

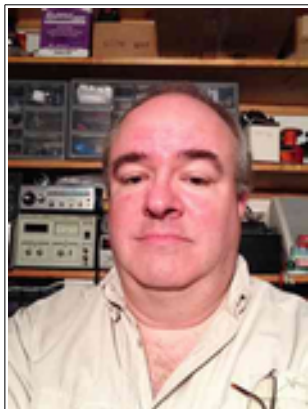
THE HAM AROUNDEE NEWS



Providing Fellowship and Community Service through Amateur Radio Since 1951

December 2016

38th Year of Publication



The Prez Sez...

So here it is, my last column. After five years on the board, two as president, I'll be signing off and taking a break from serving on the board. On January 1st, the new officers and directors will assume their roles, along with a few of the current members who are staying on for another term. I've said it before but it bears repeating, thank you folks for volunteering your time and talents to serve on the board!

I think it's been a pretty good year overall. The club finances are in good shape, and we've started to budget a bit each year for larger expenses like tower inspections and maintenance. The classes have just been excellent, with good turnout and a decent graduation rate. Let's remember to do all we can to turn graduates into members. We need to get them involved in the club so please help reach out to the new folks and share your interests and knowledge as they begin their journey into this amazing hobby.

Remember we have our holiday party coming up on December 9th at Ford Hall. Please let Mark Bova, W2PAW, know you're coming if you haven't signed up already. Plan to bring a side dish or dessert to share, the club provides the entrees and drinks. If you haven't paid your dues for 2017 you'll be able to pay at the door – being paid up at the party makes you eligible for one of our great door prizes! Doors open at 6:00. If you have some time in the afternoon, please join me in getting the hall set up for the party. I'll plan to be there around 1:30 and could use some help.

I'd like to thank everyone who shared their time and talent this year to make AARC the wonderful club that it is. Anything that gets done is due to someone volunteering their time. Sometimes it's just one person that sees something that needs to be done and takes care of it. Just a couple of examples would be Jon Graefe, AE3JG, taking care of the weeds around the tower stakes and Bruce Strackbein, WR3Q, filling in that ankle-breaker of a hole next to the clubhouse. Then there are the self-formed groups that take it upon themselves to handle larger projects. The folks that have been replacing all the lights, organizing the ham shack, and all those other improvements you've been noticing lately have put in a lot of hours to improve the clubhouse.

If you weren't able to pitch in this year, please try and make some time in 2017 to help out. Give a presentation, teach one day of a class, show up for a work party. There's always plenty that needs to be done.

With that, I'll take my leave. It's been a pleasure. DE K3HMX 73 SK.

AARC Holiday Party
6:00 pm (Set up at 5:00 pm)
Friday, December 9, 2016
at the D F R C Ford Hall

Fabulous Prizes are available
for those with paid up 2016 dues.

•RSVP to Mark Bova, W2PAW, and let him know how many adults, children, and what type of dish you'll be bringing to share.

AARC

Slate of Officers for 2017

In accordance with the bylaws, this serves to notify AARC members of the upcoming Election of Directors. The slate for the upcoming election is as follows:

President: Bruce Strackbein, WR3Q

Vice Pres: Rich Grace, KB3ZYO

Secretary: Keith Miller, AE3D

Treasurer: Justin Leishman, KC3BJT

Directors: **(Vote for 3)**

Tim Nagel, KB3YQK

Mark Bova, W2PAW

Jim Wallace, N3ADF

**The election will be held at the next regular meeting,
December 1, 2016, at 7:30 p.m. at the AARC Clubhouse.**

Anne Arundel Radio Club Member's News

ARRL Calls on Members to Press for US Senate Passage of Amateur Radio Parity Act

ARRL once again is calling on its members to urge their US Senators to support the Amateur Radio Parity Act (H.R. 1301) when it comes up in the Senate during the "lame duck" session of Congress that adjourns in mid-December. The House of Representatives approved the bill in September, but if the Senate does not follow suit, the bill will die, and the entire process will have to be repeated. ARRL

Hudson Division Director Mike Lisenco, N2YBB, who chairs the ARRL Board's Legislative Advocacy Committee and has been heavily involved in efforts to move H.R. 1301 forward, said today, "The clock is ticking."

"We begin the e-mail campaign once again, as the US Senate returns to work this week after a month-long hiatus," Lisenco said. "We were just beginning to build momentum in the Senate following the unanimous passage of the Parity Act in the House when Congress shut down for the 4 weeks prior to Election Day."

The task is simple: Go to our Rally Congress page, enter your ZIP code, fill in your name and address, press enter, and e-mails will go directly to your Senators. Members may do this, even if they have already contacted their US Senators for support.

Our Rally Congress page is at, <https://arrl.rallycongress.net/>

"We have to remind our legislators that we are still here and that we need the Amateur Radio Parity Act to become law," Lisenco stressed. "We must do this now as we have, at most, only 4 weeks left in the session to get the bill passed this year. Otherwise, we will have to begin the entire process in 2017 with a new 115th Congress."

There are no guarantees, Lisenco said, and we are subject to the political bickering that goes on daily between the parties, despite the fact that the bill is truly a bipartisan effort. "In order to have a chance at overcoming political obstacles that have little or nothing to do with the legislation, we need our voices to be heard," he said. "And we need that input today."

September's victory in the US House was the culmination of many years of effort on ARRL's part to gain legislation that would enable radio amateurs living in deed-restricted communities to erect efficient outdoor antennas that support Amateur Radio communication.

The measure calls on the FCC to amend its Part 97 rules "to prohibit the application to amateur stations of certain private land-use restrictions, and for other



purposes." While similar bills in past years gained some traction on Capitol Hill, it was not until the overwhelming grassroots support from the Amateur Radio community for H.R. 1301, and ARRL's relentless and strident efforts on Capitol Hill that this bill made it this far.

As the amended bill provides, "Community associations should fairly administer private land-use regulations in the interest of their communities, while nevertheless permitting the installation and maintenance of effective outdoor Amateur Radio antennas. There exist antenna designs and installations that can be consistent with the aesthetics and physical characteristics of land and structures in community associations while accommodating communications in the Amateur Radio services."

Used with permission, ARRL Bulletin 42, Nov. 17, 2016

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BAYNESVILLE ELECTRONICS - CLOSED AFTER 61 YEAR

As a kid I was thrilled to hear my father say on Saturday mornings "Hey, I'm going to Baynesville, do you want to go?"

Baynesville Electronics kept with the tradition of having just-about anything an electronic hobbyist or professional could imagine. Located behind the 'Huge' and iconic Luskins sign atop the hill overlooking Eastbound I-695 Baltimore Beltway and the exit for Cromwell Bridge Road; then a short drive to 1631 East Joppa Road Baynesville Electronics' parking lot - packed full every Saturday. For years the store was much like an indoor electronic flea-market with tables full of 'stuff.' From AM/FM/Shortwave & CB Radios, TVs, project cabinets and copper-etching kits to Stereo equipment, wires, tubes, connectors and components - they had it all.



But Baynesville Electronics is now CLOSED.

>From a message on their FACEBOOK page:

"This is a letter that none of us wanted to write, but the time has come to let our loyal customers know what is happening to Baynesville Electronics. As of October 1st, we will be liquidating our stock and preparing to close our doors on or before the end of the year.

For 61 years, it's been our pleasure for Baynesville Electronics to serve the generations of families that have come through our doors. These families, as well as, our loyal customers have allowed us to thrive these past years in this wonderful community.

Although we have tried to keep up with the changes in our industry and retail sales in general, we have been unable to continue to keep ourselves profitable.

It is our hope that you understand and ask that you wish our employees the best with their future plans.

>From Our Family to Yours...

Thank you for allowing us to serve you!"

>From the MDC Section, Hams and many hobbyists - "Hey, we will miss you too!"

Used with permission, MDC Section News, Nov. 17, 2016

Learn to Use Your Repeater's Autopatch

On Monday, May 23, 2016 [Amador \(California\) Amateur Radio Club](#) President Paul Keeton, KI6LZC, was on deployment with the Red Cross in Calaveras county for the Butte Fire Recovery when he came across a woman lying on the roadway. There was no cell signal there, so he used the autopatch available on the Amador repeater to call 911. This was an excellent example of autopatch use. Keeton would have had to drive to the nearest town (West Point) to use a phone there. As he noted, "Autopatch is very handy up here in the mountains." The woman recovered. - ARRL Sacramento Valley Section ARES News

Radio amateurs in the US enjoy a great privilege -- the ability to interconnect their stations and repeaters with the public telephone system. The wisdom of the federal government in permitting, and even in defending, this freedom has been demonstrated time and again. There is no way to calculate the value of the lives and property that have been saved by the intelligent use of phone patch and autopatch facilities in emergency situations. As with any privilege, this one can be abused, and the penalty for abuse could be the loss of the privilege for all amateurs. Study the ARRL Autopatch Guidelines [here](#). -- ARRL



Ten Steps to Access Your Repeater's Autopatch

1. Ensure that the repeater is not in use. If it is, but the reason for the autopatch is to report an emergency, transmit the word "break" to break into the QSO. An emergency involves the immediate safety of life or protection of property.
2. State that you are going to use the autopatch - "This is K1FUG, bringing up the autopatch."
3. Wait a few seconds for any other station to break in with a possible emergency.
4. Use your mic's DTMF keypad to transmit the repeater's autopatch access code.
5. When you hear the dial tone, push the mic's PTT button, and key in the phone number of the party you are calling.
6. Take your finger off the PTT button to receive, and you should hear the repeater controller confirm by voice that you're making an autopatch, followed by the called party's phone ringing.
7. When the called party answers, transmit and speak normally. Immediately tell the party that you're calling via a ham radio and that they are "on the air" to head off any inappropriate statements.
8. Explain that the phone call is not duplex; that is, only one party can speak at a time. In the event the other party states inappropriate words or sentences, you can block the party's speech by simply keying your transmitter, and then terminating the 'patch.

9. Keep transmissions short and the complete call as brief as possible.

10. Finish the call by saying good-bye and enter the autopatch termination code provided by your repeater club. (Note: Autopatch access codes are typically furnished only to repeater club members who support the repeater. Hint: Join and support your local repeater clubs!). The repeater controller will confirm autopatch termination. It's common courtesy to then thank the repeater sponsor for the use of the autopatch.

Remember!

When you use the autopatch, everything you and the called party say is transmitted over the air for anybody with a scanner or live stream Internet connection to hear. User discretion is advised! Also, the autopatch is for short communications, not lengthy, breezy chats - three minutes max! Some controllers will remind you when you have thirty seconds left. The autopatch is usually restricted to local calls only.

Used with permission, The ARES E-Letter for Nov. 16, 2016

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MDC RADIOGRAMS AND OTHER MESSAGING

Outlets in each ARES(r) jurisdiction are needed for daily Radiogram and Radio-email traffic for served agencies, and also for messaging welcoming new hams to the Amateur Service. Join the MEPN, BTN, or MDD nets daily to find out more about how to contribute.

Each ARES(r) jurisdiction in MDC should assign an HF rep to MEPN or MDD daily; or a rep to BTN daily; or assign an operator to check Radio-email daily.

Register these stations with the STM so traffic may be routed to/from your jurisdictions.

BTN LOCAL NTS TRAFFIC AND TRAINING NET

The BTN continues to meet on 145.33/R (no tone - our backup) daily at 6:30PM local time and continues to welcome new amateurs. The availability of an active directed traffic net of the NTS on VHF is exactly why the BTN was established, providing a welcoming place for newcomers to the Amateur Service.

MEPN representatives check for EchoLink check-ins starting at 6 PM daily via the WB3GXW-L link node (or *WASH_DC* conference node backup if the -L node is not available).

Remember that the MSN provides CW training daily for newcomers to the mode, or those wishing to refresh their skills, daily at 7:30 PM on 3563 kHz.

Thanks to all the Section NTS net controls, DRS and WL2K stations, liaisons, and traffic handlers for the continuing effort to keep the nets running and traffic moving.

Thank you for your continued support of MDC integrated ARES(r) and NTS operations.

73, W3YVQ, MDC ASM, STM

w3yvq atsign arrl dot net

w3yvq atsign winlink dot org from WL2K

Used with permission, MDC Section News, Nov. 17, 2016

Naval Academy Students Planning CubeSat with HF Uplink

Students at the US Naval Academy in Annapolis, Maryland, are planning an Amateur Radio CubeSat -- dubbed *HFSAT* -- that would carry an HF transponder as a primary payload as well as 2-meter APRS as a secondary mission when power is available. The 1.5 U CubeSat will have a linear uplink at 21.4 MHz and a downlink at 29.42 MHz.

"*HFSAT* is a small 1.5 U CubeSat that will demonstrate the viability of HF satellite communications as a back-up communication system using existing ubiquitous HF radios that are often a part of every amateur station," said USNA Instructor Bob Bruninga, WB4APR, who developed APRS. Bruninga said *HFSAT* would be similar to the 1990s-era RS-12/13 Russian Amateur Radio satellite.



"*HFSAT* will continue the long tradition of small amateur satellites designed by students and hams at the US Naval Academy," Bruninga told

ARRL. The uplink will be at 21.4 MHz and downlink at 29.42 MHz, similar to [earlier] Mode K HF satellites. No launch has yet been identified." Bruninga said *HFSAT* would be gravity gradient-stabilized by its full-sized, 10-meter, thin-wire, half-wave dipole.

Other unique features of *HFSAT* include its APRS telemetry command-and-control capability. "For VHF the students have modified a popular Byonics.com MTT4B all-in-one APRS Tiny-Track4 module for telemetry, command, and control to fit on a single 3.4-inch square card inside the CubeSat, that they will use for this and for future CubeSats," Bruninga said. The students are working with Bill Ress, N6GHZ, on the HF transponder card, which will provide a bandwidth of 30 kHz, employing an inverting transponder to minimize Doppler. Todd Bruner, WB1HAI, will be the *HFSAT* control operator.

Bruninga said the HF transponder is a follow-on from the USNA's existing *PSAT* 10-meter PSK31 transponder, still operational. *HFSAT*'s telemetry downlink will be captured via stations in the worldwide ground-station network. The packet link is a secondary mission compared to the HF transponder on this spacecraft.

Once *HFSAT* is in space, Bruninga recommended using a vertical HF antenna, because it would match well with the antenna patterns and geometry of Low Earth Orbit (LEO) satellites. "When low on the horizon, both the satellite and the user antennas are in their main lobes, providing maximum gain at the distant horizons," Bruninga said. "At the higher elevations, the satellite is 6 dB to 10 dB closer,



Bob Bruninga, WB4APR.

significantly making up for the reduced antenna pattern geometry."

He said hams would be able to use "simple, manual" pass-prediction tools, much as they used the old Oscar Locator in the early years of Amateur Radio satellites.

Used with permission, The ARRL Letter for Nov. 10, 2016

Rule Making Petition to FCC Calls for Vanity Call Sign Rule Changes

The FCC is inviting comments on a *Petition for Rule Making (RM-1775)* from a Nevada radio amateur that seeks changes to the rules governing the Amateur Radio Vanity Call Sign Program. Christopher LaRue, W4ADL, of North Las Vegas, is proposing that any licensee obtaining a vanity call sign be required to keep it for the full license term. LaRue contends in his petition that excessive and frequent vanity call sign filings are hampering the ability of other qualified licensees to obtain vanity call signs in one of the more desirable 1 x 2 or 2 x 1 formats. LaRue said that since the FCC dropped the fee to file for a vanity call sign, some applicants are taking advantage by regularly obtaining new call signs, thereby keeping them out of circulation.

"Some are changing call signs almost monthly, just to keep the newer code-free Extra class operators from obtaining a shorter call sign," he said in his petition. "I even saw an older operator that said he does it all the time and has not even owned a radio in over 6 years. When I looked him up, he has had 16 different [call signs] in 18 months."

LaRue said his proposed minor rule change would require any licensee applying for and obtaining an Amateur Radio vanity call sign "be required to keep it for the duration of the license, which is currently 10 years."

He said this would "alleviate a lot of the stress on the ULS system and manpower requirements" at the FCC. "It will also keep inactive amateurs from changing call signs regularly, thereby tying up call signs for 2 years after dismissal of said call."

Interested parties may comment using the FCC Electronic Comment Filing System ([ECFS](#)). Comments are due within 30 days of the October 26 posting date.

Used with permission, The ARRL Letter for Nov. 3, 2016



W1AW 2016/2017 Winter Operating Schedule

Morning Schedule:

Time	Mode	Days
1400 UTC (9 AM EST)	CWs	Wed, Fri
1400 UTC (9 AM EST)	CWf	Tue, Thu

Daily Visitor Operating Hours:

1500 UTC to 1700 UTC - (10 AM to 12 PM EST)
1800 UTC to 2045 UTC - (1 PM to 3:45 PM EST)

(Station closed 1700 to 1800 UTC (12 PM to 1 PM EST))

Afternoon/Evening Schedule:(See Notes below)

2100 UTC (4 PM EST)	CWf	Mon, Wed, Fri
2100 " "	CWs	Tue, Thu
2200 " (5 PM EST)	CWb	Daily
2300 " (6 PM EST)	DIGITAL	Daily
0000 " (7 PM EST)	CWs	Mon, Wed, Fri
0000 " "	CWf	Tue, Thu
0100 " (8 PM EST)	CWb	Daily
0200 " (9 PM EST)	DIGITAL	Daily
0245 " (9:45 PM EST)	VOICE	Daily
0300 " (10 PM EST)	CWf	Mon, Wed, Fri
0300 " "	CWs	Tue, Thu
0400 " (11 PM EST)	CWb	Daily

Frequencies (MHz)

CW: - 1.8025 3.5815 7.0475 14.0475 18.0975 21.0675
28.0675 147.555

DIGITAL: - 3.5975 7.095 14.095 18.1025 21.095 28.095
147.555

VOICE: 1.855 3.990 7.290 14.290 18.160 21.390 28.590
147.555

Notes:

CWs = Morse Code practice (slow) =
5, 7.5, 10, 13 and 15 WPM
CWf = Morse Code practice (fast) =
35, 30, 25, 20, 15, 13 and 10 WPM
CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.

DIGITAL = BAUDOT (45.45 baud), BPSK31 and MFSK16 in a revolving schedule.

Beginning in January 2017, the voice mode used for W1AW's 40 meter voice bulletins will be full-carrier, double-sideband AM.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.

On Tuesdays and Fridays at 2330 UTC (6:30 PM EST), Keplerian Elements for active amateur satellites are sent on the regular digital frequencies.

A DX bulletin replaces or is added to the regular bulletins between 0100 UTC (8 PM EST) Thursdays and 0100 UTC (8 PM EST) Fridays.

Audio from W1AW's CW code practices, CW/digital bulletins and phone bulletin is available using EchoLink via the W1AW Conference Server named "W1AWBDCT." The monthly W1AW Qualifying Runs are presented here as well. The audio is sent in real-time and runs concurrently with W1AW's regular transmission schedule.

All users who connect to the conference server are muted. Please note that any questions or comments about this server should not be sent via the "Text" window in EchoLink. Please direct any questions or comments to w1aw@arrl.org.

In a communications emergency, monitor W1AW for special bulletins as follows: Voice on the hour, Digital at 15 minutes past the hour, and CW on the half hour.

All licensed amateurs may operate the station from 1500 UTC to 1700, UTC (10 AM to 12 PM EST), and then from 1800 UTC to 2045 UTC (1 PM to 3:45 PM EST) Monday through Friday. Be sure to bring your current FCC amateur radio license or a photocopy.

The W1AW Operating Schedule may also be found on page 83 in the November 2016 issue of QST or on the web at, <http://www.arrl.org/w1aw-operating-schedule>.

NEW ARRL AFFILIATED CLUB - "UNALLOCATED SPACE ARC"

Norm Fusaro, W3IZ, the ARRL Assistant Manager, Field Services and RadioSport Department at ARRL Headquarters wrote, "It gives me great pleasure to advise you that the ARRL Executive Committee has approved your [UNALLOCATED SPACE ARC] club's application for affiliation with the ARRL. The Unallocated Space Amateur Radio Club is hereby declared a duly affiliated society.

Our MDC Section Manager said "You gotta to see this place and meet these Hams! Innovation and enthusiasm are just a few words that describe the "Unallocated Space ARC" – they have perpetual creativity that completely overwhelms failure – a willingness to promote curiosity that feeds an insatiable tenacity to be different. The "Unallocated Space" ARC is all about Ham Radio and so much more. It is the realm of impossible-possible!!!!!"

Thanks again to Charlie, KB3ZVN, and his ARC team for the warm hospitality and inviting me (and us) to the presentation of their "Affiliated Club" certification. You may view the photo of me, on the right, presenting the award to Charlie, KB3ZVM, on the left, at:



<www.arrl-mdc.net/pix/Award.jpg>. Let's

welcome them as our newest Maryland/DC ARC: UNALLOCATED SPACE ARC, 512 Shaw Ct #105, Severn, MD 21144.

You may find the 'Unallocated Space ARC' home page URL at: <<http://www.unallocatedspace.org/uas/>>.

This link has been added to the <http://www.arrl-mdc.net/> home page under "Links to ARRL MDC Section Affiliated Amateur Radio Clubs."

SPEAKING OF CLUB WEB PAGES SOME UPDATES NEEDED

Here's a suggestion:

I have been browsing through the affiliated club's web pages listed on the <www.arrl-mdc.net> front page. I found that many clubs maintain their home pages and links religiously. Others not so. Some are months and even years out of date. If your club wants to keep a presence on the world-wide-web, I believe you should keep your web sites up-to-date. Just a suggestion. Thanks!

Used with permission, MDC Section News, Nov. 17, 2016

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UPCOMING HAMFESTS

This is a list of hamfests in the Maryland-DC Section area. I am including a list of hamfests in nearby Pennsylvania, northern Virginia, West Virginia and Delaware as well as conventions in Orlando, Florida and Dayton, Ohio as courtesy to our neighboring Section Managers. I, your MDC Section Manager, Marty Pittinger - KB3MXM, and/or a designated ARRL representative(s) plan to attend all hamfests in the Maryland-DC Section. We hope to see you all there.

Santa Fest

Date: Saturday, December 10, 2016

Location: American Legion Youth Camp, 9201 Surratts Road, Cheltenham, MD 20623

Sponsor: American Legion & Prince George's County Emergency Repeater Association

Type: ARRL Hamfest

Talk-In: 145.230 (PL 110.9)

Public Contact: Charles Hallock, AA3WS, 16203 Manning Road, West Accokeek, MD 20607

Phone: 301-535-1666 / Email: <selbynet@hotmail.com>

Post Holiday Hamfest

Date: Sunday, January 29, 2017

Location: Odenton Volunteer Fire Company, 1425 Annapolis Road, Odenton, MD 21113

Website:

<<https://sites.google.com/site/marylandmobileers/hamfests-1/hamfest-2>>

Sponsor: Maryland Mobileers Amateur Radio Club

Talk-In: 146.805- (PL 107.2)

Public Contact: Bruce McPherson, AB3AC, 484 Peach Leaf Court, Odenton, MD 21113

Phone: 410-456-2500 / Email:

<bmcpherson73@verizon.net>

Virginia State Convention (FrostFest)

Date: Saturday, February 4, 2017

Location: Richmond International Raceway, 600 East Laburnum Avenue, Richmond, VA 23218

Website: <www.frostfest.com>

Sponsor: Richmond Amateur Telecommunications Society

Talk-In: 146.880 (PL 74.4)

Public Contact: Timothy Farrell, KJ4NPB, 8287 Ellerson Drive, Mechanicsville, VA 23111

Phone: 804-306-1134 / Email: <timfarrell57@gmail.com>

Orlando [Florida] HamCation®

Dates: Friday, February 10, 2017 through Sunday, February 12, 2017

Location: Central Florida Fairgrounds, 4603 West Colonial Drive, Orlando, FL 32801

Website: <www.hamcation.com>

Sponsor: Orlando Amateur Radio Club

Type: ARRL Convention

Talk-In: 146.760 (No CTCSS)

Public Contact: Lidy Meijers, KJ4LMM, PO Box 574962, Orlando, FL 32857

Phone: 407-841-0874 or 1-800-214-7541 / Email:

<info@hamcation.com>

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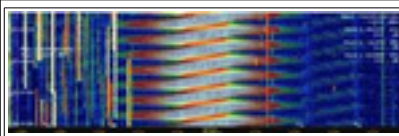
New Russian Over-the-Horizon Radars Set for 2017 Startup

According to media accounts, more long-range, new over-the-horizon (OTH) radars that can identify aerial and sea targets hundreds of miles away are scheduled to begin operation next year in the Russian Arctic. It's doubtful, however, that the news heralds the return of interference on the level of that generated by the so-called "Russian Woodpecker" OTH radar, which plagued Amateur

Radio HF bands in the 1970s and 1980s.

Over the past couple of years, OTH radars, sans woodpecker, have become increasingly commonplace

intruders on Amateur Radio bands, according to the International Amateur Radio Union Region 1 (IARU R1) Monitoring System (IARUMS), which has



A screenshot of the Russian OTH radar "Konteyner." The signal is FM CW at a sweep rate of 50/second on a center frequency of 14.127 MHz. [Image courtesy of Wolfgang Hadel, DK2OM]

noted OTH radars in Russia, China, Cyprus, Iran, and Turkey. The Russian systems-intelligence "Konteyner

RLS" OTH radar, transmitting from the Nizhny Novgorod region, is frequently spotted on 20 meters. While no woodpecker, it transmits a broad, frequency-modulated CW signal at 50 sweeps per second with a bandwidth of 80 kHz or greater, accompanied by signal splatter, IARUMS Coordinator Wolfgang Hadel, DK2OM, reported recently.

Sputnik, a Russian government-controlled radio service, cited a Rossiiskaya Gazeta newspaper report that six OTH radar installations will operate in the region. Deputy Defense Minister Dmitry Buklgakov, who visited the construction site, said a runway capable of handling all types of combat aircraft was simultaneously being



The Konteyner receiving site southeast of Moscow.

reconstructed nearby, the report continued. Other reports have indicated that similar systems will be deployed in the far east in 2018. Russia has sold its OTH radar technology to China.

OTH radars employ widely separated (250 kilometers) transmitting and receiving sites and can "see" beyond the horizon, the typical limit for ordinary radar. The transmitting array is 440 meters wide, and it incorporates 36 elements of varying configuration. The three-section receiving array is 1300 meters wide and 35 meters tall. —

Thanks for news tip to Frank Smith, WS1MH

Used with permission, The ARRL Letter for Nov. 3, 2016

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SKYWARN Recognition Day Webinar

The 18th SKYWARN Recognition Day (SRD) will be held December 3, 2016 from 0000UTC to 2400UTC. SKYWARN™ Recognition Day was developed in 1999 by the National Weather Service and the American Radio Relay League. It celebrates the contributions that SKYWARN volunteers make to the NWS mission, the protection of life and property. Amateur radio operators comprise a large percentage of the SKYWARN volunteers across the country. The Amateur radio operators also provide vital communication between the NWS and emergency management if normal communications become inoperative. During the SKYWARN Special Event operators will visit NWS offices and contact other radio

operators across the world.

This year, in the week before SRD 2016, there will be a webinar that covers the basics of the event, how to participate, and a few changes that are in store for 2016. The webinar will be November 29 at 8pm ET. Registration for the webinar can be found [here](#). As with all ARRL webinars it will be recorded and posted to the ARRL YouTube channel afterward.

Use with permission, The ARES E-Letter for Nov. 16, 2016

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Two Arrested in Georgia for Planning to Attack HAARP Facility in Alaska

Authorities in Georgia recently arrested two men who said they were planning to attack the High Frequency Active Auroral Research Program (HAARP) facility near Gakona, Alaska. Michael Vickers, a detective with the Coffee County Sheriff's Office, [told Alaska Dispatch News](#) that the pair explained to authorities "that God told them to go and blow this machine up that kept souls, so souls could be released."

"Yes, that news caused a bit of a stir," said Chris Fallen, KL3WX, a faculty member at the University of Alaska-Fairbanks (UAF), which now operates the HAARP facility. "I can also confirm that no souls are stored at HAARP."



Part of the massive antenna field at the HAARP facility near Gakona, Alaska. The row of white structures contains individual transmitters.

Long of interest to the Amateur Radio community as well as a target of various mind- and weather-control conspiracies, HAARP is now operated as an ionospheric research facility by UAF, which took it

over last year from the US Air Force.

Police seized a "massive" arsenal of weapons the individuals had apparently planned to use in attacking the remote facility. According to a WALB [TV news account](#), investigators discovered the plot after they began looking into possible drug sales by one of the men. A local gun shop also alerted authorities that the same individual was attempting to buy a large number of weapons. The two men, who face domestic terrorism charges, also were charged with selling drugs, and they could face other charges.

UAF spokesperson Marmian Grimes told [Alaska Dispatch News](#) that HAARP has been the target of previous threats, and she thanked the Georgia authorities for heading off this one. At an August open house at HAARP, Sue Mitchell of UAF's Geophysical Institute said they hoped, among other things, "to show people that [HAARP] is not capable of mind control and not capable of weather control and all the other things it's been accused of."

Opened in 1960, HAARP is capable of generating extremely high-power signals in the HF range, aimed at the ionosphere. It has run listening tests in the past for the Amateur Radio community. — Thanks to [Alaska Dispatch News](#) and other media.

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Repeaters and Nets

2 Meter Repeaters

Location	Frequency	Tone	Notes
Davidsonville	147.105+	107.2	AARC Repeater with morning traffic net.
Glen Burnie	147.075+	107.2	AARC repeater Located in Northern AA County.
BrandyWine	147.150+	114.8	SMARC Repeater.
Prince Frederick	145.350-	156.7	SPARC/CARC Repeater.
Laurel	147.225+	156.7	Laurel ARC Repeater.
Millersville	146.805-	107.2	Repeater.

1.25 Meter Repeaters

Location	Frequency	Tone	Notes
Davidsonville	223.880-	107.2	AARC 1.25M repeater *check to see if tied into 7.105...
Millersville	224.560-	107.2	AARC repeater Located in Northern AA County.

70cm Repeaters

Location	Frequency	Tone	Notes
Davidsonville	444.400+	107.2	AARC 70 cm Repeater.
Annapolis	442.300+	107.2	AARC 70 cm repeater
Laurel	442.500+	156.7	Laurel ARC 70 cm Repeater.
Millersville	449.125-	107.2	Maryland Mobileers Repeater.
Upper Marlboro	443.600+	103.5	SMARC 70 cm Repeater.

Packet Stations

Location	Frequency	Call	Notes
Davidsonville	145.050	W3VPR	AARC Club packet node running JNOS
Davidsonville	145.010	W3VPR-5	Digipeter Relay to EOC Winlink
Millersville	145.010	W3AAC-5	Digipeter Relay to EOC Winlink
Glen Burnie	145.010	W3AAC-10	EOC Winlink system and digipeter

Amateur Radio nets

Name	Frequency (in Mhz)	Day	Time
Morning Commuter Net	147.105+ PL 107.2	Weekdays	0600
AARC Talk Net	147.105+ PL 107.2	Wednesday	2000
AA County ARES Net	146.805- PL 107.2	Sunday	2000
Baltimore Traffic Net	146.670-	Daily	1830
Boating Net	146.805- PL 107.2	Wednesday	1930
Maryland Emergency Phone Net	3.920	Daily	1800
Maryland-DC-Delaware Traffic Net	3.643	Daily	1900 and 2200
Maryland Slow Net	3.563	Daily	1930
React Net	147.105+ PL107.2	1st Sunday	1930

We use **simplex 146.430 Mhz** frequently enough that you should probably program that into your HT or mobile. This is the go-to frequency for many 5K race/walk volunteering efforts, local communication, Field Day setup, and the like when we're not using a repeater.

Around the ARRL

NWS Baltimore/Washington SKYWARN Spotter

The purpose of this email is to introduce you to a new method this winter of transmitting your SKYWARN snowfall reports, and to review snowfall observation procedures.



Your SKYWARN snowfall report is vitally important in supporting our office's winter weather operations. During the snowstorm, your SKYWARN report helps us see what has fallen across the area, which in turn helps us refine our forecast. Your SKYWARN report also documents for historical purposes how much your area received.

This year, you will need to use a new Google Form to submit your SKYWARN spotter snowfall reports. This method of using the Google Forms will put your observation directly into our system, as opposed to previous method of emailing your report to LWX-report@noaa.gov. To access the new Google Form, please go to this web address: <http://ht.ly/fHlx305Kn8n>. You will need to have your SKYWARN ID in order to use this service. Please save this site and use it to report snow this winter.

Here is a quick review of other snowfall observation procedures:

1. Remember to use a snowboard, and clear it no more than every six hours. In other words, clearing it every 6 hours, or once a day, (as necessary) is fine. Do not clear your snowboard every hour!

2. If winds are creating uneven snow accumulations, take an average of several readings. Discount any extreme high or low readings in your averaging.

3. Report any amount of ice glaze, and report snow every couple inches or so as you are able. A storm total is important information at the end.

4. Report changes to precipitation type in "Remarks". (Ex. snow to rain, etc.)

If you don't remember your SKYWARN ID, please let me know. Thanks for assisting the NWS and your community!

Heather Kenyon
SKYWARN Program Leader
National Weather Service
Baltimore/Washington Weather Forecast Office
Sterling, Virginia

Skywarn Logo® "Skywarn® and the Skywarn® logo are registered trademarks of the National Oceanic and Atmospheric Administration, used with permission."

Link:

**A Look Inside National Weather Service,
Baltimore/Washington Office in Sterling, VA**
<http://www.srh.noaa.gov/CmsSrAdditions/smpanel/?sid=lwx&embed=1>

National Geographic Channel Ham Radio Guide Supports Before MARS Prequel

The National Geographic has produced [A Guide to Ham Radio](#) to support its recently released digital short, [Before MARS](#) — a prequel to its upcoming *MARS* series. The 33-minute prequel, which has a heavy Amateur Radio theme, provides the back story of two principal characters in the upcoming *MARS* global event series.

In the prequel, twin teenaged sisters Hana and Joon Seung are the new kids in town, after their single mother relocates. In due course, they come across old ham radio transceivers — one in an attic, the other in a thrift shop — and use them to communicate with each other and with an older, local ham.

Tuning about, Hana — whose character gets most of the attention — hears an astronaut on the International Space Station (ISS) on her radio and eventually makes contact, as Amateur Radio on the International Space Station ([ARRL](#)) program participants do. In a touch of realism, the female astronaut uses the NA1SS call sign.

The Amateur Radio researcher on the film was veteran electrical engineer Michael Gilmer, N2MG, who said the producers contacted him through his connection with the eHam.net website. Patrick J. Kiger authored the guide.

Gilmer concedes that the depictions of Amateur Radio in the production take a few liberties, although he believes that non-hams will likely overlook these and focus instead on the story arc of self-discovery and relationships within a theme of young women becoming interested in science and scientific careers.

The sisters' exposure to ham radio helps to inspire them to pursue careers in space exploration, become astronauts, and take part in a 2033 mission to Mars. *MARS* will combine documentary sequences about real-life efforts to travel to and colonize Mars.

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IARU Region 1 Monitoring Service Reports an Apparent Success

The International Amateur Radio Union Region 1 (IARU-R1) Monitoring System (IARUMS) reports that the Russian military apparently responded positively to a complaint from German telecommunications authorities to eliminate an intruding signal on 20 meters. The Russian Navy "RDL" signal from Crimea had been transmitting on 14.180 MHz, using F1B at 50 baud and 200 Hz shift for several days. IARUMS said the transmissions were heard for the last time on October 31. IARU Region 1 includes Europe and Africa.

German telecommunication authorities have, so far, had less success in quelling the intrusion of Radio Eritrea (Voice of the Broad Masses) on 7.185 MHz, which Ethiopia

is said to be jamming with broadband white noise. So far, Germany has filed two official complaints. IARUMS reports that 7.146.5 MHz and 7.175 MHz are still in use by Radio Eritrea. The jamming signal reported by the IARUMS is 20 kHz wide on each channel. The on-air conflict has been going on for years, and the interfering signals can be heard in North America after dark.

IARUMS Coordinator Wolf Hadel, DK2OM, said the Russian Over-the-Horizon radar (OTH) "Konteyner RLS" remains a problem on 40 and 20 meters, with lengthy transmissions, often with many spurious emissions. Hadel said the radar's transmissions interfered with participants in the Worked All Germany Contest in mid-October.

One apparently frustrated radio amateur in Germany "tried again to chase away Russian MIL FSK traffic on 80 and 40 meters by transmitting dashes on the mark or space frequency," the latest IARUMS newsletter reported. Hadel cautioned that such actions, even when aimed at intruding signals, are illegal. German telecommunications authorities were alerted. IARUMS also reported someone was transmitting empty Stanag 4285 mode signals on 7 MHz, hunting and QRMing German contesters on October 29. That signal was also believed to be originating in Germany. The Stanag 4285 modem is used for HF radio links between the NATO military bases.

IARUMS also reported an OTH radio on 10 meters, transmitting daily on 28.960 MHz covering about 50 kHz "with many spurious emissions."

Strong F2 propagation has also made Brazilian CBers audible on 10 meters, running AM between 28.000 and 28.325 MHz.

Used with permission, ARRL Bulletin 41 ARLB041, Nov. 15, 2016
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Popular TV Show *HamRadioNow* Adds "EmComm Extra"

The popular TV show/YouTube show/Podcast [HamRadioNow](#) is adding presentations on emergency and disaster response communications subjects. *HamRadioNow* is an online television show, webcast, podcast, and a [YouTube show](#) for and about Amateur Radio. The host is Gary Pearce, KN4AQ, a radio amateur and broadcaster for 50 years. The show is recorded, not live, and there's no set schedule. Viewers can watch the show at any time on the [Episode Pages](#) on its website, or on its YouTube Channel. Or listeners can download just the audio and listen on their phones with the [RSS feed](#). The format is primarily a talk show with a pair of hosts and a series of guests. Co-host is David Goldenberg, W0DYG, an Emergency Coordinator. (Pearce has an ARES/PIO background).

Goldenberg and Pearce have announced that they are planning to produce a show whenever an incident occurs that warrants discussion of lessons learned. "The goal is to provide an interesting, entertaining and useful look at emergency/disaster response activity in the context of Amateur Radio," said Pearce. "We do in-depth shows (usually an hour or more), and can go way beyond a cursory summary of an event or drill," he said. Spurring this new aspect of the show was Hurricane Matthew. "We did an off-the-cuff show as HamRadioNow Episode 270, then a more formal show (Episode 274) featuring Emergency

Coordinators from Florida and South Carolina in the storm's aftermath," Pearce said. There have been emergency/disaster response themed shows before, collected and published on an "[EmComm Playlist](#)" on the YouTube Channel. -- Gary Pearce, KN4AQ, Cary, North Carolina, [HamRadioNow](#)

Use with permission, The ARES E-Letter for Nov. 16, 2016
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Public Information Officer Training Course PR-101

The PIO course provides an overview of public relations. Experts in various aspects of public relations provide Public Information Officers with basic skills. PR-101 covers drafting a basic news release to website and video development/production. The materials can also be used as a handbook. Special sections cover emergency communications and the media - what Amateur Radio wants the world to know *and how to position it for best results*. ARES members can download a copy of the course [here](#). Upon completion, contact the Continuing Education Program at cep@arrl.org to request the URL and password you'll need to take the online final exam.

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Thoughts from Marty Pittinger, KB3MXM, ARRL MSD Section Manager

I hope you all turned your clocks BACK one hour and enjoyed an extra hour of sleep on the weekend of November 5-6. I know I did. November 30th marks the end of Hurricane season for the North Atlantic. And we made it through the season pretty well. But, that is no reason to let our guard down. We have had terrible storms after November 30th. December 1st marks the beginning of Meteorological Winter. Yes, I know that astronomically winter, or the Winter Solstice, does not begin until December 21 at 5:44 AM EST. But, again, I must remind you that we have seen some large snow storms in December. So, keep your 'go kits' ready and always keep an eye on the weather.

Our Rally Congress page is at, <https://arrl.rallycongress.net/>. The task is simple: Go to our Rally Congress page, enter your ZIP code, fill in your name and address, press enter, and e-mails will go directly to your Senators. Members may do this, even if they have already contacted their US Senators for support.

Check the ARRL Contest Calendar - there are plenty of super opportunities to have some RadioSport fun and continue to listen for the "Burn" as we finish up with the Leonids meteor shower, peaking on the Thursday morning, the 17th of November.

You might also want to do pre-winter antenna check/maintenance before winter gets here.

And, the ISS also visits our crisp morning skies over MDC Section for the next few weeks - check your favorite NASA tracking site for times.

"Get on the Air"

73 and remember that I am always ready to serve you.

Marty Pittinger, KB3MXM

KB3MXM@ARRL.net ARRL Maryland-DC Section Manager

Used with permission, MDC Section News, Nov. 17, 2016

The Radio Amateur Operator is...

CONSIDERATE

...He/[She] never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL

...He/[She] offers loyalty, encouragement and support to other amateurs, local clubs, the IARU Radio Society in his/[her] country, through which Amateur Radio in his/[her] country is represented nationally and internationally.

PROGRESSIVE

...He/[She] keeps his/[her] station up to date. It is well-built and efficient. His/[Her] operating practice is above reproach.

FRIENDLY

...He/[She] operates slowly and patiently when requested; offers friendly advice and counsel to beginners; kind assistance, cooperation and consideration for the interests of others. These are the marks of the amateur spirit.

BALANCED

...Radio is a hobby, never interfering with duties owed to family, job, school or community.

PATRIOTIC

...His/[Her] station and skills are always ready for service to country and community.

REPEATER FREQUENCIES

Davidsonville	Millersville	Glen Burnie	Annapolis
147.105+		147.075+	
223.880-	224.560-		
444.400+			442.300+

PL: 107.2 for all repeaters

The 147.105 and 147.075 repeaters are frequently linked. Please leave an extra second after the courtesy beep to allow the link to reset as well.

Visitors are welcome to all meetings and nets.

*Meetings are held in the Clubhouse at the
Davidsonville Family Recreation Center,
 Queen Anne Bridge and Wayson Roads off
 MD Route 214 near Davidsonville, MD.*

For en-route directions, make initial contact on the 147.105 repeater.

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Wednesday Night Talk Net -- All are welcome

8PM, On the AARC Repeater 147.105

Other Amateur Radio nets

Name	Frequency	Day	Time
Morning Commuter Net	147.105+Mhz PL 107.2	Weekdays	0600
AA County ARES Net	146.805- Mhz PL 107.2	Sunday	2000
Baltimore Traffic Net	146.670- Mhz	Daily	1830
Maryland Emergency Phone Net	3.820Mhz	Daily	1800
MD-DC-DE Traffic Net	3.557Mhz	Daily	1900 and 2200
Maryland Mobileers Net	146.805 PL107.2	Monday	1930
Maryland Slow Net	3.563 MHz	Daily	1930
REACT Net	442.300+Mhz PL107.2	1st Sunday	1930