

THE PLATTSMOUTH AMATEUR RADIO CLUB

Communicator

December 2021-January 2022

ASRTU-1 CubeSat with V/u FM Transponder Submitted for IARU Coordination

(ARRL 11/03/2021) China's Harbin Institute of Technology has applied for IARU Coordination of the ASRTU-1 CubeSat. Among other capabilities, the satellite will provide a V/u FM amateur radio transponder. ASRTU-1 is a 12U CubeSat mission designed by Russian and Chinese university students for education and amateur radio.

Harbin Institute of Technology has successfully developed several amateur radio satellites, including LilacSat-2 (CAS-3H), LilacSat-1 (LO-90), DSLWP-A (LO-93), and DSLWP-B (LO-94). A new SDR-based transceiver was developed for ASRTU-1 to provide communication and experiment resources to radio amateurs, including a V/u FM transponder, a UHF telemetry downlink, and a 10.5 GHz image downlink. The satellite will also allow radio amateurs to send commands to control the satellite to take and download images.

ASRTU is planned for a launch from Russia in the fourth quarter of 2022.

<http://www.arrl.org/news/asrtu-1-cubesat-with-v-u-fm-transponder-submitted-for-iaru-coordination>

Small Antenna with Big Possibilities

(ARnewsline 11/19/21) Imagine an antenna that doesn't look like an antenna. Scientists at Princeton University's Keller Center for Innovation in Engineering Education have done just that. They're basing their work on something called large-area electronics, which allows electronic circuits to be created on material that is both thin and flexible. As a result, they're hoping to develop an antenna array that could be incorporated into something as thin as wallpaper or even a skin patch. Their findings are published in the October 7th issue of Nature Electronics.

A report on the Phys.org website quotes Naveen Verma, the senior author of the study, describing how the researchers adapted zinc-oxide thin-film transistor tech-

nology for wireless use. They created a phased array of antennas in a row that is 30cm, or one foot, long.

Lead study author Can Wu of Stanford University said this phased array allows for point-to-point wireless communication. Although phased arrays are already employed by cellular networks, radar systems and satellites, scientists are seeing this new development as showing promise for handling even more ranges of radio frequencies than ever before. Scientists said that to add to their usefulness, the antennas could be located practically anywhere—even as wallpaper in a room—making it potentially compatible with devices being driven as part of the internet of things.

<https://www.arnesline.org/>

<https://phys.org/news/2021-11-thin-film-high-frequency-antenna-array-flexibility.html>

<https://www.nature.com/articles/s41928-021-00648-z>

WSJT-X Version 2.5.1 Released

(ARRL 10/26/2021) The WSJT-X development team has announced the general availability release of WSJT-X version 2.5.1. This release mainly contains improvements and repairs defects related to Q65 and JT65 when used with nonstandard and compound call signs. Those planning to use Q65 or JT65 to make weak-signal contacts involving a nonstandard call sign should upgrade to this version. Also included is a new feature for microwave aircraft scatter, as well as repairs for bugs detected since the general availability release of version 2.5.0.

A complete listing of changes is available in the Release Notes. Links to WSJT-X 2.5.1 installation packages for Windows, Linux, and Mac are available.

<http://arrl.org/news/wsjt-x-version-2-5-1-has-been-released>

https://physics.princeton.edu/pulsar/k1jt/Release_Notes.txt

<http://physics.princeton.edu/pulsar/k1jt/wsjsx.html>

2021 PAID MEMBERSHIP

AGØL Steve Loyd [E]
 AIØN Chuck Engberg* [E]
 KØEO Kary Cluck [E]
 K3CRF Dave Smith [E]
 K5LBS Jerry Gault [E]
 KBØFSI Pat McCollum [T]
 KBØLF Fred Eriksen [E]
 KBØOGO Roger Behrns* [E]
 KCØHYD John Titsworth [G]
 KCØHYE Shirley Titsworth [T]
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 N5SEZ Ray McNally [E]
 NØLZH John Harrington [T]
 WØJRN Jim Nelson [E]
 WØZY Dave McLaughlin [E]
 WØZYD Debbie McLaughlin [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

P.A.R.C. Officers

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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 October 30, 2021 meeting was called to order by President Roger Behrns at 8:19 am.

Those in attendance were Roger (KBØOGO), Kevin (KIØPY), Ray (N5SEZ), Derek (WØDBW) and Stanley, Chuck (AIØN), Gary (WØCFC) Bill (KEØXQ) and Jim (WØJRN).

The Minutes of the September meeting were approved on a motion by Gary and second by Chuck.

The treasurer reported no changes since the last meeting which leaves \$315 in the repeater fund and \$703.95 in the general fund for a balance of \$1018.95. The report was approved on a motion by Derek and second by Roger.

The January meeting will be a dinner meeting on Sunday, January 30, 2022 at 5pm at Famous Dave's in Bellevue.

There is no meeting in December.

The meeting adjourned at 8:21 am on a motion by Kevin and second by Gary.



Meeting Calendar

8am, Sat Nov. 28, 2021
 (No Meeting in December.)

at Mom's Café

The January meeting will be a Sunday evening dinner meeting.

5pm Sun January 30, 2022
Famous Dave's in Bellevue

PLATTSMOUTH ARC MEMBERSHIP REGISTRATION FORM

Name		Call Sign		Class	
Address		City	State	Zip	
E-Mail		Phone #			
Spouse Name		Call Sign		Class	
Membership Type	● 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:	Amount:	
☐ Primary (\$15) ☐ Spouse (\$5) ☐ Student (\$5) ☐ New Ham			☐ Repeater fund ☐ Insurance ☐ Other _____ ☐ General	☐ I prefer my donation to be anonymous.	
Any additional e-mail or cell phone #s?					