

THE PLATTSMOUTH AMATEUR RADIO CLUB

Communicator

May 2018

New 630-Meter Band Reported “Very Busy”

(ARRL 04/24/2018) Amateur Radio got two new bands last year, but is anyone actually using them? Ralph Wallio, W0RPK, of Greenville, North Carolina, and others who took part in ARRL’s WD2XSH Part 5 Experimental operation or have a deep interest in what now is the 630-meter band, 472 – 479 kHz, say activity is picking up on the new allocation. Wallio has been maintaining an informal database tracking the activity of stations on a state-by-state basis, as well as how many states each station has worked. Topping the list is Eric Tichansky, NO3M, in Pennsylvania, with 36 states worked on 630 meters, and 35 confirmed, including Hawaii and Alaska. NO3M, who also operates as W3CDX, reports 8 DXCC entities worked on the new band. Wallio said his list will be updated weekly.

“During the past 6 months our list of stations in the US participating in QSOs on 630 meters has steadily increased to 108 stations across 39 states,” Wallio told ARRL. “As of mid-April 2018, we have 6 months of operating experience over the past winter. Our 630-meter band has been very busy.”

Wallio said modes frequently used for 630-meter contacts include CW, JT9, WSQ (weak-signal QSO), and FT8 with occasional additional digital mode experiments and SSB. Numerous US stations are also participating in WSPR beacon transmission, reception, and reporting on 472 kHz. “An analysis of the past 30 days finds 59 stations occasionally transmitting 630-meter WSPR beacons in the US,” Wallio added.

Transatlantic and transpacific contacts on the new band also have been reported.

John Langridge, KB5NJD, posts a daily discussion of 630-meter operations and conditions. He advises stations operating on 630 meters to upload their logs to Logbook of The World, so 630-meter operators participating in the 2018 ARRL International Grid Chase (IGC) can receive credit.

Another WD2XSH participant, Rudy Severns, N6LF, discusses LF-MF antenna design on his website, with notes. An archive of 600MRG discussions also is available.

<http://www.arrl.org/news/new-630-meter-band-reported-very-busy>

Logbook of The World has Online Status Monitor

(ARRL 04/26/2018) Logbook of The World (LoTW) now has a full-time status monitor. The system’s status is displayed in real time and is available offsite, offering a single spot for all users — web, Facebook, Twitter, etc. — to quickly check what’s happening with the online repository of contacts and confirmations.

At a glance, the LoTW status monitor shows if the system is up, paused, or down; overall uptime statistics, and quick stats. A green status means all systems are go, a red status means the system is down, and a black status means the system has been paused. The monitor indicates overall uptime for the past 24 hours, the past 7 days, and the past 30 days, as well as the most-recent downtime occurrence.

<http://www.arrl.org/news/logbook-of-the-world-has-online-status-monitor>
<https://status.lotw.arrl.org/>

Hamvention® to Stream Worldwide

(ARRL 04/19/2018) “Amateur Radio Roundtable” Host Tom Medlin, W5KUB, will once again livestream selected activities from the 2018 Hamvention® in Xenia, Ohio, during what he calls the “Hamvention Marathon Webcast” — more than 40 hours of live video from the annual show. This will mark Medlin’s 17th year covering the show for those unable to attend Hamvention.

“Our motto is ‘Bringing ham radio to you,’” Medlin said. “We want to give everyone the experience of feeling like they are part of this ham radio event.” Medlin said viewers can not only see what’s going on at Hamvention, but they can also use the chat room to communicate directly with the W5KUB group.

“Astronaut Doug Wheelock, KF5BOC, is scheduled to be with us again for the 5th year as a co-host,” Medlin noted. “Amateur Radio Roundtable” is webcast Tuesday evenings (Wednesday at 0100 UTC). Medlin invites radio amateurs to join the W5KUB Facebook group.

<http://www.arrl.org/news/w5kub-to-stream-hamvention-2018-worldwide>
<http://w5kub.com/>

**2018
PAID MEMBERSHIP**

- AGØL.....Steve Loyd [E]
- K3CRFDave Smith [E]
- K5LBS.....Jerry Gault [E]
- KA0IJY Keith Keene [E]
- KBØFSIPat McCollum [T]
- KBØLFFred Ericksen [E]
- KBØOGO Roger Behrns* [E]
- KBØZZT..... George Bellairs [T]
- KCØDTK..... Joan Bellairs [T]
- KCØHYD.....John Titsworth [G]
- KCØHYE.....Shirley Titsworth [T]
- KEØXQ..... Bill McCollum [E]
- KIØPYKevin Faris [E]
- N5SEZ Ray McNally[E]
- WØDBW.....Derek Winterstien [G]
- WØZYDave McLaughlin[E]
- WØZYD Debbie McLaughlin[G]
- W3DCQ.....Bill Pulsifer [G]

**Charter Members #New Ham*

Note: Thanks to all who have paid their dues and many who have given additional donations. All donations are greatly appreciated. Please let me know of any corrections.



Meetings are 8am the last Saturday of most months at Mom's Café in Plattsmouth.

Tuesday night get-togethers at Plattsmouth Burger King at 7 PM

**PLATTSMOUTH AMATEUR
RADIO CLUB**

KBØSMX

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Repeaters:

- 443.45⁺ is located in downtown Omaha
- 443.225⁺ is located in Murray.
- 147.48 Simplex is also in Murray.

Web Site

www.kb0smx.com

Maintained by Derek (WØDBW)

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**MINUTES of
the
MEETING**

The March 31, 2018 meeting was held at Mom's Café in Plattsmouth. The meeting was called to order at 8:09 am by President Roger Behrns.

Those in attendance were Roger (KBØOGO), Kevin (KIØPY), Ray (N5SEZ), Derek (WØDBW), Fred (KBØLF), Steve (AGØL), Dave (WØZY), Debbie (WØZYD), Gary (KBØKYT), and Keith (KA0IJY).

The Minutes of the February meeting were approved on a motion by Kevin and second by Keith.

The treasurer reported receiving dues of \$15 and \$5 in donations and expenses of \$320 for insurance which leaves \$260 in the repeater fund and \$630.35 in the general fund for a balance of \$930.35. Derek moved and Dave seconded a motion to accept the treasurer's report. Passed.

It was noted that the Nebraska QSO party will be April 21-22.

The Bellevue Fleamarket is April 7.

The meeting adjourned on a motion by Kevin and second by Gary at 8:12.

Meeting Calendar
8am, April 28, 2018
8am, May 26, 2018
at Mom's Café
Field Day June 23-24
Meeting at Noon, 6/23

**Field Day 2018
is June 23-24**

<http://www.arrl.org/field-day>

PLATTSMOUTH ARC MEMBERSHIP REGISTRATION FORM

Name		Call Sign		Class	
Address		City		State	
E-Mail		Phone #			
Spouse Name		Call Sign		Class	
Membership Type <input type="checkbox"/> Primary(\$15) <input type="checkbox"/> Spouse (\$5) <input type="checkbox"/> Student (\$5) <input type="checkbox"/> New Ham		● Additional donations are gratefully accepted. ● New Hams are free during the year they receive their first license. ● Please give this form and dues to the club treasurer or any club officer.		Donation for: <input type="checkbox"/> Repeater fund <input type="checkbox"/> Insurance <input type="checkbox"/> Other _____ <input type="checkbox"/> General	
Any additional e-mail or cell phone #s?		Amount: <input type="checkbox"/> I prefer my donation to be anonymous.			

FCC Releases Notice of Proposed Rulemaking on Small Satellites

(ARRL 04/26/2018) The FCC released a Notice of Proposed Rulemaking (NPRM) on April 17, seeking comment on proposals to streamline its rules regarding the deployment of “small satellites.” This would include small spacecraft put into orbit for Amateur Radio purposes, as well as small satellites launched by non-Amateur Radio entities, such as universities, but using Amateur Radio spectrum. The NPRM primarily addresses satellites launched by the commercial sector, however.

“These types of satellites, which have relatively short duration missions, have been advancing scientific research and are increasingly being used for commercial endeavors such as gathering Earth-observation data,” the FCC pointed out in its NPRM.

Until now, the FCC has not defined spacecraft categorized as “small satellites.” An International Telecommunication Union Radiocommunication Sector (ITU-R) Report focused on satellites having a mass of less than 10 kilograms with a typical mission duration as less than 3 years and deployed in low-Earth orbit (LEO), which would include most CubeSats. The FCC NPRM aims, in part, to further refine the definition of a small satellite.

The FCC has authorized small satellites as commercial operations under Part 25 of its rules, as experimental operations — including scientific and research missions for purposes of experimentation, product development, and market trials; under Part 5 Experimental FCC rules, and as Amateur Radio satellites under Part 97. In its wide-ranging NPRM, the FCC points out that the “increasingly commercial nature of small satellite missions” makes many unsuitable for Part 5 Experimental licensing, but that obtaining a Part 25 commercial authorization “can be challenging for some small satellite applicants because of the costs and timelines involved.”

In any case, FCC authorization is required prior to launch, and ITU Radio Regulations require that no transmitting station may be established or operated by a private person or by any enterprise without a license by or on behalf of the government of the country to which the station in question is subject. This would include spacecraft built in the US but launched in another country.

“Because the type of operations that qualify as Amateur are narrowly defined, an Amateur Satellite authorization will not be appropriate for many small satellite operations,” the FCC NPRM notes. “Commission staff may also request a document describing the mission of the satellite, in order to facilitate review and verify eligibility for operations in the Amateur Service,” the NPRM continues.

The FCC notes that the International Amateur Radio Union (IARU) “will only coordinate a non-Amateur satellite, if an administration directs in writing that it be operated in an Amateur-Satellite band under an experimental or other non-Amateur license.”

The NPRM does not propose any specific Part 97 Amateur/Amateur-Satellite Service rule changes, but some more general proposals could affect future authorizations under the Amateur Service. For example, the FCC is proposing that “all applicants seeking to be licensed under the streamlined small satellite process also certify that their satellites will be no smaller than 10 x 10 x 10 centimeters, to ensure that the satellite will be trackable as a space object,” the NPRM said. “This size is consistent with the CubeSat specification.” This subject recently arose in connection with the January launch of tiny, so-called SpaceBEEs by Swarm Technolo-

gies, which the FCC said it had not authorized.

Comments on the FCC NPRM will be invited 45 days following publication in The Federal Register. ARRL is planning to file comments.

<http://www.arrl.org/news/fcc-releases-notice-of-proposed-rulemaking-on-small-satellites>
https://transition.fcc.gov/Daily_Releases/Daily_Business/2018/db0417/FCC-18-44A1.pdf

IEEE SPECTRUM Report: FCC is Inconsistent Regarding Small Satellites

(ARRL 04/12/2018) [UPDATED: 2018-04-13] According to an April 10 IEEE SPECTRUM report, “The FCC’s Big Problem with Small Satellites,” confusion and erratic enforcement at the FCC is sending satellite makers abroad. Earlier this year, the FCC rescinded permission for Swarm Technologies to launch another round of SpaceBEEs later this month and questioned Swarm’s suitability to be an FCC licensee. That came in the wake of the January launch from India, of Swarm’s tiny 0.25 U CubeSats after the FCC had told the California company that it was unable to grant its application for an Experimental authorization in association with the deployment and operation of “four spacecraft smaller than 10 centimeters in one of their three dimensions.” The FCC said SpaceBEEs were below the size threshold “at which detection by the Space Surveillance Network (SSN) can be considered routine.”

The IEEE SPECTRUM article by Mark Harris suggested that the FCC’s stance could doom Swarm’s plans for a constellation of Internet of Things (IoT) communication satellites and “revealed that the FCC-licensed multiple satellites smaller than 10 centimeters over the past 5 years, including some as small as 3.5 × 3.5 × 0.2 centimeters. But the commission has also changed its mind from one application to the next, refusing launch permission for satellites that were virtually identical to ones previously authorized. This uncertainty has led to at least one satellite maker exporting his technology rather than risk being denied a license in the US.”

The IEEE SPECTRUM article noted that four PocketQube satellites were launched in 2013 on a Russian vehicle, and one of the satellites — the QubeScout-S1 was a 5 × 5 × 10 centimeter sun-sensing satellite built by University of Maryland researchers. “Because of its American roots, the QubeScout is officially a US spacecraft and thus required launch permission from the FCC,” Harris said in his report.

The researchers submitted a required Orbital Debris Assessment Report (ODAR), which does not include any minimum size requirements. The FCC subsequently granted a launch license, and, IEEE SPECTRUM said, the US Air Force Space Command has been successfully tracking the QubeScout since then.

Just days after the IEEE SPECTRUM report, the FCC issued an Enforcement Advisory, with the heading, “COMPLIANCE WITH SATELLITE COMMUNICATIONS LICENSING REQUIREMENTS IS MANDATORY AND FAILURE TO COMPLY CAN RESULT IN ENFORCEMENT ACTION.”

<http://www.arrl.org/news/ieee-spectrum-report-fcc-is-inconsistent-regarding-small-satellites>
https://transition.fcc.gov/Daily_Releases/Daily_Business/2018/db0412/DA-18-368A1.pdf