

## 2024 February 29 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.***

- 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 7:00 to 8:00 PM  
Website: <http://www.k1usn.com/sst.html>
  - Worldwide Sideband Activity Contest  
Monday 8:00 to 8:59 PM  
Website: <https://wwsac.com/rules.html>
  - Phone Weekly Test (SSB)  
Tuesday 9:30 to 10:00 PM  
Website: [http://www.perluma.com/Phone\\_Fray\\_Contest\\_Rules.pdf](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: None. See <https://contestcalendar.com/>
- Other activities of interest:
  - ARRL International DX Contest., SSB: Friday 03/01 7:00 PM to Sunday 03/03 7:00 PM.

160M to 10M (legacy only). Exchange: Signal report (“59”) + state/province (US/Canada) or signal report (“59”) + Power. This contest is the US works the rest of the world and vice-versa.

Website: <http://www.arrl.org/arrrl-dx>

- Novice Rig Roundup: Friday 03/01 7:00 PM to Sunday 03/10 06:59 PM. 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) <sup>1</sup> is 164 (173 last week and 180 this morning).
- The Wolf (Sunspot) Number <sup>2</sup> is 127 (45 last week) from two Active Regions (seven last week and this morning).
- As of 6:30 PM ET today, the geomagnetic field is quiet with a Kp <sup>3</sup> of 0.67 but the Hp30 <sup>12</sup> index was 0.67 indicating a quiet level. Between 4:00 and 6:00 PM ET, in 30-minute increments, the Hp30 was 0.00, 0.00, 0.33, 0.33 and 0.33.
- X-ray solar flare <sup>4</sup> activity had been low with many C-class flares. Yesterday, an M1.5 occurred, peaking at 1:50 PM ET that lasted almost 3-hours in the M-class region. The radio blackout <sup>5</sup> was R1 and didn’t have much effect on HF communications on the higher bands (20M to 10M).
- At 6:30 PM ET today, the solar wind <sup>9</sup> speed is barely elevated at ~385-km/sec. The particle density is low at ~3.0 particles/cm<sup>3</sup>. The B<sub>z</sub> component of the Interplanetary Magnetic Field <sup>16</sup> is pointing north which is good.
- A CME <sup>10</sup> lifted off the surface of the sun from a filament attached to AR3592 in the southern hemisphere of the sun. Models suggest the CME may graze the earth on 03/02 and possibly producing a G1 (minor) geomagnetic storm <sup>6</sup>.
- Summary: Radio propagation conditions through Saturday, 03/02, and maybe Sunday, 03/03, 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 CME effects that are not expected.

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

<sup>1</sup> Solar Flux Index (SFI): See [https://glossary.ametsoc.org/wiki/Solar\\_flux](https://glossary.ametsoc.org/wiki/Solar_flux)

<sup>2</sup> Wolf [Sunspot] Number: See [https://en.wikipedia.org/wiki/Wolf\\_number](https://en.wikipedia.org/wiki/Wolf_number).

- <sup>3</sup> K<sub>p</sub> is the planetary K-index. See <https://www.swpc.noaa.gov/products/planetary-k-index>.
- <sup>4</sup> 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>.
- <sup>5</sup> Radio Black Out categories may be found at the SMARC website under “Files” and “Documents.”
- <sup>6</sup> Geomagnetic Storm categories may be found at the SMARC website under “Files” and “Documents.”
- <sup>7</sup> Coronal Holes (CH): See <https://www.swpc.noaa.gov/phenomena/coronal-holes>
- <sup>8</sup> Tamitha Skov, WX6SWW, <https://www.spaceweatherwoman.com/>
- <sup>9</sup> Solar wind parameters at <https://www.solarham.net/solarwind.htm> and explanations of the parameters at <https://hypertextbook.com/facts/2005/RandyAbbas.shtml>
- <sup>10</sup> CME (Coronal Mass Ejection): See: [https://en.wikipedia.org/wiki/Coronal\\_mass\\_ejection](https://en.wikipedia.org/wiki/Coronal_mass_ejection)
- <sup>11</sup> Carrington Event: See [https://en.wikipedia.org/wiki/Carrington\\_Event](https://en.wikipedia.org/wiki/Carrington_Event)
- <sup>12</sup> Hp30 and Hp60 Indexes: See <https://kp.gfz-potsdam.de/en/hp30-hp60>
- <sup>13</sup> 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))
- <sup>14</sup> Solar Dynamics Observatory Helioseismic and Magnetic Imager (SDO HMI): [https://en.wikipedia.org/wiki/Solar\\_Dynamics\\_Observatory](https://en.wikipedia.org/wiki/Solar_Dynamics_Observatory)
- <sup>15</sup> Magnetic Filaments: <https://spaceweather.com/glossary/filaments.html>.
- <sup>16</sup> Interplanetary Magnetic Field (IMF): <https://www.spaceweatherlive.com/en/help/the-interplanetary-magnetic-field-imf.html>
- <sup>17</sup> Solar filaments or prominences: [https://en.wikipedia.org/wiki/Solar\\_prominence](https://en.wikipedia.org/wiki/Solar_prominence)
- <sup>18</sup> 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) is on the air until 03/15. Operations from 160M to 6M using CW, SSB and FT8. Although not listed at the website, the station was worked on 12M (24.925) today at 8:45 AM ET. For very sketchy details see <https://dxnews.com/xu7gny/>.
- H40WA, Temotu Province (H40, south Pacific Ocean Solomon Islands nation 11S/167E, 271°, #43) until 03/06. Operations from 160M to 6M using CW, SSB and FT8 (F/H <sup>1</sup>). For details and bandplan see <https://intrepid-dx.com/h40wa/>.

<sup>1</sup> 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.

<sup>2</sup> 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 28.5080-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 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.
- Do you wish to help HAARP (High-frequency Active Aurora Research Program) the next three days? Although the experiments began 02/28, they continue through this Sunday. For information, see <https://haarp.gi.alaska.edu/>.

73 ES GUD DX DE  
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