

2024 March 07 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 EST (UTC-5), 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.

NOTE: Daylight Saving Time begins at 2:00 AM EST this Sunday, March 10. “Spring ahead.”

- Weekly Sprints or Short Events:
 - NCCC (Northern CA Contest Club- both are tonight, Thursday)
 - FT4 Sprint 8:00 to 8:30 PM
 - Website: <https://www.ncccsprint.com/ft4ns.html>
 - Sprint Ladder (CW) 9:30 to 10:00 PM
 - Website: <https://ncccsprint.com/rules.html>
 - Radiosport World Weekly RTTY Test
 - Thursday 8:45 to 9:15 PM
 - Website: <https://radiosport.world/wrt.html>
 - K1USN Slow Speed Tests (SST – CW max 20-wpm)
 - Friday 3:00 to 4:00 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: OK, ID and WI. See <https://contestcalendar.com/>
- Other activities of interest:

- Novice Rig Roundup: Continues until Sunday 03/10 07:59 PM EDT. Read the rules at the website.

Website: <https://novicerigroundup.org/>

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 137 (164 last week and 136 this morning).
- The Wolf (Sunspot) Number ² is 105 (45 last week) from seven Active Regions (two last week and this morning). Number of individual sunspots = Wolf number - [10 * (number of AR)] or, 105 - [10 * 7] = 35.
- As of 6:30 PM ET today, the geomagnetic field was active with a Kp ³ of 3.33 but the Hp30 ¹² index was 0.67 indicating a quiet level. Between 4:00 and 6:30 PM ET (period ending times), in 30-minute increments, the Hp30 was 4.33, 3.00, 2.67, 2.67, 2.67, and 2.33.
- X-ray solar flare ⁴ activity had been low with many C-class flares. Late yesterday and continuing into today, some higher level C flares have occurred. This may portend higher level x-ray solar flare activity to come. Keep an eye on both <https://www.solarham.net/> and <https://spaceweather.com/> for further developments.
- The solar wind ⁹ parameters are all elevated to small extents; it is interesting to note that the changes appear to coincide with the increase in C-level flare activity. The B_z component of the Interplanetary Magnetic Field ¹⁶ is bouncing around neutral.
- A further increase in the solar wind speed, and possibly the other components, may cause a G1 (minor) geomagnetic storm ⁶ on Saturday 03/09. 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 through Saturday, 03/09, and maybe Sunday, 03/10, 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/>.

¹ F/H (Fox and Hound or DXpediton) mode. See <https://www.onallbands.com/using-the-ft8-dxpediton-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>.

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.

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

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- The ARRL podcast, “On The Air,” is an article on “The First-Year Experiences of a General-Class Ham,” by KE8JVX. [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.
- By now most hams have heard of the passing of audio and concert sound systems giant, Bob Heil (K9EID). Bob passed away on February 28 after a one year battle with cancer. Bob worked with such Rock & Roll greats like The Grateful Dead, The Who, Joe Walsh (solo and with The Eagles) and Peter Frampton. He was inventor of the “talk box” (“vox box”?) that debuted with the live recording of “Frampton Comes Alive!” Bob Heil’s products are on display at the Rock & Roll Hall of Fame. RIP K9EID.

Don’t forget to “spring forward” at 2:00 AM EST this Sunday (03/10). The time will change to 3:00 AM EDT.

73 ES GUD DX DE
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