

# Next meeting is January 19<sup>th</sup>, 2021 at 7:00pm. Informal meet and greet starts at 6:30pm. Talk-in is on 147.180+

### Membership

The website has been updated with our current roster of paid members. If there are corrections, please drop an email to maranews@w1mv.org

#### **Presidents Notes**

MARA Facebook page: Our Massasoit Amateur Radio Association Facebook page with club events, meetings, photos, etc. are occasionally updated so that it may be another resource for us on which to spark interest in our club, amateur radio and keep members informed of what we are doing outside of our club meetings and in our community. If you go to the "about" tab on our page you can find our <u>http://www.w1mv.org/</u> web page for our present and past newsletters and other club information. Please send Phil N1XTB <u>n1xtb@powersrvcs.com</u> or Wendy KC1GTR kc1gtr.mara.@gmail.com any articles or photos you would like to see in our MARA newsletter, W1MV-MARA Website and Facebook page. Jeff N1ZZN has created a link to twitter to help get the word out even more!

#### Secretary's Notes - MARA Meeting 10/20/2020 - Wendy White-KC1GTR

**Open:** WA1BEE - Allen Hiltz called the meeting to order at 7:00pm

**Attendance:** 4 were present including 2 elected officers.

President - WA1BEE - Allen HiltzVice President - N1ZZN - Jeff LehmannSecretary - KC1GTR - Wendy WhiteTreasurer - N1XTB - Phil McNamara

WAITOM – Thomas Luckman Jr. KC1MSL – Ray Ball



Secretary Notes - KC1GTR - Wendy - Correct Bill to Phil Temple and add ERM ARRL to the website and newsletter. WA1TOM made motion to accept the secretary notes. KC1MSL seconded - Ray. All in favor, 0 opposed.

**Treasurer Report** – WA1BEE – Allen read overview for N1XTB – Phil. Phil will work on getting the batteries that were found. WA1TOM made motion to accept the Treasurer report. KC1MSL seconded - Ray. All in favor, 0 opposed.

**Repeater Report** – WA1BEE – Allen read overview for N1ZZN – Jeff. Jeff said we are having a problem with the Antenna, directly related to the APR Packets are dropping. He is checking into this. Motion to accept Repeater report was made by WA1TOM made motion to accept the Repeater report. KC1MSL seconded - Ray. All in favor, 0 opposed.

New member applications – KC1MSL – Ray Ball sponsored by WA1BEE – Allen Hiltz. WA1TOM made motion to accept the new applicant. KC1GTR - Wendy seconded the motion. All in favor, 0 opposed. Application and \$25.00 will be sent to Phil.

New Business – WA1BEE – Allen brought up Tuesday's Net, IRLP was being used during the last MARA club meeting. Two repeaters were being tied up at the same time, he could hear both talking at the same time. KC1GTR - Wendy heard the same thing on her radio. If repeaters are being keyed simultaneously it will block out the repeaters and people trying to get onto the nets cannot. WA1BEE will address this issue so it will not repeat. WA1TOM made motion to accept the Treasurer report. KC1MSL seconded - Ray. All in favor, 0 opposed.

WA1BEE – Allen closed the meeting at 7:50pm

### HAM RADIO LOCAL AREA NETS

Any additions or corrections contact John – N1UMJ at: <u>N1UMJ@arrl.net.</u>

All Frequencies are in MHz and 6 Meters (50.0 MHz and up.) are FM Mode unless otherwise noted. Sunday:

8:30 AM WA1NPO - WARPSN Net, Whitman ARC Rptr, 147.225 +, PL 67.0 8:45 AM New England phone net, 3.945 +/--- LSB

#### Dailv:

- 7:00 PM NE Cracker Barrel Net, Matt W1AEM, NCO, 3.921.00 MHz LSB Pilgrim Amateur Wireless Assoc. 10 Meter Net
- 7:00 PM 28.375.0 USB Cape & Island Traffic Net, Mon. Tue. Thur.
- 7:00 PM Plymouth N1ZIZ Rptr, 146.685 PL 131.8
- 7:30 PM Falmouth N1YHS Rptr, 147.375 + PL 110.9 Genesis ARC CW Training Net
- 8:00 PM Eastern MA 2 Mtr Traffic Net, Boston W1BOS Rptr, 145.230 PL 88.5



8:00 PM Norfolk County Radio Association Net, , Walpole Rptr, 146.895 – PL 123.0 **Monday:** 

- 6:00 AM Cape and Islands Weather Net, M-S, Dennis K1PBO Rptr, 146.955 PL 88.5
- 8:00 PM Fairhaven Weather Net, SEMARA Rptr, 147.000 + PL 67.0
- 8:00 PM Norfolk County Emergency Preparedness Net, Walpole Rptr, 146.895 PL 123.0
- 8:30 PM New England DMR net, DMR---MARC repeaters talk group 3181 New England Falmouth ARA Net, Falmouth K1RK Rptr, 146.655 – PL 88.5
- 9:00 PM Boston ARC Rag Chew Net, Boston W1BOS Rptr, 145.230 PL 88.5

#### Tuesday:

- 7:30 PM Plymouth N1ZIZ Rptr, 146.685 PL 131.8
- 8:00 PM Fairhaven Weather Net, SEMARA Rptr, 147.000 + PL 67.0
- 8:00 PM Massasoit ARA Net, , Bridgewater W1MV Rptr, 147.180 + PL 67.0 (Except 3rd Tue!) Genesis ARC 2 Mtr Rag---Chew Net,
- 8:00 PM Norwood Amateur Radio Club Net, Norwood Rptr, 147.210 + PL 100.0 220 MHz Day! Try to find a 220 Repeater near you and give a call out!

#### Wednesday:

- 7:00 PM Blackstone Valley ARC, 2 Mtr Simplex Net, 146.565
- 8:00 PM Cape and Islands ARES Net, Dennis K1PBO Rptr, 146.955 PL 88.5
- 8:00 PM Fairhaven Weather Net, SEMARA Rptr, 147.000 + PL 67.0
- 8:00 PM Whitman ARC 10 Meter Rag---Chew Net, 28.333.0 USB Except 1st Wed!
- 9:00 PM Waltham Wranglers Swap Net., Waltham W1MHL Rptr , 146.64 PL 136.5

#### Thursday:

- 7:00 PM Genesis ARC CW Training Net, Plymouth N1ZIZ Rptr, 146.685 PL 131.8 10 Mtr
- 8:00 PM Fairhaven Weather Net, SEMARA Rptr, 147.000 + PL 67.0
- 8:00 PM General Class Rag---Chew Net, 29.470.0 FM
- 8:30 PM Sturdy Mem. Hosp. ARC ARES Practice Net, K1SMH Rptr, 147.195 + PL 127.3 900 MHz Friday:
- 8:00 PM Fairhaven Weather Net, SEMARA Rptr, 147.000 + PL 67.0

#### Saturday:

8:00 PM South Shore Skywarn Net, Bridgewater W1MV Rptr, 147.180 + PL 67.0

\*VKEMCOMM\* Echolink Conference node: 270177/IRLP 9508 (due to \*WX---TALK\* Echolink conference node: 7203/IRLP 9219 outage) Refer to: http://www.voipwx.net/

Massasoit Amateur Radio Association Executive Board

President - Allen Hiltz - WA1BEE Vice President Jeff Lehmann - N1ZZN Secretary Wendy White - KC1GTR Treasurer: Phil McNamara N1XTB





Call Sign Trustee: Phil McNamara N1XTB

| 2M Repeater          | 147.180+ (Tone 67.0)                 |
|----------------------|--------------------------------------|
| -                    | ,                                    |
| 440 Repeater         | 444.550+ (Tone 88.5)                 |
| APRS Node            | Node 144.39 W1MV-1                   |
| Packet BBS           | 145.09 N1XTB-4                       |
| Packet Node Brockton | 145.09 W1JOE-7 (BROCK)               |
| MARA Web page        | http://www.w1mv.org/                 |
| Facebook             | https://www.facebook.com/w1mvmara/   |
| Newsletter Editor    | <u>kc1gtr.mara@gmail.com</u>         |
| ARC Web Page         | http://www.wa1npo.org                |
| Qsl via              | <u>www.eqsl.cc</u>                   |
| Skywarn              | http://wx1box.org_and                |
|                      | www.powersrvcs.org/w1gmf/skywarn.htm |
| Mailing Address P.O. | Box 428 Bridgewater, MA 02324        |

**Monthly meetings** are held the 3<sup>rd</sup> Tuesday of each month, for time being, on the Tuesday Night net at 8:00pm on 147.180+

Our **Meetings-On-The-Air** are held all other Tuesday evenings at 8PM on 147.180+ and includes the Westlink News Report with the latest news about happenings in the world of Amateur Radio.

The **South Shore Skywarn Net** is held every Saturday evening at 8PM local time on 147.180+ and is open to all hams.

**VE Exams** are held the 2<sup>nd</sup> Saturday of every month, in Braintree contact Steve Cohen, W1OD via email w1od@arrl.net. Walk-ins are no longer permitted. We will be hosting VE exams at 8:45 at the Watson building. If you know of anyone planning to take an exam, please have them drop a note to Steve to confirm a reservation.

http://www.hamradiolicenseexam.com/index.html

Courtesy of ARRL

What's New?

FCC to Require Email Addresses on Applications 12/02/2020 (Starting in 2021)



Amateur radio licensees and candidates will have to provide the FCC with an email address on applications, effective sometime in mid-2021. If no email address is included, the FCC may dismiss the application as defective.

The FCC is fully transitioning to electronic correspondence and will no longer print or provide wireless licensees with hard-copy authorizations or registrations by mail.

A *Report and Order* (**R&O**) on "Completing the Transition to Electronic Filing, Licenses and Authorizations, and Correspondence in the Wireless Radio Services" in WT Docket 19-212 was adopted on September 16. The new rules will go into effect 6 months after publication in the *Federal Register*, which hasn't happened yet, but the FCC is already strongly encouraging applicants to provide an email address. When an email address is provided, licensees will receive an official electronic copy of their licensees when the application is granted.

Under Section 97.21 of the new rules, a person holding a valid amateur station license "must apply to the FCC for a modification of the license grant as necessary to show the correct mailing and email address, licensee name, club name, license trustee name, or license custodian name." For a club or military recreation station license, the application must be presented in document form to a club station call sign administrator who must submit the information to the FCC in an electronic batch file.

Under new Section 97.23, each license will have to 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," the amended rule will state. "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."

Radio Frequency Interference - things you may or may not know.

### Introduction

As our lives become filled with technology, the likelihood of electronic interference increases. Every lamp dimmer, garage door opener or other new technical "toy" contributes to the electrical noise around us. Many of these devices also "listen" to that growing noise and may react unpredictably to their electronic neighbors, including Amateur Radio transmitters.



Sooner or later, nearly every active Amateur Radio operator will have a problem with interference. This could involve interference to a neighbor's equipment, or, more likely, some form of interference to Amateur Radio from the noisy devices that can sometimes even be found in our own homes. The good news is that most cases of interference can be cured! The proper use of "diplomacy" skills to communicate with a neighbor and standard technical cure will usually solve the problem.

## Asking "Where" Before "What"

A message from ARRL Laboratory RFI Engineer, Paul Cianciolo, W1VLF:

In the course of investigating interference (RFI) issues, two questions are frequently asked.

The first: "What does this RFI sound like to you?" And sometimes a video or screen capture is included when an amateur reaches out about their interference problem. The question then becomes, "What does this look like to you?"

Aside from a few very distinctive types of RFI, it is difficult to identify what specific device is causing interference based on the sound it produces, or the visual signature in a waterfall.

The most useful question to ask first regarding interference is not "What is producing this RFI?" but "Where is this interference coming from?" Once the source of RFI is determined to be coming from a specific location, the process of identifying the actual device causing issues is much easier.

For example, at my own station, there are no fewer than 20 individual devices that can potentially cause RFI (and some do!). This is just one room in one house, in one of many houses in the neighborhood.



In my case, figuring out where interference is coming from is easy: it's my own home. It was not difficult for me to locate individual sources of RFI and deal with them on case by case basis as I worked on reducing interference around my station.

Another example: Let's say I use a very popular imported LED bulb in my home and it's producing RFI. Let's call it part of the DimBulb brand, model no. 123A. I purchased the bulb online. There is no question that this bulb is the source of my noise, and I can deal with it.

Although this is an imaginary brand and model number, the potential for one of those bulbs to be in service in your neighborhood, with many homes nearby, is highly likely. Even knowing without a doubt, the source of RFI is that very same bulb, would you ask all your neighbors if they have one of those bulbs? Would they even know offhand if they did? Or would you locate where the interference is coming from and then determine what is causing it?

Rather than trying to figure out what you think is causing interference and chasing after that particular device, you're better off tracking down where RFI is coming from and going from there. Try to ask yourself "where" before asking "what."

Almost half the RFI cases of unknown origin I deal with are found to be in the amateur's own home. Never underestimate the power of simply taking a trip to your main breaker and listening for noise on batteries. It's the best first step when determining "Where is this RFI coming from?" before figuring out "What is causing this RFI?"

### **RFI: ARRL Laboratory On Television--WATCH!**

ARRL's Ed Hare, W1RFI and Mike Gruber, W1MG talk about **RFI problems on a Common Point**, a Cable Access TV show hosted by Dan Thomas. Mr. Thomas serves on the Board of Directors of the <u>Vintage Radio and</u> <u>Communications Museum of Connecticut</u> (VRCMCT). Associate Producer: ARRL Assistant Laboratory Manager, Bob Allison, WB1GCM

Links to all other Common Point Shows are available at Simsbury Community Television. Common Point is a show for and about communications.

Links to other videos include:

Identifying & Locating Power Line Noise, Produced by the ARRL Laboratory, written and directed by Bob Allison, WB1GCM and narrated by Jerry Ramie, KI6LGY

**<u>Power Line RFI Investigation in Pleasant Hill, California</u>**, Video of an RFI Investigation in Pleasant Hill, California.

About Amateur Radio. Featuring ARRL Laboratory's Bob Allison, WB1GCM. From Simsbury Community Television's, Common Point, Produced by Dan Thomas, NC1J



### Articles

<u>What Is It?</u> While this question may seem intuitive, it may be the wrong one to ask if you have an RFI problem. By Ed Hare, W1RFI.

<u>Electronic Noise Is Drowning Out the Internet of Things.</u> Our increasingly connected world needs better protection against RF noise pollution, By Mark A. McHenry, Dennis Roberson & Robert J. Matheson. *IEEE Spectrum*, August 18, 2015

<u>Hunting Down RF Noises</u>. Find noise sources both outside and inside your home with a systematic approach, by Michael Foerster, W0IH. *QST* February 2015, p 45.

Locating RF Interference at HF. A proven and practical approach to dealing with RFI from grow lights and more, by Tom Thompson, WOIVJ. *QST* November 2014, p 33.

A Quick Look at Radio Frequency Interference, by Joel R. Hallas, W1ZR. QST May 2009, p 61.

Interference Primer - Parts 1 and 2 Derived from *QST* Lab Notes columns. Contains general information on Radio Frequency Interference.

### Web Links

- <u>A Ham's Guide To RFI, Ferrites, Baluns, And Audio Interfacing</u> by Jim Brown, K9YC. (1st Link)
- <u>A Ham's Guide To RFI, Ferrites, Baluns, And Audio Interfacing</u> by Jim Brown, K9YC. (2nd Link)
- <u>In Compliance Magazine</u> provides a tutorial on ferrites <u>Using Ferrites to Suppress EMI</u>.
- <u>Audio Systems Group, Inc. Publications</u> Provides a number of articles and application notes related to sound systems. Some of these articles pertain to interference to audio systems from both power and RF sources.
- <u>The EMI RFI Page</u>, by Mark Demeuleneere, ON4WW. In this page, Mark provides some interesting background on some of his more memorable RFI experiences in Belgium. As Mark puts it, "It took quite some time just to document these RFI cases. Imagine how much more time was invested in finding and solving them!"
- <u>The EMI RFI Page</u>, by Chris Gare, G3WOS.
- Variable Speed DC Motor Washing Machine RFI Fix, by Gene Preston, K5GP.
- Grow Light Electronic Ballast RF Interference, by WOQE.
- <u>eEngineer</u> provides an <u>EMI/EMC Glossary</u> as well as several other RFI pages pertaining to RFI.
- Lutron provides <u>Applications Notes</u>
- <u>V-Soft Communications® LLC</u> Provides AM FM Zip Code Based Signal Strengths: Field strength vs. Zip Code



#### **Information for Electric Utilities**

- <u>Center for Devices and Radiological Health</u> Addressing EMI in medical devices
- <u>Welcome to the RSGB EMC Web Pages</u> E-book-"The RSGB Guide to EMC" (Electromagnetic Compatibility)
- <u>EMC Standards</u> Contains a list that details some of the major electromagnetic compatibility (EMC) standards in place worldwide.
- <u>Radioing eEngineer</u> has a page on Radio Frequency Interference (<u>RFI</u>)
- The United Kingdom's <u>Radiocommunications Agency</u> has a <u>Radiocommunications Agency EMC</u> <u>Awareness</u> page with EMC/RFI information for the non-technical person and the general public.

### Naval Postgraduate School RFI Handbooks

Special thanks to George F. Munsch, W5VPQ for providing these documents. They contain useful and comprehnsive information for both RFI locating and noise mitigation. *By Wilbur R. Vincent, W6PUX, George F. Munsch, W5VPQ, Richard W. Adler, K6RWA, and Andrew A. Parker, WV1B.* 

- <u>Power-Line Noise Mitigation Handbook for Naval and Other Receiving Sites</u> *This is a comprehensive manual that describes how to understand, locate and correct power line noise. A must for every utility or RFI troubleshooter.*
- <u>The Mitigation of Radio Noise And Interference From On-Site Sources at Radio Receiving Sites</u> *Provides information when sources are located within the boundaries of a site. In most cases, these sources are electrical or electronic consumer devices.*