



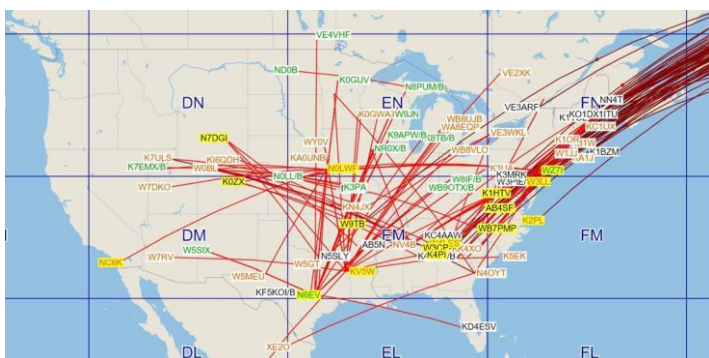
NEWS FOR AND BY BARS MEMBERS

From the President's Desk

from the President of BARS, Andy Wallace, KA1GTT

Here it is the summertime and we have been having great success at BARS. Our Field Day was a fantastic experience – more on that at a future meeting – Wednesday Net attendance is way up, we have exciting speakers in the queue, and the weather's getting great for operating outdoors at a park or working on antenna projects. But have YOU been keying the mic lately? Are you on sporadically, or in other words not regularly? You might want to consider taking advantage of Sporadic-E propagation!

Tom, K1TW, alerted me quite some time ago to <http://www.dxmaps.com>. On this site, you can see real time propagation maps for the entire world. It takes data from DX spotters and maps them to show band openings. Click on the link and select "North America" and "50 MHz" to see a real time map for 6m. Here is what it looks like right now:



ALL those red lines are flagging sporadic-E propagation. Note the huge number heading off toward Europe. Those are probably FT8 contacts.

Wikipedia's entry on Sporadic-E at https://en.wikipedia.org/wiki/Sporadic_E_propagation says "Sporadic E or Es is an unusual form of using

characteristics of the Earth's Ionosphere. Whereas most forms of skywave propagation use the normal and cyclic ionization properties of the ionosphere's F_region to refract (or "bend") radio signals back toward the Earth's surface, sporadic E propagation bounces signals off smaller "clouds" of unusually ionized atmospheric gas in the lower E_region (located at altitudes of approx. 90 to 160 km). This occasionally allows for long-distance communication at VHF frequencies not usually well-suited to such communication."

What users of DXMaps may not know is you can create a login at the site and put in settings to have it ALERT YOU of propagation warnings. <https://www.dxmaps.com/spots/warnings.php> will take you to the setup page. I have not changed mine much from defaults:

Language: English (warnings will be sent in this language)
 Interval between warnings: 6 hours (Each band and mode of propagation you will only receive one warning within this interval. For instance, if you want to receive only one warning per day you should select an interval of 24 hours. If you want to receive up to four warnings per day you should select an interval of 6 hours, etc...)
 Receive warnings for the following bands: 6m. 4m. 2m. 70cm.
 Only receive warnings triggered by non digital reports:
Tropo warnings
 Receive. Only when it happens within a range of: 300 Km. (see *f below)
Aurora warnings
 Receive. Only when it happens within a range of: 500 Km. (see *f below)
 Only when it's workable below 42 degrees of latitude (Use positive values for the Northern hemisphere and negative for the Southern)
Sporadic-E warnings
 Receive. Only when it happens within a range of: 1000 Km. (see *f below)
 Only when it's workable from my QTH (If you select this option you will only get warnings when the system establishes that the opening is, in theory, usable from your QTH, taking into account the location and intensity of the sporadic-E cloud)
Multihop sporadic-E warnings
 Receive. Only when it happens within a range of: 500 Km. (see *f below)
FAI warnings
 Receive. Only when it happens within a range of: 500 Km. (see *f below)
FX warnings
 Receive. Only when it happens within a range of: 2000 Km. (see *f below)
TEP warnings
 Receive. Only when it happens within a range of: 1000 Km. (see *f below)

This has allowed me to dash to the rig when I hear 6 is open, and I have caught a few openings. I am using a 40m doublet and the internal tuner in the radio so I am severely compromised on six. However, I have had fun working some distant stations in the Southeast and have heard Nova Scotia as well. This has happened mostly around the SSB calling frequency of 50.125 MHz.

And don't forget, there can be activity when sporadic-E is not happening. I have had some fun conversations with locals on 50.550 MHz in AM mode recently too.

If you are a 6M enthusiast we'd love to hear about your experiences. Please consider writing something for our newsletter. Paula Crock, KC1EDA would like contributions at mailto:cognosco@fastmail.fm for a future issue.

See you at the August 7th meeting!

Andy, KA1GTT

13 Colonies with QRP

from Kayla Creamer, W2IRY

I thought I'd take a few minutes to share my experience with attempting to make contacts during the 13 Colonies Event this year with a QRP rig and a directional loop antenna. My dad and I often participated in this event from his home station and always had a lot of fun. I took a break last year, but was going away on a camping trip in Maine this year and wanted to give it a go. With the help of BARS President Andy Wallace, KA1GTT, and some signal testing assistance from John Fisher, KC1FTJ, and Tom Walsh, K1TW, I was able to bring a QRP rig with me on the trip.

The rig consisted of a Ten-Tec Argonaut II that my dad, W1DEA, purchased on eBay a couple of years ago and a 20/40m Alpha directional loop antenna that he purchased with the intent of using while camping with this rig. Unfortunately, he discovered early on that the radio had a transmit issue, so it had to be sent off to Ten-Tec, where it took some time to be repaired and sent back. Sadly, my dad passed before having the opportunity to test and use the setup. Andy agreed to help me test everything to make sure that all was in working order.



I brought the antenna over to Andy's QTH where we hooked it up to his Elecraft K2. It took a few minutes to figure out the in's and out's of the antenna, as it didn't

come with much documentation. As it turns out, it's pretty simple. You rotate the antenna to whichever direction you're aiming to communicate with. It has a box with a tuning knob that you then rotate until you receive maximum noise on whichever frequency you're tuned to. Since there are no markings on the knob (you have to turn it several times depending on which band you're on), it sometimes takes a while to find maximum noise. Once we figured this out and got the antenna tuned up, we contacted KC1FTJ via cell phone to let him know what frequency we were on and called CQ a few times. John reported that we were audible, but way in the noise. Since the band was a little noisy and we were running 25 watts, we considered his ability to hear us at all a success.

A few weeks later, I stopped by Andy's QTH again with the Ten-Tec radio and we hooked that up to his antenna since we knew that was fully functioning. While I'm quite sure my dad has a power supply that would work with the Ten-Tec kicking around somewhere, I have yet to figure out exactly where he had certain things stored. Andy was able to take a power supply he had and convert the connectors to power pole connectors so I could use it with the existing Ten-Tec connection. From there, we discovered that my dad's Heil headset would not work with the rig, but his Astatic D-104 that he presumably picked up at NEAR-fest a few years ago worked perfectly. I'm not sure that he intended to actually use that mic with the Ten-Tec, but it worked, so we went with it. Once we got power and a working mic, we tuned around 40m a bit and found a station in Germany calling CQ. We were pleasantly surprised that at 25 watts and with a rig that we weren't 100% positive was fully functioning, we were able to make contact with a station in Germany! We were also able to talk with Tom Walsh, K1TW here in MA.

A big part of the reason that I wanted to get this rig up and running, aside from use at home and other camping trips, was because I had hoped to try and make some contacts during the 13 Colonies Special Event while I was camping in Maine. On Monday, I pulled everything out and set up at the picnic table outside of our camper. I should share that we had absolutely no cell coverage at this campground and had to drive 10 minutes up the road in order to get cell coverage again. Fortunately, the campground did have relatively decent WIFI. Prior to leaving, I downloaded a free app to my phone called iDx, which came in very handy. I took a look at that and saw that someone had spotted K2A in NY. I quickly tuned over to the frequency the station had been spotted on and made the appropriate adjustments to the direction and tuning of my antenna. Much to my surprise, I made contact within a few tries.

If I had made contact with just one station during the event, I would have been happy, but I wanted to try and get as many stations as I could with the expectation that it was going to be very unlikely that I'd get a clean sweep this year. I pulled up my app again and saw that someone had spotted K2C in RI on 40m. It took me about 20 minutes, but I eventually made it through the pileup and made contact. I managed to also get K2M, the PA station.

I made several more attempts to make contact with other stations over the next few days with no success. I could hear WM3PEN, the bonus station in PA, loud and clear. The person operating that station at the time happened to be camping as well. I could also hear K2K in NH, K2B in VA, K2E in DE, K2F in MD, K2G in GA, K2J in NC, and K2L in SC loud and clear, but couldn't break through the pileups. Amazingly, I could hear GB13COL in Great Britain pretty clearly at times, but my understanding is that a large portion of people stateside who were running way more power than I was couldn't even make contact with them. Even at my dad's home station in past years, they've been a tough station to reach.



I'd share pictures of me operating but unfortunately, my mom took them on her phone, which ended up at the bottom of the Androscoggin River a few days later. That's a long story for another time. For now, I'll leave you with a few shots that I took on my phone of the setup at the campsite. We were in a site overlooking the pond, so I can't really complain since I had a great view and nice weather the whole time. Now that I know the rig functions, I look forward to bringing it on other camping trips. I know my dad would have had a blast with this setup.

Kayla, W2IRY

This newsletter is edited by Paula Crock, KC1EDA. If you have comments or contributions, please contact her at cognosco@fastmail.fm

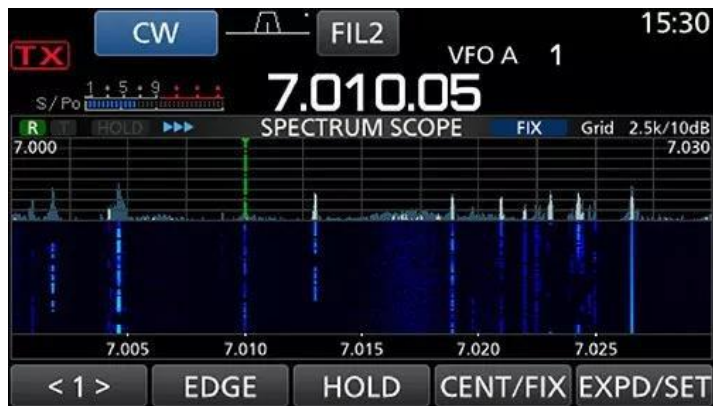
August Meeting Speaker

from Andy Wallace, KA1GTT

Next BARS meeting – 7PM, August 7, 2019: Bruce Blain, K1BG and CW Academy – an easy way to learn CW (Morse Code)!

I am very pleased to announce that Bruce is returning to speak again at BARS, this time about CW Academy. Many BARS members use and enjoy CW. If you have never tried it, please attend this session and see what is possible for you!

Did I just lose half my audience? I dearly hope not. If you have only used voice your whole ham experience, you are missing out. I promise you will find this talk interesting. Please come and hear why people love operating using Morse code, and the kinds of things you can do once you know it.



Here are just some of the benefits of using Morse code to communicate on HF:

- More band! Adding activity below the SSB portions of the bands gains you over TWO MEGAHERTZ of places to play – 80% more!
- More DX! Many exotic countries can be found on the air in the CW portions.
- Less congestion! More CW signals can fit per kHz than SSB.
- Easier QRP! A CW signal cuts through with low power operations compared to SSB. Rigs are simpler and CHEAPER, too!
- It's a secret code! Learning CW puts you in a fun group of people doing something DIFFERENT to communicate.
- You CAN do it! CW is memorization of sounds, not dots and dashes. 26 letters, 10 numbers, and a handful of special characters. This is a finite workload. Patience and practice will get you there. You can even use keyer memories to get in on a contest while you still have your "training wheels" on.

- You'll meet new folks! Some hams stick around in the CW portions and never venture into SSB land.
- Your rig already does CW! You might need to get a key, but that's it.
- You can get on CW before learning it! There are apps and computer programs to receive and even send CW by typing.
- It is FUN!

And Tom, K1TW would like to remind you that there are many CW activities each week. Here is a selection:

- Clubs that promote CW operations and contests such as "CWOPS; SOTA; SKCC; County Hunters" keeping 14.050-14.062 busy all day long.
- "SOTA (Summits on the air)" see <http://www.sotawatch.org/> for spots
- Checking CW County Hunters net on 14056.5 for spots at <http://ch.w6rk.com/>
- Checking out this web site <https://rbn.telegraphy.de/> It uses reverse beacon network to spot all the activity associated with CW clubs.
- Parks on the Air CW spots found at <https://pota.us/#/>

Bruce and CW Academy:

CWA has become a very popular training program for hams wanting to learn and USE CW. Bruce is a "Level 1 Advisor" will talk about CWA's history, methods, and programs. CW academy is a web-based CW learning system where classrooms are held in Skype chat sessions and instructors evaluate students' progress. There are practice sessions and assignments. Resources and classes handle all skill levels, even those hams who do not know Morse code characters yet.

I am sure this will be a popular presentation and I hope we have a great turnout at this session. See you there.

Andy, KA1GTT

Get-on-the-air Events

Events can be found every week on the WA7BNM contest calendar

at <https://www.contestcalendar.com/weeklycont.php?mode=custom&week=current>

2019 BARS Member Dues

The BARS Board has changed the policy on member dues. A \$15 annual BARS membership now runs from January 1 and expires on December 31st. Any renewal or new membership made after September 1 will be valid until December 31 of the next year. Memberships not renewed by January 1st have lapsed. Please renew now for 2019 if you have yet to do so.

Treasurers Report

In June we had one renewal \$15 and \$25 from sales at the Spring NEAR-Fest. Field Day expenses to date were \$281.86 and Field Day food collections were \$188. We now have \$483.38 in our PayPal account, \$244.45 in the local Bank and \$10.46 in Cash for a total of \$738.32.

Bruce Anderson W1LUS, Treasurer

VE Report

At the June 13 BARS VE exam session seven people showed up for testing. There was one new Technician with call sign KC1LPE. Be sure to say hello if you hear him on the air. Five upgraded to General KB1ZIY, KC1KOV, KC1LLS, N1LBO and W1HJY, and KC1LNH upgraded to Extra.

The VE's at the session were Gary W1GFF, Antonio KB1KDS, Peter N1ALO and myself W1LUS.

At the July 11 BARS VE exam session Five people showed up and all five left as new Technicians. Their call signs are KC1IRW, KC1LRX, KC1LRY, KC1LRZ and KC1LSB. Again, be sure to say hello if you hear them on the air.

The VE's for the July session were Gary W1GFF, Guy AC1BJ, Neice KA1ULN, Peter N1ALO and W1LUS. The next VE session will be on August 8.

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 John KC1FTJ harmyman@aol.com. Also, the club needs volunteers for light tasks of ~1 hour a month. Are you able to pitch in? Contact Andy, KA1GTT

Wednesday Night Net

Join us on the Billerica Repeater for the weekly BARS net (except on 1st Wednesday of Month which is club meeting night)

Repeater info:

147.12 MHz
+600 kHz (normal) offset
Encode CTCSS 103.5 Hz

Club Meetings

First Wednesday of the month at 7:00PM 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 \(map\)](#)

VE Sessions

VE sessions are held the 2nd Thursday of the month 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 \(map\)](#)

Club Breakfast every Saturday

On Saturday mornings around 8:15AM, we also meet weekly for a casual, social breakfast at Stelio's restaurant.
[Stelio's Family Restaurant, Billerica, MA \(map\)](#)

BARS Leadership Team

President: Andy Wallace, KA1GTT
Vice President: Kayla Creamer, W2IRY
Treasurer: Bruce Anderson, W1LUS
Secretary: Paula Crock, KC1EDA
BoD: Mike Raisbeck, K1TWF
BoD: Henry Christle, WA1VAB
Ex Officio: Tom Walsh, K1TW
Net Manager: John Fisher KC1FTJ
VE Manager: Bruce Anderson W1LUS
VE Manager: Gary Frascarelli W1GFF
Website: Kayla Creamer W2IRY