

2024 March 14 Announcements – Operating Events, Propagation, DX and ARRL Letter

These notes are posted to the SMARC website, <https://w4olb.org/>, after the Thursday Evening Net. Click on “Info” and then “Operating Events” on the drop down menu. The format is PDF and the highlighted links are directly clickable. Only the last four weeks of announcements are retained.

***** Operating Events *****

From the WA7BNM Contest Calendar website come the following operating events or contests that may be of interest to SMARC members and other Amateur Radio operators. Links to the rules and regulations for each event may be found at <https://contestcalendar.com/index.html>. Select the “8 Day Calendar.”

NOTE: All times are EDT (UTC-4), unless otherwise noted, although most are listed at the WA7BNM Contest Calendar website as UTC. Translations to the correct days have been taken into account.

➤ Weekly Sprints or Short Events:

- NCCC (Northern CA Contest Club- both are tonight, Thursday)
FT4 Sprint 9:00 to 9:30 PM
Website: <https://www.ncccsprint.com/ft4ns.html>
Sprint Ladder (CW) 10:30 to 11:00 PM
Website: <https://ncccsprint.com/rules.html>
- Radiosport World Weekly RTTY Test
Thursday 9:45 to 10:15 PM
Website: <https://radiosport.world/wrt.html>
- K1USN Slow Speed Tests (SST – CW max 20-wpm)
Friday 4:00 to 5:00 PM and Sunday 8:00 to 9:00 PM EDT
Website: <http://www.k1usn.com/sst.html>
- Worldwide Sideband Activity Contest
Monday 9:00 to 9:59 PM EDT
Website: <https://wwsac.com/rules.html>
- Phone Weekly Test (SSB)
Tuesday 10:30 to 11:00 PM EDT
Website: http://www.perluma.com/Phone_Fray_Contest_Rules.pdf

➤ Operating event for the entirety of 2024

- CQ Magazine DX Marathon, 160M to 6M using CW, Phone and Digital modes, no QSL required.
Website: <https://dxmarathon.com/rules/2024/>

➤ State QSO Parties: VA. See <https://contestcalendar.com/>

➤ Other activities of possible interest. This weekend there are three (3) DX contests that are either CW and SSB, or SSB only:

- Russian DX Contest. See https://www.rdxo.org/rules_eng

- F9AA Cup: See <https://www.site.urc.asso.fr/index.php/om-yl/concours/trophee-f9aa>
- Africa All Mode International DX Contest: See <http://www.sarl.org.za/public/contests/contestrules.asp>

If you are interested in digital contests, either inside of contests or standalone try one of there three (3) contests:

- PODXS 070 Club St. Patrick's Day Contest (PSK31). See <https://www.podxs070.com/o7o-+club-sponsored-contests/saint-patrick-s-day-contest>
- BARTG HF RTTY Contest: See <https://bartg.org.uk/wp/>
- Africa All Mode International DX Contest (includes RTTY): See above.
- Feld Hell Sprint (Feld Hell / Feldhellschreiber): See <https://sites.google.com/site/feldhellclub/Home/contests/sprints/leprechaun-sprint>
- RSGB FT4 Contest: This is similar to a sprint. See https://www.rsgbcc.org/hf/rules/2024/r80m_ft4.shtml

General CAUTIONS: Contests are allowed *only* on the “legacy” bands; there are *no* contests on 60M, 30M, 17M and 12M. Watch the band edges corresponding to the privileges of your license class and the phone edges with respect to LSB (160M to 40M) and USB (20M to 10M). Be aware of the digital modes upper frequency segment limits on each band. The lower 100-kHz segments of 6M and 2M are reserved for CW, i.e., *no* phone.

***** Propagation ***** [K9JU]

The following information is from the HF Clock (“HamClock” by WB0OEW. For build information and computer code see). <https://www.n1fd.org/2023/08/24/hamclock/>

- Also, see <https://www.wm7d.net/>, <https://spaceweather.com/> and <https://www.solarham.net/> websites for further details.
- The Solar Flux Index (SFI) ¹ is 127 (137 last week and 128 this morning).
- The Wolf (Sunspot) Number ² is 86 (105 last week) from four Active Regions (seven last week and six this morning). Number of individual sunspots = Wolf number - [10 * (number of AR)] or, 86 - [10 * 4] = 46. [I'm not sure of the accuracy of the current Wolf number.]
- As of 6:30 PM ET today, the geomagnetic field was quiet with a Kp ³ of 1.67 but the Hp30 ¹² index was 2.33 indicating an active level. Between 4:00 and 6:30 PM ET (period ending times), in 30-minute increments, the Hp30 was 1.67, 1.33, 1.33, 1.00, 2.67, and 2.33, ranging from unsettled to quiet geomagnetic field.
- X-ray solar flare ⁴ activity had been low with many B-class and C-class flares. At 2:00 AM ET, there was an extremely short lived M1.0 flare on the sunlit side of the earth and would not have effected us. Keep an eye on both <https://www.solarham.net/> and <https://spaceweather.com/> for further developments.
- The solar wind ⁹ parameters are all bouncing around; the wind speed has increased and is moving up and down around 400 km/sec; the density is also changing rapidly although now down near normal; and the B_z component of the Interplanetary Magnetic Field ¹⁶ is becoming more negative.
- So what does this all mean? Not much from what can seen on the upper HF bands, they are still pretty hot. Enhanced effects from the solar wind tend to surround the two equinoxes; the Vernal Equinox occurs on March 19 at 11:06 PM EDT. The equinoxes typically produce excellent DX conditions on the HF bands.

- Summary: Radio propagation conditions for daytime DX should be good to very good on the upper HF bands (20M to 10M); nighttime DX should be good for 80M to 30M barring any effects from the solar wind that are not expected.

For up to date info, stay tuned to <https://www.solarham.net/>, <https://spaceweather.com/> and <https://www.spaceweatherlive.com/>

¹ Solar Flux Index (SFI): See https://glossary.ametsoc.org/wiki/Solar_flux

² Wolf [Sunspot] Number: See https://en.wikipedia.org/wiki/Wolf_number.

³ K_p is the planetary K-index. See <https://www.swpc.noaa.gov/products/planetary-k-index>.

⁴ Solar flare definition and classes at <https://www.spaceweatherlive.com/en/help/what-are-solar-flares.html#:~:text=A solar flare is defined as a sudden%2C,up in the solar atmosphere is suddenly released>. Also, read <https://www.space.com/solar-flares-effects-classification-formation>.

⁵ Radio Black Out categories may be found at the SMARC website under “Files” and “Documents.”

⁶ Geomagnetic Storm categories may be found at the SMARC website under “Files” and “Documents.”

⁷ Coronal Holes (CH): See <https://www.swpc.noaa.gov/phenomena/coronal-holes>

⁸ Tamitha Skov, WX6SWW, <https://www.spaceweatherwoman.com/>

⁹ Solar wind parameters at <https://www.solarham.net/solarwind.htm> and explanations of the parameters at <https://hypertextbook.com/facts/2005/RandyAbbas.shtml>

¹⁰ CME (Coronal Mass Ejection): See: https://en.wikipedia.org/wiki/Coronal_mass_ejection

¹¹ Carrington Event: See https://en.wikipedia.org/wiki/Carrington_Event

¹² Hp30 and Hp60 Indexes: See <https://kp.gfz-potsdam.de/en/hp30-hp60>

¹³ CIR (Co-rotational Interactive Region): See [https://www.swpc.noaa.gov/news/coronal-hole-high-speed-streams-ch-hss#:~:text=Persistent coronal holes are long-lasting sources for high,forms%2C known as a co-rotating interaction region \(CIR\)](https://www.swpc.noaa.gov/news/coronal-hole-high-speed-streams-ch-hss#:~:text=Persistent coronal holes are long-lasting sources for high,forms%2C known as a co-rotating interaction region (CIR))

¹⁴ Solar Dynamics Observatory Helioseismic and Magnetic Imager (SDO HMI): https://en.wikipedia.org/wiki/Solar_Dynamics_Observatory

¹⁵ Magnetic Filaments: <https://spaceweather.com/glossary/filaments.html>.

¹⁶ Interplanetary Magnetic Field (IMF): <https://www.spaceweatherlive.com/en/help/the-interplanetary-magnetic-field-imf.html>

¹⁷ Solar filaments or prominences: https://en.wikipedia.org/wiki/Solar_prominence

¹⁸ SWPC: Space Weather Prediction Center: <https://www.swpc.noaa.gov/>.

***** DX *****

The following information is from several sources including DX World <https://www.dx-world.net/>, DXNews <https://dxnews.com/>, the ARRL DX Bulletin <http://www.arrl.org/w1aw-bulletins-archive-dx> and/or personal experience. Most, if not all, DXpeditions will operate SPLIT; refer to the operating manual for your radio for instructions. Do NOT call on the frequency of the DXpedition as they are not listening on their own frequency! NOTE: Following the call of the DXpedition, in parenthesis, are the principal prefix, the general location plus latitude/longitude, beam heading (°) from East TN, and the ClubLog Most Wanted list standing out of 340 for the country/entity. The Most wanted, #1, is P5, North Korea.

- XU7GNY, Cambodia (XU, southeast Asia at 12N/105E, 348°, #102) continues until 03/15. Operations from 160M to 6M using CW, SSB and FT8 although there seems to be only FT8 (F/H ¹) and FT4 activity. For very sketchy details see <https://dxnews.com/xu7gny/>.
- J38R, Grenada (J3, eastern Caribbean Sea nation 12N/62W, 136°, #155) until 03/16. Operations from 160M to 10M using CW, SSB, RTTY (only on 20M) and FT8. There is no indication as to whether FT8 will be F/H or MSHV ². For details and bandplans see <https://rockall.be/>.
- TY5C, Benin (TY, west African nation at 9N/2E, 87°, #151) until 03/31. Operations from 160M to 10M using CW, SSB, RTTY and FT8 (MSHV). For very sketchy details see <https://www.qrz.com/db/TY5C>.

¹ F/H (Fox and Hound or DXpediton) mode. See <https://www.onallbands.com/using-the-ft8-dxpedition-mode-a-k-a-fox-and-hound/>. Keep in mind, you are the hound.

² MSHV (Multi Stream HV) mode. See <http://lz2hv.org/node/10>.

For a bar graph of DXpeditions, on a per month basis, go to <https://www.dx-world.net/>.

Remember: Technician Class Amateur Radio Operators have (somewhat limited) operating privileges to use phone (**only** SSB) and digital modes on the 10M band using up to 200-Watts PEP output power. Your segments are digital from 28.000-MHz to 28.300-MHz (stay near the digital mode frequencies above 28.070-MHz out of courtesy to CW operations) and SSB from 28.300-MHz to 28.500-MHz. You are not authorized to use FM mode as it is above your phone cutoff frequency. 10M has experienced exceptional propagation to all parts of the world during day light hours. The conditions should continue for another 2-years. Get on 10 and have fun! You just might get the DX bug and upgrade to General Class. A win-win situation for you.

For more DXpeditions, from DX World, <https://www.dx-world.net/>, please see [http://www.hamradiotimeline.com/timeline/dxwSouth Pacific Ocean at timeline_1_1.php](http://www.hamradiotimeline.com/timeline/dxwSouth%20Pacific%20Ocean%20at%20timeline_1_1.php).

***** ARRL Letter *****

From the ARRL Letter and other ARRL publications, all copyright and published by the American Radio Relay League, Newington, CT. See ARRL website <http://www.arrl.org/>.

- The ARRL podcast, “On The Air,” is new addressing an upcoming operating event, “The Solar Eclipse QSO Party” on April 08. The lead organizer of the Ham Radio Science Citizen Investigation (HamSCI), W4NAF, is interviewed. [Listen to the podcasts with iTunes for iOS, Stitcher for Android and blubrry for desktop computers.]
- New editions of the ARRL Audio News,” a summary of the top news for the week of ham radio and the ARRL, appear every Friday. All editions of the Audio News are available at the blubrry website, <https://blubrry.com/arrlaudionews/>. The latest Audio News may be heard locally on the W4KEV repeater (Knoxville), 145.370-MHz, on Fridays, Saturdays and Sundays at 8:30 AM and 10:00 PM ET.
- The theme of the 2024 ARRL Field Day (06/22-23) will be, “Be Radio Active.”

73 ES GUD DX DE
Bob Loving K9JU
Maryville, TN
k9ju@arrl.net