

THE PLATTSMOUTH AMATEUR RADIO CLUB

Communicator

December-January 2019-20

FCC Invites Comments on Digital AM Broadcasting Proposal

(ARRL 11/26/2019) The FCC has invited comments on a Notice of Proposed Rulemaking (NPRM), that would allow AM broadcasters to transmit an all-digital signal using the HD Radio in-band on-channel (IBOC) mode, known as MA3.1

“We tentatively conclude that a voluntary transition to all-digital broadcasting has the potential to benefit AM stations and provide improved AM service to the listening public,” the FCC said. “We seek comments on proposed operating standards for all-digital stations and the impact of such operations on existing analog stations and listeners.”

The proceeding was initiated by a March 2019 Petition for Rulemaking (Petition) filed by Bryan Broadcasting Corporation. “This proceeding continues the Commission’s efforts to improve and update the AM radio service to provide a better listening experience for consumers and enhanced service offerings, as part of our continuing effort to revitalize AM broadcasting,” the FCC said in the introduction to the NPRM.

Comments are due 60 days after the NPRM appears in The Federal Register.

<http://www.arrl.org/news/fcc-invites-comments-on-digital-am-broadcasting-proposal>
<https://docs.fcc.gov/public/attachments/FCC-19-123A1.pdf>

Maine Radio Amateurs Helping to Deploy AM Band Public Information Radio Service

(ARRL 11/05/2019) Waldo County, Maine, is implementing the nation’s first county-wide emergency AM radio station with the help of radio amateurs.

“We realized that the last option [in emergencies] most people have for getting information is by broadcast radio,” said Waldo County Emergency Management Agency Director Dale Rowley, KC1LKI. He recalled an ice storm a few years ago that took down the power grid for a week. “We established an emergency shelter, but could not get the word to residents that the shelter was open. They couldn’t watch TV, and their smart-phone batteries were dead,” he said.

Rowley’s agency learned about emergency radio advisory stations and determined that they could be a solution. The RadioSAFE Wide Area Emergency Broadcast System is by Infor-

mation Station Specialists, which has provided a similar station for Dayton Hamvention visitors. The company developed a compact, center-loaded whip antenna with a small ground plane that will cover the mostly rural coastal county.

Brit Rothrock, AB1KI, and Robert Hoey, W1EBA, with the Waldo County Emergency Management Agency are handling system planning and will install the new service at the county’s tower site. The 530 kHz channel is designated exclusively for Travelers’ Information Station (TIS) services. — Thanks to Information Station Specialists

<http://www.arrl.org/news/maine-radio-amateurs-helping-to-deploy-am-band-public-information-radio-service>
<https://www.waldocountyme.gov/ema/>
<http://www.theradiosource.com/products/radiosafe.htm>

FCC Asked to Clarify Amateur Rules Governing Encrypted or Encoded Messages

(ARRL 11/04/2019) The FCC’s Wireless Telecommunications Bureau is soliciting comments on a Petition for Declaratory Ruling filed on behalf of New York University (NYU) seeking to clarify that Section 97.113(a)(4) of the Amateur Service rules prohibits the transmission of “effectively encrypted or encoded messages, including messages that cannot be readily decoded over-the-air for true meaning.” Comments are due by December 2, with reply comments (comments on comments already filed) due on December 17. The FCC has requested that all filings refer to WT Docket No. 16-239, which grew out of an ARRL Petition for Rule Making seeking elimination of symbol rate limitations on the amateur bands and is unrelated to the wider encryption issue.

A footnote in the Petition says the efficacy and availability of recently announced software to decode Winlink communications when sent using different PACTOR modes is “unclear” as it applies to existing PACTOR-capable modems. “If any bits or letters are missed or corrupted during the reception — as would be expected under HF propagation — the message cannot be realistically decoded,” the footnote asserts. SCS, the company that created PACTOR, recently unveiled its PMON software that it says offers the ability to monitor the content of PACTOR 1, 2, and 3 transmissions over the air.

<http://www.arrl.org/news/fcc-asked-to-clarify-amateur-rules-governing-encrypted-or-encoded-messages>

(Continued on Page 3)

2019 PAID MEMBERSHIP

- AGØLSteve Loyd [E]
- AIØN..... Chuck Engberg* [E]
- KØEGG.....John 'Tim' Eggertsen [G]
- K3CRF Dave Smith [E]
- K5LBS Jerry Gault [E]
- KA0IJY Keith Keene [E]
- KBØFSI Pat McCollum [T]
- KBØLF Fred Eriksen [E]
- KBØOGO Roger Behrns* [E]
- KBØZZT George Bellairs [T]
- KCØDTK Joan Bellairs [T]
- KCØHYD John Titsworth [G]
- KCØHYE Shirley Titsworth [T]
- KDØNMD Dudley Allen [G]
- KEØBXB Kim Allen [T]
- KEØXQ Bill McCollum [E]
- KGØKR Beth Engberg* [E]
- KIØPY Kevin Faris [E]
- NØLZH John Harrington [T]
- WØDBW Derek Winterstien [G]
- WØZY Dave 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.

**PLATTSMOUTH AMATEUR
RADIO CLUB
KBØSMX**

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443.45⁺ is located in downtown Omaha
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Maintained by Derek (WØDBW)

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**MINUTES of
the
MEETING**

The October 26, 2019 meeting was held at Mom's Café. The meeting was called to order at 8:09 am by President Roger Behrns

Those in attendance were Roger (KBØOGO), Kevin (KIØPY), John (KCØHYD), Shirley (KCØHYE), Derek (WØDBW), Gary (KBØKYT), Keith (KA0IJY), John (WR5I) and Bill (KEØXQ).

The Minutes of the August meeting were approved on a motion by Bill and second by Gary.

The treasurer reported no activity which leaves \$305 in the repeater fund and \$695.35 in the general fund for a balance of \$1000.35. The report was approved on a motion by John and second by Keith.

It was agreed that we should have our annual dinner meeting on Sunday, January 26, 2020, 5pm at Famous Dave's in Bellevue. Shirley will reserve the room.

The meeting adjourned on a motion by Derek and second by John at 8:12.



**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**

Meeting Calendar
8am, Sat Nov. 30, 2019
at Mom's Café

No Meeting in December
Dinner meeting on Sun-
day January 26, 2020.
5 pm at Famous Dave's

PLATTSMOUTH ARC MEMBERSHIP REGISTRATION FORM					
Name		Call Sign		Class	
Address		City		State	Zip
E-Mail			Phone #		
Spouse Name			Call Sign		Class
Membership Type	<ul style="list-style-type: none"> ● 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:
<input type="checkbox"/> Primary(\$15) <input type="checkbox"/> Spouse (\$5) <input type="checkbox"/> Student (\$5) <input type="checkbox"/> New Ham			<input type="checkbox"/> Repeater fund <input type="checkbox"/> Insurance <input type="checkbox"/> Other _____ <input type="checkbox"/> General		<input type="checkbox"/> I prefer my donation to be anonymous.
Any additional e-mail or cell phone #s?					

More than 1 Million Contacts Logged during ARRL Field Day 2019

(ARRL 11/14/2019) ARRL Contest Program Manager Paul Bourque, N1SFE, reports that nearly 1.1 million contacts were made during the 2019 ARRL Field Day — the most popular operating event in North America. Bourque reported the 2019 ARRL Field Day results, which are available starting on page 64 of the digital edition of the December 2019 issue of QST. Bourque says in his article that more than 36,000 radio amateurs took part in ARRL Field Day 2019 across all 83 ARRL/Radio Amateurs of Canada sections, up slightly from the 35,250 reported last year. The total number of contacts was down by about 7% from 2018's 1.18 million contacts.

"This year, 3,113 entries were received from local clubs and emergency operations centers (EOCs), as well as individual portable, mobile, and home stations," Bourque wrote in QST. Most entries were in Class A — club or non-club groups of three or more.

Of the nearly 1.1 million contacts, approximately 46% were made on phone, and 456,000 (42%) of contacts were made on CW. The remaining 138,000+ (12%) of the contacts were made on digital modes, such as FT8 and RTTY.

"This is a substantial increase compared to 2018, when total QSOs on the digital modes numbered just over 56,000," Bourque reported. "With the last 2018 release of WSJT-X (which now supports Field Day exchanges), many participants made use of FT8's ability to communicate when band conditions weren't being cooperative."

Top 10 scores ranged between W3AO's Class 14A entry from Maryland-DC, with 32,356 points, to W1NVT's 14,876-point Class 2A entry from Vermont.

Bourque said that 95% of the 3,113 entries received came through the Field Day web applet.

"Not only is ARRL Field Day an opportunity to sharpen operating skills in temporary and portable locations, it's also an occasion to showcase amateur radio to the local community, with clubs often setting up in publicly accessible locations and interacting with non-hams," Bourque wrote.

Soapbox comments for Field Day 2019 are available on the ARRL website. ARRL Field Day 2020 will take place June 27 – 28. <http://www.arrl.org/news/more-than-1-million-contacts-logged-during-arrl-field-day-2019>

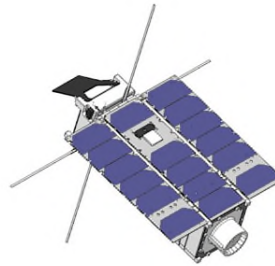
AMSAT Says HuskySat-1 Paving the Way for Further Cooperation

(ARRL 11/13/2019) AMSAT says it had to maneuver some regulatory challenges in establishing its partnership with the University of Washington to share the just-launched HuskySat-1. The satellite went into space on November 2 aboard a Cygnus cargo vessel, which docked to the International Space Station. HuskySat-1 will be boosted into a higher orbit and deployed in January, and once it completes its primary mission, it will be turned over to AMSAT for operation of its linear transponder sometime in the second quarter of 2020. AMSAT Vice President-Engineering Jerry Buxton, NOJY, explained this week that the AMSAT-UW partnership presented some regulatory challenges, but has paved the way for similar partnerships in the future.

"The [FCC] Part 97 license that AMSAT will operate under does not include or allow the use of any of the experiments on board," Buxton explained. "As those experiments were not able to conform to Part 97's so-called 'educational exemption,' including the K-band radio, two licenses were required." UW obtained a Part

5 Experimental license to cover the telemetry downlink of the AMSAT transponder module, but the transponder must remain off during that operation. The AMSAT transponder module will operate under an FCC Part 97 Amateur Service license.

"This was the first partnership with an educational institution where an AMSAT radio was flown on a non-AMSAT (UW in this case) CubeSat," Buxton said. "In the process of working with the FCC and NASA to obtain a single Part 97 license that was not complicated or restricted by 'pecuniary interest,' the experience developed an understanding with FCC as to how a mission such as HuskySat-1 could be fully licensed under Part 97."



Buxton said delays and difficulties encountered in executing all of the requirements to qualify under

Part 97 ultimately bumped up against the mission deadline to have a license in hand, so the CubeSat could be integrated on the launch vessel. "The only way forward at that time, in order for UW to make the launch, was to do the separate licensing," Buxton said.

"It was lots of work and some good frustration along the way. I thank and commend our partners at University of Washington as well as the FCC for their work to make it happen, and our friends at NASA for giving us the opportunity to push for a path to amateur radio licensing for more of the CubeSat launches they sponsor," Buxton remarked. "I believe that it has resulted in a known path toward fully Part 97-licensed educational (e.g., university) CubeSats. That should in turn offer more opportunities for AMSAT radios to fly as the communications package for a mission as well as an operating amateur radio satellite, in the same way as the CubeSats we produce."

After deployment, HuskySat-1's 1,200 bps BPSK beacon on 435.800 MHz should be active and decodable with the latest release of FoxTelem. HuskySat-1 is expected to run its primary mission for 30 days — testing a pulsed plasma thruster and experimental 24 GHz data transmitter — before being turned over to AMSAT for amateur radio operation. HuskySat-1 will feature a 30 kHz wide, 145 to 435 MHz linear transponder for SSB/CW. — Thanks to AMSAT News Service

<http://www.arrl.org/news/amsat-says-huskysat-1-paving-the-way-for-further-cooperation>

Russian OTH Radar Now Reported to be "Everywhere"

(ARRL 11/12/2019) The latest International Amateur Radio Union Region 1 Monitoring System (IARUMS) newsletter reports the Russian "Contayner" over-the-horizon radar (OTHR) has been active in the 7, 10, 14, and 18 MHz amateur radio allocations (amateur radio is primary on 40, 20, and 17 meters). The OTHR transmissions have been 40 sweeps/second, FM on pulse, and 12 kHz wide.

Additionally, IARUMS reports a significant increase in Russian military traffic using F1B, PSK, and orthogonal frequency division multiplex (OFDM) on 40, 30, 20, and 15 meters.

IARUMS on November 13 reported an OTHR in northern Iran on 6.078 – 7.022 MHz, AM on pulse, 81 sweeps/second, 44 kHz wide.

<http://www.arrl.org/news/russian-oth-radar-now-reported-to-be-everywhere>

<https://www.iarums-r1.org/>

<http://www.iarums-r1.org/iarums/news2019/news1910.pdf>