

BARS Billerica Amateur Radio Society

JANUARY 2023

BARS physical meetings are on hiatus until further notice.

The decision to resume in-person club meetings will be made entirely by the Board based on the outlook of the COVID-19 medical emergency.

Meanwhile, virtual club meetings using Zoom have proved an enjoyable substitute. Please ignore the section, below which gives directions and schedule for in-person meetings. It is hoped that we can resume inperson meetings by the new year.

The Board has decided to resume in-person Saturday morning breakfasts at Stelio's Restaurant. However, virtual breakfast meetings using Zoom will continue to provide an enjoyable substitute for those who wish to avoid physical presence.

The VE License Exam Sessions, have gone back to in-person exams – see the VE section near the end of the newsletter for details.

The safety and well-being of our membership is important to us.

--BARS Management.

A Message from the President

By Doug Bruce, N1WRN

Greetings and Happy Holidays to All,

I hope everyone has had a wonderful Holiday Season. Hopefully there has been no sickness in your families over the Holiday Season, and that you are looking forward to a great 2023.

I would like to offer a few thoughts about the resurgence of the FT8 mode in ham radio recently. I am strongly on the side that FT8, in fact, is real ham radio and here's why. FT8 signals originate in the radio and go out over the antenna as Radio Frequency waves that are to be received on the other end by a hopefully distant station and then decoded and listed on a computer screen. This, to me, is as much ham radio as screaming into the mike on the SSB mode and having one wail of a sore throat after a contest weekend. The ARRL has had the good sense to allow contacts in FT8 to count towards their series of awards. I would never havebeen able to get my DXCC or WAS awards without the FT8 mode. It allows many hams to reach distant corners of the world with a very modest antenna setup that they would never have been able to reach using SSB phone. To me, this makes the hobby much more enjoyable for hams of all levels, and should only make the hobby more popular in the future.

I have only been a ham for three plus years and FT8 makes the playing field level for all, which can only be good for the hobby. I have made contacts on FT8 in Reunion Island, St Helena Island, South Africa, and the Fiji Islands to name a few!

At this time, I would like to mention that we will be having our Club Holiday Party on Wednesday, January 11, 2023 at 7:00 PM at the Great Wall Restaurant in Bedford, MA. I would like to invite everyone to join us that night for great Chinese food and equally great ham radio fellowship and camaraderie.

During the first net I ran as President, more than half of the check in's wanted to see more in person gatherings for the Club in 2023, and this is the first step towards that end. I will be sending out an email to the B.A.R.S. mailing list in the next few days with the details as well, so that everyone can put this on your calendar! The Board is still deciding on having a Yankee Swap like we did at our last in person party in January 2020, right before the pandemic hit. I am looking forward to seeing everyone at the Great Wall. This will serve as our Club Meeting for the Month of January, so hopefully everyone can join us!

In closing, I hope that everyone is enjoying the improving conditions on the HF bands, especially 10 meters lately. These

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conditions will only improve the next 3-5 years, so get out there and make our Club a GOTA (Get On The Air) Club for 2023!

73 Doug N1WRN

Holiday Party Announcement

We will be having our Club Holiday Party on Wednesday, January 11, 2023 at 7:00 PM at the Great Wall Restaurant, 309 Great Road, in Bedford, MA. I would like to invite everyone to join us that night for great Chinese food and equally great ham radio fellowship and camaraderie.

www.greatwallbedford.com

Next BARS Zoom Meeting: February 1 at 7:00 PM - Program: "CW Basics"

Presenter: Bruce Blain, K1BG

There will be no January meeting because of the BARS Holiday Party.

February 1, 2023 Club Meeting Guest Speaker

We will be having Bruce Blain, K1BG as our Guest Speaker for the February 1, 2023 Club Meeting. Bruce will give an informative talk about the basics of CW for us.

Bruce was first introduced to amateur radio by his neighbor Jim Payne, W1GPN, when he was 4 years old. He was first licensed as WN1KBG in 1968 (Canton, MA) and upgraded to WA1KBG. He earned a BSEE from Northeastern University in 1976, and became K1BG in 1977.

Bruce is past president of the Norwood Amateur Radio Club, and is a founding member and past Vice President of the Nashoba Valley Amateur Radio Club where he currently serves as a member of the board. He is also a member of the First Operators Club, CW Ops, the Yankee Clipper Contest Club, and the Radio Club of America. Bruce has been a member of the ARRL for over 50 years.

He has been "advising" CW Academy classes for the past 4 years, where he is currently a "youth academy" advisor. Attracting and mentoring young people and supporting local radio clubs are areas that Bruce is passionate about.



BARS will announce the link to join the Zoom meeting before the meeting, but it will be posted to the BARS email list and should not be shared outside our Club. Are you on the email list? If not, please send an email to bars-subscribe@w1hh.org and then simply reply to the robot response from the server and you will be subscribed.

Observing our Zoom meeting requires only a web browser and headphones/speakers. You do not need a webcam or microphone unless you want to speak or be seen.

Before our meeting date, please go to https://zoom.us/test and see if it will function for you. If you have problems, we can try to assist – feel free to ask questions on the BARS email list.

We are looking forward to "seeing" many of you on Wednesday 2/1 here at 1900.

Doug, N1WRN

From the Editor's Desk

By Marla Wallace, WA1GSF

My how time flies! By the time you read this, it will be almost 2023 (if we get the newsletter to press as planned). I hope everybody has had a merry holiday season and that your New Year's plans include Straight Key Night (see Tom Walsh's CW column, below).

Lots of news in this edition, including a date change for NEARFEST this spring. Be sure to see the announcement in the Strays column.

Have you paid your dues for 2023 yet? It's easy; you can even use snail-mail to do it.

With the cold weather comes higher heating bills. You can offset the cost of heat by using your station more, HI HI. (Especially if your gear includes boat anchors from the vacuum tube era.)

Feature Article: In Orbit

By Paul Graveline, K1YUB

Review of the 40th AMSAT Symposium Ocober 21-23, 2022 in Minneapolis MN

For a number of years I have been an Assistant Editor for the AMSAT Journal. If you are not familiar with AMSAT, it is the organization which designs, finances, builds and launches amateur radio satellites for communication into low earth orbit. It has been doing this for over a half century.

In addition to my editing duties I have become involved in developing a CubeSat Simulator. But more about that in an article next month.

During a virtual meeting in September the group leader Dr Alan Johnson, KU2Y, mentioned that he would not be able to attend because of professional obligations and asked if anyone on the team would be interested in attending the Minneapolis gathering and making a presentation about our continuing development of the CubeSat Simulator. No one else seems interested and when he mentioned that AMSAT would pick up the air, hotel and registration I jumped at the opportunity.

A free trip to Minneapolis discussing ham radio and making a presentation sounded like a good deal to me and it was.

The Symposium opened on Friday night with a gathering to meet the other attendees. Saturday morning saw the start of the main sessions of which there were about seven presentations.

Speaker presentations were focused on the varying aspects of an AMSAT's mission. My talk was to give an update on the progress of developing a Cube Sat Sim and ground station.

Here is a list of sessions of some of the topics and the Presenter

"Building a Portable Station for QO-100, the Geostationary Satellite Es'hail-2 Carrying Amateur Radio." by Randy Berger, WA0D;

"What's New, ARISS on ISS and mission to the moon with Lunar Gateway."

Nick Pugh, K5QXJ, led a discussion then filled us in on a University of Louisiana at Lafayette project he is working on with four private schools (Upper elementary grades) in the area;

"AMSAT Engineering Update" provided Jerry Buxton, NOJY

Some of the talks were very technical and if you would like the full list email me.

My own talk focused on a progress report presentation about the work of the CubeSatSim Educational Materials team. The team leader is Alan Johnston, Ph.D., KU2Y AMSAT V.P. Educational Relation and he provided a 20 minute video explaining the

operations of the CubeSat Simulator while I reported more on where we are and where we hope to go.

AMSAT is wrestling with one old challenge and one new one. For a number of years the government has prohibited US organizations from sharing technology with non-Americans. This has made it difficult to coordinate efforts with other AMSAT groups like AMSAT U.K, AMSAT Germany and AMSAT Japan. Some changes may be coming so the regulations will be less restrictive. Some of the technical info is already in the public domain anyways.

A new issue has arrived. For a quarter of a century AMSAT has launched satellites but now new regulations will force it to be able to achieve debris mitigation after a specific time ("useful life of the satellite" is apparently a pretty murky term).

The next generation of AMSAT projects referring to a GOLF (Greater Orbit Larger Footprint) satellite was discussed (Good thing they did not call it backgammon!). The idea seems to be a more elliptical orbit.

They are also looking at a project involving the moon. I bet that would be a popular grid square!

In the next edition of the BARS newsletter I will discuss just what is a Cube Sat Simulator is and who might find it useful.

CW (And More) Corner for January 2023

By Tom Walsh, K1TW

January provides a wonderful opportunity to become more involved in operating the CW Mode. If you are a CW beginner, January can help ease your discovery of CW because of two special events that I will describe shortly.

Why CW?

- CW is indispensable for the low power (QRP) community especially usefulfor very simple equipment field operations such as POTA and SOTA.
- CW is one of the oldest and one of the most thrilling modes in use today on the amateur radio bands.
- CW dominates the biggest annual contests such as CQ Worldwide DX in the fall and ARRL DX in the winter.
- CW is favored by DX'ers especially during DX'peditions to the rarest of countries.

Two extraordinary on-air events occur in January that make it very special for CW fun.

- ARRL SKN (Straight Key Night) on January 1;
- SKCC Straight Key Month 2023 from January 2-31.

During both events, codes speed are typically slow and great for CW beginners to improve their skill.

ARRL SKN - January 1 from 0000 UTC through 2359 UTC

Starting New Year's eve at 7 PM EST and for 24 hours say hello to many CW hams using a straight key. http://www.arrl.org/straight-key-night.

SKCC Straight Key Month 2023: January 2-31

Starting on January 2nd SKCC members around the world will be operating special event CW stations. This 17th Straight Key Month event coincides with the 17th anniversary of SKCC.

Official SKCC event stations in US jurisdictions will operate from 13 regional call areas using call signs K3Y/0 through K3Y/9, plus K3Y/KH6, K3Y/KL7 and K3Y/KP4.

Other SKCC members from various countries in six IARU continental regions will participate as special event stations using their own call signs and sending "CQ SKM".

All hams, whether an SKCC member or not, can try to complete the following goals:

- BASIC SWEEP. Contacts with K3Y/0 through K3Y/9 stations.
- FULL SWEEP. The above plus KH6, KL7 and KP4.
- GRAND SWEEP. The above plus the six IARU Continent regions: AF, AS, EU, NA, OC, and SA.

And here is what I think is the best part. Your progress is automatically recorded on the SKCC webpage in the Sweeps & Stats section.

Looking for SKCC stations

Last year, I found it very easy to contact the many K3Y special stations by looking for them on the Reverse Beacon Network and especially the club reverse beacon network at https://rbn.telegraphy.de/

On the club RBN site just select SKCC as the club and choose the band and CW speeds you want to use. You will see listings for K3Y and other SKCC members only.

More information on SKCC Month

Go to https://www.skccgroup.com/k3y/k3y.php for full details and rules.

You can find the daily K3Y operator schedules. But for the most fun use the Log Search to enter your callsign to see how many stations you have currently worked.

Have fun

Beginning CW op or expert, the January Straight Key events are great fun.

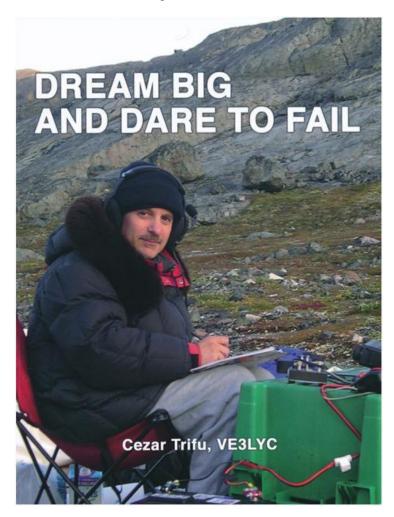
73, Tom K1TW k1tw@arrl.net

Book Review: "Dream Big and Dare to Fail"

By Scott Ginsburg K10A

Cezar Trifu, VE3LYC has been activating islands in the Islands On The Air (IOTA) program for over 14 years. He's been to several IOTAs from all over the world, many in inhospitable climates and dangerous locations, with the main purpose of providing a new IOTA for the many island chasers who crave that all time new island (ATNi). Cezar has compiled stories from each of his DXpeditions into a wonderful book that chronicles his travels to each location, with vivid descriptions of each adventure and the sometimes life threatening situations that will keep you on the edge of your seat.

The book contains 240 pages and it is filled with amazing photos from each island, with breathtaking landscape views and wildlife, and his various operating setups and portable antennas. There are hundreds of beautiful color photos in this book.



Travel with Cezar to East Penn Island in Nunavut Canada where he experienced a harrowing 120 km trip via snowmobile with his guide, and near the end needed to call for help on his HF radio after 36 hours without gas, power, water or fire while waiting for

a replacement guide to show up. Go with him to Pupuya Island off the coast of Chile where he endured large sea swells in a small boat getting to the island and spent time with thousands of Peruvian boobies, pelicans and penguins that generated a deafening noise level and interfered with his SSB operation. Experience his harrowing boat trip to Escondida Island off the coast of Argentina where a wave nearly tipped the boat over and he lost all of his equipment!

This book is guaranteed to keep you glued to Cezar's various adventures. You will feel like you were a part of every trip. If you enjoy reading about DXpeditions and learning more about what it's like to be on one, or you have any interest in the IOTA program, this book is for you. I guarantee you won't be able to put this book down!

You can order the book from https://ve3lyc-book.weebly.com/ for US\$40.

Strays

New Date for NEAR-FestXXXIII

FOR IMMEDIATE RELEASE

NEAR-FestXXXIII will be held on April 28th and 29th 2023 and not on its traditional date which always has been the first weekend in May every year since 2007. NEAR-Fest XXXIV scheduled for October 13th and 14th 2023 is NOT affected.

Last month the Deerfield Fair Association informed me that they booked two events, the NH Farm, Forest and Garden Show and the NH Arabian Horse Ass'n Show at the Fairgrounds for May 5th and 6th 2023 which is the weekend before Mothers Day. We were told we were welcome to hold the NEAR-Fest at the same time with the two other shows but there would be a "few small changes" to the parts of the Fairgrounds that we would be allowed to use.



Regretfully I decided the best course of action is to take a chance on the weather one week earlier and change the date. My team agrees with me. It's the best way to deal with it. We have full use of the grounds with no stinking and noisy horses and outsiders to bother us. I resisted it at first but changed my mind after discussing it with my colleagues who run the fester with me.

Is this a one-time thing or is it permanent? Depends on if the horse show comes back next spring. We could co-exist with the Farm Show but it is the horse show that causes us the problems because we use part of the grounds adjacent to the Horse Show ring and bleachers.

I still don't like it but I know it is the right decision. We apologize for any inconvenience that this may cause anyone.

Merry Christmas and Happy New Year my friends.

Mister Mike, W1RC < w1rc@near-fest.com

Becoming an ARRL member or is your membership up for renewal?

One of the benefits of being an ARRL Affiliated Club is a commission for recruiting new ARRL members and securing timely ARRL member renewals.

Each new ARRL member earns the club a \$15.00 commission. New members are defined as never having been a member or a returning member that has not been a member for two years. Each renewal earns the club a \$5.00 commission. There is no limit to the amount a club can earn in this program.

Multiyear memberships earn only one commission. Life, Family, International, Blind, and Student memberships are not eligible for a commission. The member will not be eligible to receive a gift or incentive if the club collects a commission on the membership.

Currently at least 82 BARS members are also ARRL members. If we all renewed through the club we could potentiality receive \$410 per year from the ARRL.

If you are interested in renewing your ARRL membership through the club fill out the following form <u>ARRL Affiliated Club Membership Application (pdf)</u>. Then forward it to <u>W1LUS@hotmail.com</u>

Is your Email address on the FCC site up to date? § 97.23 Mailing and email addresses.

Each license grant must show the grantee's correct name, mailing address, and email address. The email address must be an address where the grantee can receive electronic correspondence. Revocation of the station license or suspension of the operator license may result when correspondence from the FCC is returned as undeliverable because the grantee failed to provide the correct email address.

[85 FR 85533, Dec. 29, 2020]

I recommend that you log on to the your FCC Registration at https://apps.fcc.gov/coresWeb/updateRegistrationPre.do to make sure that your email address is up to date. Also in the future should you change your home address or your email address be sure to remember to update it on the FCC site.

[The \$35 FCC application fee applies to new, renewal, rule waiver, and modification applications that request a new vanity call sign. The fee will be per application.

Administrative updates, such as a change of name, mailing or email address, and modification applications to upgrade an amateur radio licensee's operator class or to request a sequentially issued call sign, are exempt from fees. – ed.]

-- de Bruce, W1LUS

Upgrading Your License? Here's a Resource

If you are thinking of upgrading your license using one of the Online exam sites. I recommend that you take some free practice exams on HamStudy.org. I recommend it because the software used to generate practice exams on HamStudy.org is the same software that is used to create exams for online tests. By doing that when you take an online upgrade exam the test question format will be familiar. With HamStudy.org practice tests you should use the keyboard to select the answer, A,B,C, or D and not your mouse as that is way online exams are run.

--de Bruce Anderson, W1LUS

Making ZOOM available to Elmers

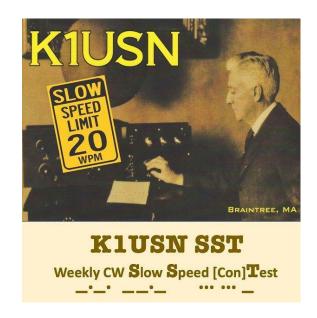
In this time of social distancing we have been using Zoom for our monthly club meetings. I have been thinking that Elmers could also be using Zoom to coach new hams instead of actually going to visit with them. Elmers could perhaps help with programming a new radio with the new ham sharing their computer screen and the Elmer helping to walk them thru the process. An Elmer could have Zoom on their cell phone and show a new ham how their shack was setup. Use your imagination and see how you might use this tool. If you would like to use Zoom for this, contact Bruce, W1LUS@hotmail.com, with a date and a time and a meeting will be setup for you. You may also contact Bruce if you would like training on using Zoom to Elmer someone.

--de Bruce Anderson, W1LUS

Friday and Sunday Night CW Slow Speed Contest

Every Friday and Sunday night, there is a weekly slow-speed CW contest run by the local K1USN guys. This is a good way to polish up your CW skills. See http://www.k1usn.com/sst.html for details. Currently, the schedule is:

Fridays 20:00-21:00 UTC (3-4pm EST) and Mondays 00:00-01:00 UTC (7-8pm EST Sunday).



-- de Tom Walsh, K1TW

Free Gear for New Hams

QRZ.com has instituted a "jumpstart" program. The new QRZ Jumpstart Program was developed by Gigaparts and QRZ.com and it is designed to give a free dual band HT radio to newly licensed Hams.

 $\frac{https://forums.qrz.com/index.php?threads/free-radio-for-new-hams-with-the-qrz-jumpstart-program.829070/$

--de Larry Krainson, W1AST

Secretary's Reports

from Marla Wallace, WA1GSF, Secretary

BARS General Meeting – December 7, 2022 at 7:00 PM

The Zoon meeting was convened at 7:05 by our new President, Doug Bruce, N1WRN.

Announcements:

- Holiday party 1/11 at Great Wall. No Jan. Mtg.
- FD 2023 Mike Nelson, KA1INE will do FD Chair again. We will attempt to get the same location.

We spent about thirty minutes doing introductions.

The program began at 7:40. Bob Brehm, AK6R, of Palomar Engineering gave a very informative talk on curing RFI. The program ended at 9:15.

There were 25 attendees.

We adjourned at 9:15.

BARS Board of Directors Meeting. – December 6, 2022 at 7:00 PM

Attendees were

Marla - WA1GSF

Don - W1DM

Bruce - W1LUS

Doug - N1WRN

Gary - W1GFF

Mark - KA1INE

Bill - WZ1L

Items on the adjenda:

- 1. What is BARS about? Survey membership.
- 2. Zoom + Live meetings in spring. Zoom for now.
- 3. Lighthouse operation?
- 4. FD Mark will run it.
- 5. Winter banquet Jan 11 / 14
- 6. Programs

Dec - Bob Brehm - RFI

Feb - Bruce Blaine - CW

Mar - Tom Aruba – logging programs

Apr – speaker TBD – haystack radio telescope

We adjourned at 8:00.

BARS Membership

Our current combined membership is 120. To date 29 members have paid for 2023 membership. 40 members from 2022 did not renew their membership and were dropped. Anyone with a question about their renewal status can email me at <u>W1LUS@hotmail.com</u> to get your current status.

from Bruce Anderson, W1LUS, Treasurer

2023 BARS Member Dues

A \$15 annual BARS membership now runs from January 1st and expires on December 31st. Any renewal or new membership made after September 1 will be valid until December 31st of the next year. Memberships allow us to

- Pay our bills;
- maintain our great web page;
- fund field day;
- and bring the membership a great variety of informative meetings and speakers.

Treasurers Report for January 2023

It is the start of a new year and your DUES are DUE. For 2023 dues will remain at \$15.

Dues can be paid several ways:

- Via bank to bank transfer with Zelle, Venmo, PayPal, etc. by sending \$15 to bars.dues@outlook.com.
- With credit card by using the Join/Renewal membership form on the W1HH.org website.
- With cash or check by mailing \$15 to Billerica ARS, 16 Regis Road, Tewksbury, MA 01876

In December, our expenses were Zoom \$15.93, PayPal \$3.48 Internet domain fee \$16.88. We had four renewals for an income of \$60.00. We now have \$698.50 in the Bank and \$1231.41 in our PayPal account for a total of \$1929.31.

Bruce Anderson W1LUS

BARS Needs You!!!

We are looking for a few good hams to act as net control on the regularly scheduled Wednesday night nets! All it takes is one night a month; if you are interested contact Doug, N1WRN.

Also, the club needs volunteers for light tasks of ~ 1 hour a month. Are you able to pitch in? Contact Tom Walsh, K1TW.

Wednesday Night Net

Join us on the Westford 146.955 Repeater for the weekly BARS net each Wednesday at 8:00 PM (except on the first Wednesday of the month which is club meeting night). Note: Thanks to the Westford Police Amateur Radio Team (PART) for their generous act of making their repeater available to us.

Repeater info: WB1GOF 146.955 MHz -600 kHz (normal) offset Encode CTCSS 74.4 Hz

Reminder: "kerchunking" the repeater is not only impolite, it's illegal. It constitutes an unidentified transmission. If you need to check that you're making the repeater, say something like "This is <your call> standing by on the frequency." Thanks for your courtesy.

Club Meetings

Because of the continuing COVID health crisis, in-person club meetings are on hiatus. Club meetings are being held "virtually" using Zoom. We hope to resume in-person meetings in the fall.\

Club meetings are held on the first Wednesday of the month.

VE Sessions

Our VE sessions are again being held in-person at the Chelmsford Bible Church. Pre-registration for our in-person exams is suggested. Contact w1lus@hotmail.com for registration information.

VE sessions are held every month on the 2nd Thursday at 7:00 PM at Chelmsford Bible Church, 128 Gorham St., Chelmsford MA. Park in back and enter by rear door. Chelmsford Bible Church Hall, 128 Gorham St, Rear Door, Chelmsford MA 01824-3220 (map)

December VE Session Report

On December 8 noone showed up at our exam session. Thanks to Gary W1GFF, Don W1DM and Bill W1ZL for their help in running the session.

Our next exam session will be on January 12 at 7:00 PM.

--de Bruce Anderson, W1LUS

Club Breakfast every Saturday

On Saturday mornings around 8:30AM, have a virtual Zoom breakfast session (link provided in email if you subscribe).

We also meet in-person weekly at 8:15AM for a casual, social breakfast at Stelio's restaurant.

Stelio's Family Restaurant, Billerica, MA

Future Meetings

The 2/1 meeting will be held via Zoom.

Subscribe to the BARS Mailing List

To subscribe to the BARS email list, send a blank email to <u>bars-subscribe@w1hh.org</u> and watch for an automated reply. Note that bars-subscribe is all one word.

Reply to that message from the list server and you are then subscribed.

To post to the list, address your email to bars@w1hh.org

December Get-on-the-Air Suggestions

from Scott Ginsburg, K10A

BARS is a "get-on-the-air" (GOTA) club. We encourage members to participate in the varied events on HF and VHF.

Don't forget about the FT5/W Crozet and 3Y0J Bouvet DXpeditions happening this month!

Here are the popular suggestions for this month:

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Date		Event
Jan 7		ARRL Kids Day
		http://www.arrl.org/kids-day
Jan 7-8		ARRL RTTY Roundup
		http://www.arrl.org/rtty-roundup
Jan 14-15		North American QSO Party, CW
		http://www.ncjweb.com/NAQP-Rules.pdf
Jan 21-23		North American QSO Party, SSB
		http://www.ncjweb.com/NAQP-Rules.pdf
Jan 21-23		ARRL January VHF Contest **
		http://www.arrl.org/january-vhf

** Top recommendations for this month

Recurring Events – visit webpage for exact times and dates:

K1USN Slow Speed Test - Every Friday 20:00 UTC / Every Monday 00:00 UTC http://www.k1usn.com/sst.html

Straight Key Century Club (SKCC) Weekend Sprintathon – the Saturday following the 6^{th} of every month at 1200 UTC http://www.skccgroup.com/operating_activities/weekend_sprintathon

Details on each contest above and more events can be found every week on the WA7BNM contest calendar at: <a href="https://www.contestcalendar.com/weeklycont.php?mode=custom/weeklycont

BARS Leadership Team

OFFICERS:

President: Doug Bruce, N1WRN Vice President: Mark Nelson, KA1INE Treasurer: Bruce Anderson, W1LUS Secretary: Marla Wallace, WA1GSF BoD: Don Melanson, W1DM BoD: Bill Poulin, WZ1L

Ex Officio: Gary Frascarelli, W1GFF

VOLUNTEERS:

Net Coordinator: Doug Bruce, N1WRN Newsletter Editor: Marla Wallace, WA1GSF New Member Outreach: John Fisher, KC1FTJ Field Day Chair: Mark Nelson, KA1INE

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