storm was forecast for May 12th and 13th.

Disruptions in amateur radio communications, and GPS reception issues were expected over the following 24 – 48 hours on the Earth's night side. Minor to moderate storm levels as well, (Kp 5-6), were expected over the following few days.

A coronal mass ejection (CME) hit Earth's magnetic field during the early hours of May 12th, sparking the strongest geomagnetic storm of young Solar Cycle 25. The G3-class disturbance lasted 6 full hours. As the storm subsided, minor G1-class storms were expected on May 13th as Earth exited the CME's wake.

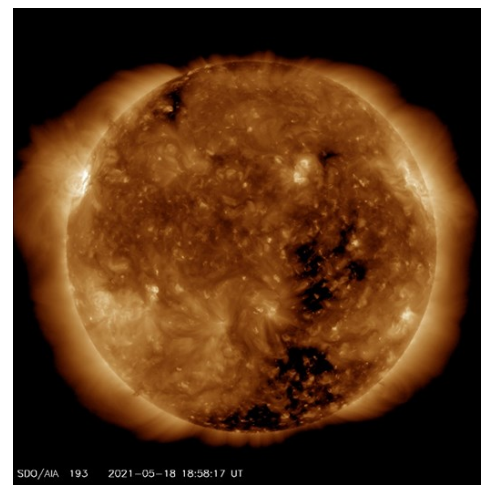
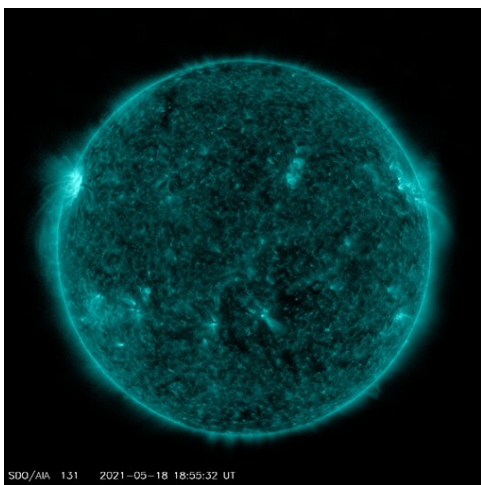


May 15th - SDO/AIA Credit: SDO/AIA



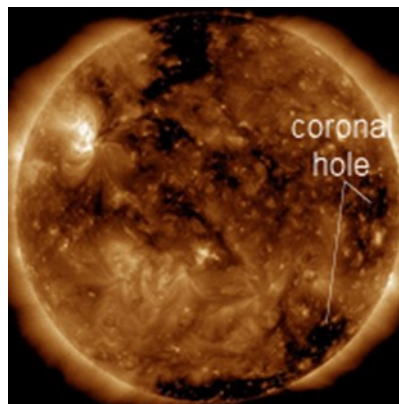
Sunspots AR2822 and AR2823 are both in decay. Strong flares were unlikely. Credit: SDO/HMI

May 18th - Below Left: SDO/AIA 131. Below Right: SDO/AIA 193



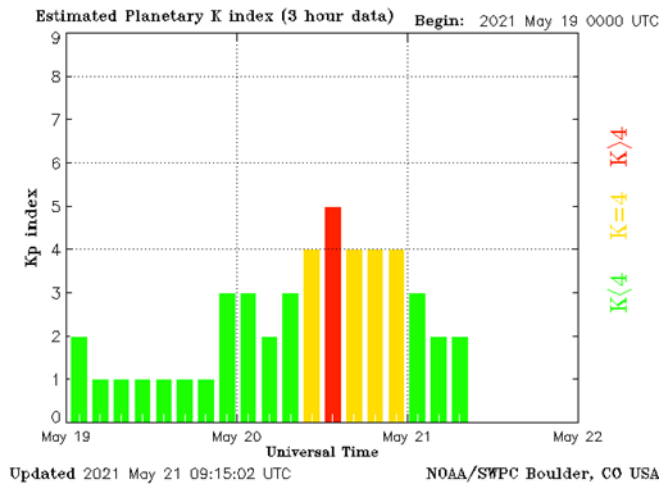
New striking active region on the northeast limb. Plasma was shooting out ionized helium from the southern region as it turned into an Earth facing view.

May 21st



SDO/AIA

Earth was inside a stream of solar wind flowing from this coronal hole



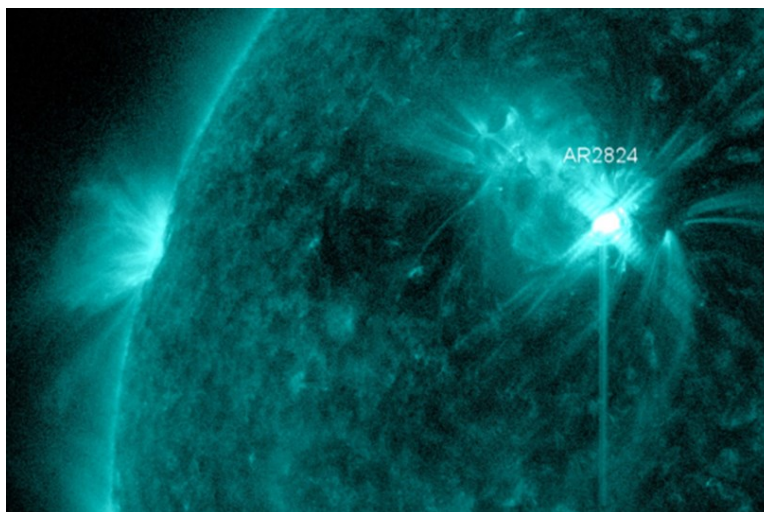
The principal users affected by geomagnetic storms are the electrical power grid, spacecraft operations, GPS, users of radio signals that reflect off of or pass through the ionosphere.

Solar-Terrestrial Data - http://www.n0nbh.com		
21 May 2021 0918 GMT	VHF Conditions	HF Conditions
SFI 76 SN 13	Item Status	Band Day Night
A 24 K 2 / PIntry	Aurora Band Closed	80n-40n Fair Good
X-Ray A5.8	6n EsEU 50MHz ES	30n-20n Fair Fair
304A 99.3 @ SEM	4n EsEU Band Closed	17n-15n Poor Poor
Ptn Flx 0	2n EsEU Band Closed	12n-10n Poor Poor
Elc Flx 0	2n EsNA Band Closed	Geomag Field QUIET
Aurora 1/n=1.99	EME Deg Good	Sig Noise Lvl S1-S2
Aur Lat 67.5°	MUF	MUF US Boulder 7.14
Bz -0.0 SW 551.5	HS	Solar Flare Prb 11%
	0 MIN 6 12 18 UTC MAX	(C) Paul L. Herrman 2013

As FT8, JT65 and JT9 are a time synchronized protocol, one soon discovers that an accurate PC clock is very important. If your workstation time is off it can cause you to send when no one is listening, or to listen when no one is sending.

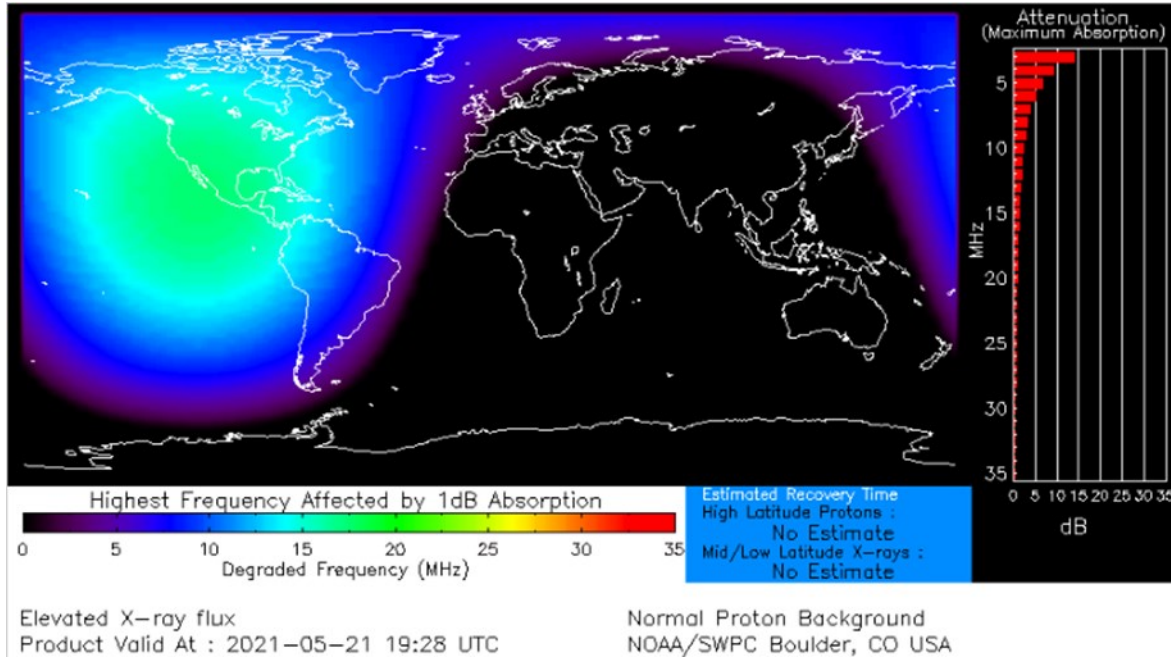
GPS Time for FT8 Operation
 GPS in Ham Radio (hparc.org)

Solar Cycle 25 - Rising Sunspot Numbers, It's Not All Good News. QST June 2021 p56

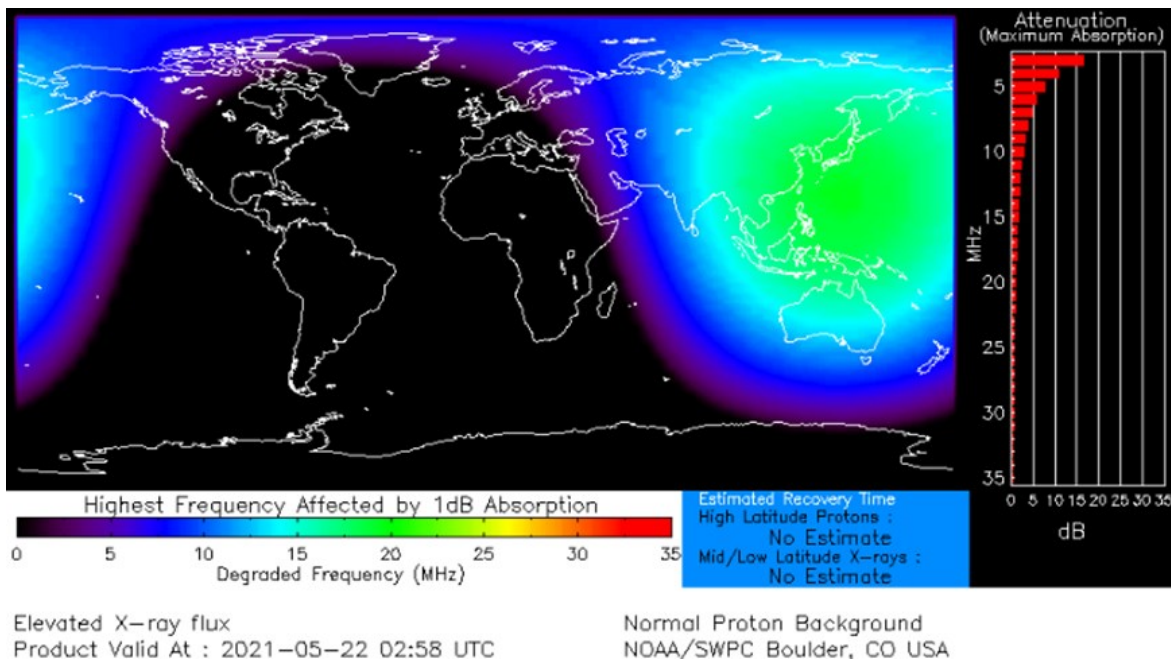


SDO/AIA 131

Sleeping sunspot wakes up. After nearly a week of somnolent quiet, sunspot AR2824 was flaring again. An impulsive C4.8-class flare during the late hours of May 21st (1928 UT) was followed by an even stronger C6.1-flare on May 22nd (0256 UT). This image from NASA's Solar Dynamics Observatory shows the UV flash from the C6.1-flare.



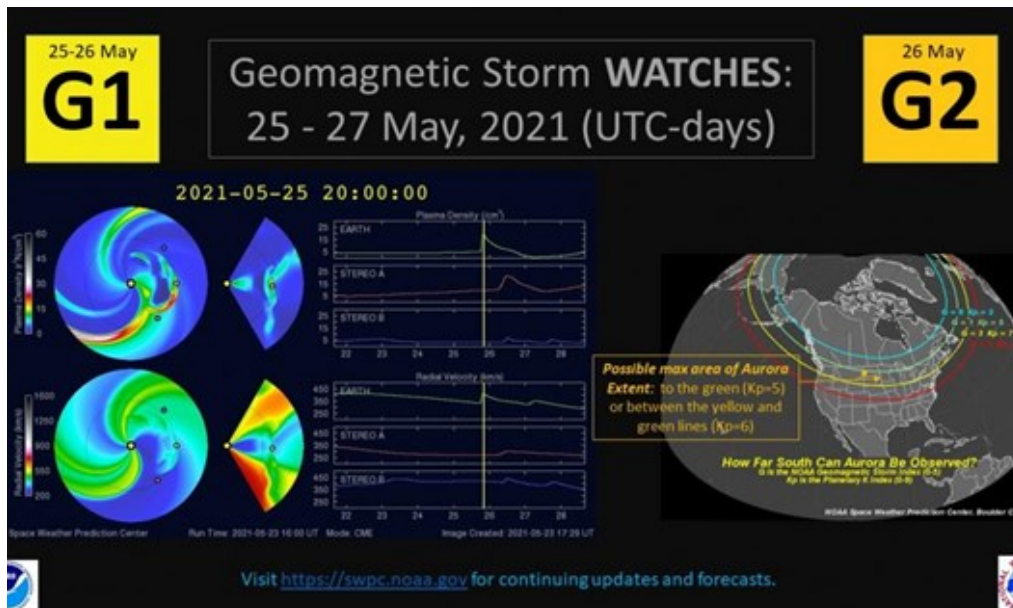
Saturday, May. 22nd



AR2824 was strobing Earth with pulses of ultraviolet radiation. Waves of ionization rippling through Earth's upper atmosphere caused shortwave radio blackouts over North America on May 21st, and southeast Asia on May 22nd. Ham radio operators, aviators, and mariners might have noticed unusual propagation at frequencies below ~20 MHz.

There were no signs of Earth-directed CMEs from these explosions, no geomagnetic storms were in the offing.

Solar flare frenzy. On May 22nd, sunspot AR2824 unleashed a sequence of solar flares unlike anything we've seen in years. In only 24 hours, NASA's Solar Dynamics Observatory recorded 10 C-flares and 2 M-flares. The rapid-fire explosions hurled multiple overlapping CMEs into space. According to NOAA models, a combined CME would hit Earth's magnetic field during the late hours of May 25th, potentially sparking G2-class geomagnetic storms.



A G1 (Minor) geomagnetic storm watch was issued for 25 May with a G2 (Moderate) watch for 26 May due to the arrival of multiple CMEs from 22-23 May associated with flare activity from active sunspot Region AR2824.

Forecast:

Joint USAF/NOAA Solar Geophysical Activity Report and Forecast

Geophysical Activity Forecast: The geomagnetic field is expected to be at quiet to minor storm levels.

73,

Fred
AA0JK

DRC's Trading Post

Don't forget you can find **locally-sourced, ham-grown** merchandise at:
<https://www.w0tx.org/trade.htm>

THE ORIGIN OF "HAM SHACK"

PROVIDED BY BILL RINKER, W6OAV

The following appeared in the October 1965 issue of the Round Table. The author is unknown.

"The shack" is a term we hear on the airways daily. On very few occasions have we heard the question, "when did it start?" If you look into the shack of yours truly, or most any other ham shack's junk box, the name would speak for itself. However, to a non-ham, I hear there are such things (commonly known as TVI). I have been queried, "Why do you call it the shack?"

Just before the turn of the century, when a radio operator was known as a "Marconi Man" and radio was commonly known as "wireless", radio was just beginning to prove its worth on the seas. In about 1900 or 1901, "wireless" was to be installed on board a ship where no room was available for the "shack". A wooden lean-to was constructed on a lower deck against an iron bulk head. The shack was about 4½ ft. by 3½ ft. for something like \$20.00. This is believed to be the starting of our term "the shack", and who is to disagree. The equipment was a huge 8-inch spark coil plus transformer. The "Marconi man" needed a strong arm to actuate the long bar which acted as the key as we know it. How does this compare with your shack?

PAST ROUND TABLE PAGES

PROVIDED BY WOODY LINWOOD, W0UI

A page from the April 1958 edition.

IS SSB THE LATEST THING

By WØHXP

Is single side band the latest thing in radio? To hear many of the fellows on the ham bands today, one would think that SSB was a very recent idea, but that is not the case.

In 1912 the opinion of the experts was that the transmission of intelligence with a carrier consisted of a single frequency of varying amplitude, only or, in other words, with no sidebands.

In 1914, Carl R. Englund, a young physicist, working on radio, worked out a simple trigonometric analysis of an A.M. signal that showed 3 distinct components, the carrier and the first all vacuum tube transmitter and receiver. This was a carrier current demonstration using a transmission line instead of antenna. His report on this experiment recognized the presence of sidebands.

In experiments at the U.S. Navy Radio Station in Arlington, Virginia in 1915, H. D. Arnold suggested that the narrow band antenna system be tuned to one side of the carrier to pass one sideband and to attenuate the

other. Here was recognition that one sideband contained all elements necessary to reproduce the original speech. About the sametime, B. W. Kendall discovered that injection of a carrier at the receiver greatly enhanced detection and John R. Carson promoted the idea of elimination of the carrier at the transmitter as well as the suppression of out sideband. Carson's idea of SSB, as we use it today, was filed with the U. S. Patent Office in 1915.

For many years after these experiments the arguments ensued. Many claimed that sidebands were merely mathematical fiction and the feasibility of SSB was doubted by the majority. Apparently the arguments have not stopped yet as you can hear these same comments on the ham bands to this day.

In the late 1920's the Bell Telephone Labs constructed a special SSB receiver to investigate the characteristics of SSB reception.

This receiver occupied seven racks and used crystal fil-

(continued on page 4)

FISTELL'S ELECTRONIC SUPPLY CO.	
Bargains in Amateur and Electronic Supplies Fast Courteous Service	
1001 Bannock	MA 3-3197

RADIO-TV	PHONOGRAPH
SOL'S TV	
5149 Leetsdale Drive	
WØWSK	DU 8-3043
SALES	SERVICE

DRC's EMERGENCY RESPONSES

In the event of a disaster in the metro area, please monitor our repeaters on 145.490/448.625 (primary) and 449.350 (secondary).

The emergency Net Control Operator will provide information and/or requests to members for assistance.

[W0TX Repeater Directory](#)



Note to DRC Members:

Our club depends on the involvement and participation of YOU, our members. Do you have a skill or interest that could help the club. Maybe you want to volunteer to be on a committee? Like to write? Have ideas for improving what we do? Speak up and let someone know, all ideas are welcomed and participation is always helpful. ~Editor

✂

RANDOM SITE OF THE MONTH
[Oaxacan Pickled Pigs' Feet](#)

✂

THE ROUND TABLE ARCHIVE

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

THE ROUND TABLE ARTICLE INDEX

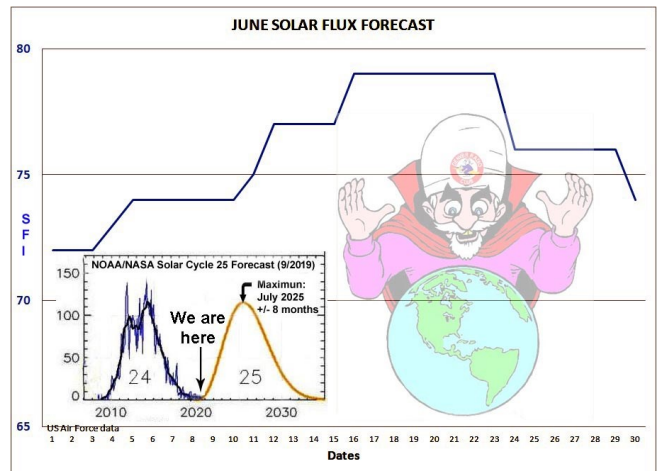
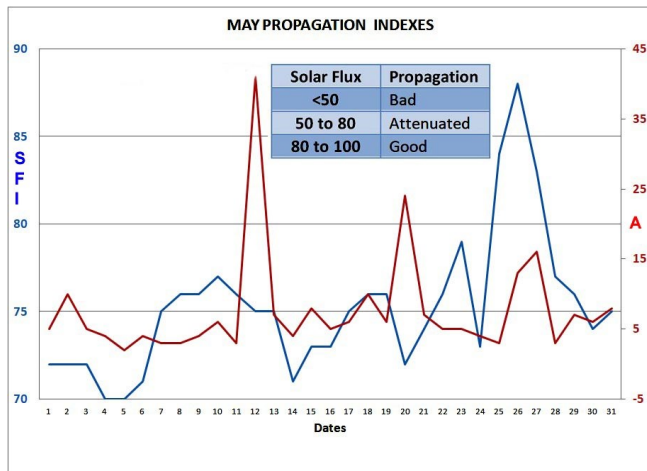
Go to: <http://www.w0tx.org/RoundtableArchive/-RoundTables-Index.pdf>

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 *Round Table* for more complete information on interpreting these charts, which is available at: [http://www.w0tx.org/RoundtableArchive/2010-RoundTables/RT201009\(SEP\).pdf](http://www.w0tx.org/RoundtableArchive/2010-RoundTables/RT201009(SEP).pdf)



UPCOMING EVENTS
HAMFESTS & CONVENTIONS

Event	Date	Location	Sponsor Website
Montrose ARC Tail Gate	06/05/21	Lions Club Pavilion	montrosehamradio.org

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
Kentucky	06/05/2021	06/06/2021	Kentucky Contest Group	
West Virginia	06/19/2021	06/20/2021	West Virginia State Amateur Radio Council	
Missouri	07/31/2021	08/01/2021	Boeing Employees' Amateur Radio Society – St. Louis	
Maryland-DC	08/14/2021	08/15/2021	Anne Arundel Radio Club	
Hawaii	08/28/2021	08/29/2021	Hawaii QSO Party	
Kansas	08/28/2021	08/29/2021	Kansas QSO Party	
Ohio	08/28/2021	08/29/2021	Ohio QSO Party	
Colorado	09/04/2021	09/05/2021	Pikes Peak Radio Amateur Association	
Tennessee	09/05/2021	09/06/2021	Tennessee Contest Group	
Alabama	09/11/2021	09/12/2021	Alabama QSO Party	
Iowa	09/18/2021	09/19/2021	Story County ARC	
New Hampshire	09/18/2021	09/19/2021	Port City Amateur Radio Club	
New Jersey	09/18/2021	09/19/2021	Burlington County Radio Club	
Texas	09/18/2021	09/19/2021	Texas DX Society	
Washington	09/18/2021	09/19/2021	Western Washington DX Club	
Maine	09/25/2021	09/26/2021	Wireless Society of Southern Maine	

ATTENTION

SUPPORT THE DRC FROM YOUR AMAZON PURCHASES

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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	2m / 20m gateway. Useable by Technicians on 2m.
2m	145.490MHz (-) 100Hz PL	Linked to 70cm / 448.625MHz. Primary frequency during emergency net.
2m	147.330MHz (+) 100Hz PL	Local area. Has voting receivers. 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 2m / 145.490MHz. 1° disaster net freq.
70cm	449.350MHz (-) 100Hz PL	Wide area coverage with Echolink, node # 4140. Secondary frequency during emergency net.
70cm	449.775 MHz (-)	Yaesu digital, C4FM, Wires-X, DN, VW & Data. No analog FM. W0TX Room 40931.
70cm	446.7875MHz (-)	BrandMeister Repeater: Slot 1 – Wide Area Traffic, Slot 2 – Local Talk Group 310804

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JUNE 2021 DRC Net Sundays at 8:30 p.m. on 145.490 / 448.625 (no PL)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2 Learning Net 7:30 p.m. 145.490 / 448.625 (No PL)	3	4	5
6  Last Quarter	7	8	9 Learning Net 7:30 p.m. 145.490 / 448.625 (No PL) Wheat Ridge Siren Test 11 AM	10	11	12 June VHF Starts 1800
13 June VHF continued	14 June VHF Ends 0259   New Moon	15	16 DRC Online Meeting Elmer 6 p.m. Meeting 7 p.m.	17	18	19 Kids Day - Begins 1800 UTC - 2359 UTC
20 	21  First Quarter	22	23 Learning Net 7:30 p.m. 145.490 / 448.625 (No PL)	24	25	26 Field Day - Begins 1800 UTC  ARRL Field Day
27 Field Day - Ends 2059 UTC  ARRL Field Day	28	29	30 Learning Net 7:30 p.m. 145.490 / 448.625 (No PL)  Full Moon			

See arrl.org/contest-calendar for additional details about contests.

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Please Let Us Know

Over the years we occasionally hear from hams who have read the Round Table 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 Round Table Round World.

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 25th of the Month. ~ Editor