



February 2018

MONTACHUSETT AMATEUR RADIO ASSOCIATION

Vol 59, No 6

Next Meeting

Wednesday, February 14, 7:30 pm, Lunenburg Library. Program: Paul KD1YH discusses IRLP.

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Contributors To This Issue: AB1GF, K1JHC, KD1SM, KD1YH, NZ1D, W1HFN

The President's Corner

de Tom, AB1GF

Greetings everyone. Thankfully, winter is getting closer to its end and it's time to repair those antennas. I will be working on mine soon., the driven element slipped in the wind. While I am at it I plan on adding a fold-over section to make things easier. I have a stockpile of aluminum and Rohn 25, if anyone needs something let me know.

January Meeting Report

de Barry Fox W1HFN, MARA Secretary

The January meeting was cancelled due to club officers' scheduling conflicts.

State of the Repeaters

de Tom AB1GF, Paul KD1YH

The 2 meter repeater is currently experiencing some undetermined interference; strange, random "pop, snap, and crackle" noises that are being investigated by the breakfast...er...technical committee. Page 1

de Tom K1JHC

Three members made it for lunch at our February gathering, Charlie KT1I, Barry W1HFN, and Tom K1JHC. Remember, young or old, all are welcome to join us. Come out and enjoy a good lunch and some friendly "eyeball" chatter.

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Don't worry, simple antennas do work:

Introducing the "MacGyver" Q'nD antenna

de Bill, NZ1D

In the continuing vein of *I'M NOT A FLY FISHERMAN: or you don't need to spend your kids' inheritance on antennas*, I present my latest project: the "MacGyver" Q'nD (quick & dirty) HF antenna. As I wrote earlier, about my accidental OCF dipole, there are fishing purists and there are antenna purists. This design is not for antenna purists. In *Aerials II*, antenna guru Kurt N. Sterba, describing a dipole antenna made from two shopping carts and a Budwig connector, wrote, "...*if you can get power into metal, it will radiate. It will then spray off into the ionosphere.*" This antenna will spray off into the ionosphere.

The MacGyver Q'nD antenna is (gasp!) non-resonant (yeah, I know, every antenna is resonant "somewhere"). Discussing antennas of non-resonant length, John Haerle, WB5IIR(SK) in *The Easy Way* said, *Quit worrying about them....You just need a resonant antenna SYSTEM, consisting of antenna, feedline and a matching device.*" In other words, you can make contacts with less than a "fly fisherman's" antenna if you can resonate the antenna system as a whole.

This antenna is made from a scrap piece of 22 awg wire taken from a discarded string of Xmas lights. It is configured as a 22-ft long inverted "L", a roughly 12-ft vertical section and a 10-ft flat top. Two 11-ft counterpoise wires strung on the ground provide the "image" antenna (the other half of the "dipole"). The feedline is 50 ft of RG-58 with the far end coiled into a 6-turn choke balun 4-1/4 in. dia. x 1-1/2 in. long. A short pigtail with bullet connectors allows quick disconnect on lawn service day.

The vertical portion is supported by slightly over 12-1/2 feet of assorted sections of PVC and CPVC pipe and various adapters, all scrounged from my junk box. (Rickety looking but it has so far survived gusts up to 30 knts.) The mount consists of an old discarded three-legged swivel chair base ballasted with four concrete sprinkler "donuts".

Ah, but does it work? Initial tests on 20 meters using an MFJ-941C antenna tuner showed an SWR of 1:1. Recent band conditions on 20 have been less than stellar but with 30 watts I did contact the Wisconsin net control on the Maritime Mobile Service Net. (I didn't try higher power because the 13.8 VDC power supply I used was rated at only 10A.)

Total cost: probably less than \$10 for pipe and bullet connectors. (Most of the fittings came in a box-full bought at a yard sale for 50 cents.) Wire was essentially free, as was the chair base. Remember, you never know what might work until you try it. With a similar antenna you will not be a big gun contestor, but you could be a little pistol. You will make contacts and you will have fun in the process.

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NZ1D's Q'nD inverted "L" antenna made from assorted scrap pvc and a handfull of #22 wire scavenged from Xmas lights. (NZ1D photo)



Note how a CPVC eared-elbow provides easy transition from vertical to flat-top on Q'nD inverted "L" antenna. (NZ1D photo)

de Ralph, KD1SM, Tim W0TJP

2018 Boston Marathon.

There are still volunteer opportunities for the Boston Marathon but the window is closing fast. Volunteer registration closes **Wednesday February 7th.** For volunteer information registration and information, please see:

http://www.baa.org/races/boston-marathon/event-information/volunteerinformation/volunteerregistration.aspx

You don't need to specify any group name or passcode. Just make sure you request at least one ham radio assignment in your preferences. Once you get your application confirmation number, you're all set. If you're a returning volunteer, you'll be asked to provide your BAA Volunteer Loyalty Number. You should've received that in a separate e-mail from the BAA. There's also a tool to look it up on the BAA volunteer site. If you still have trouble finding it, or if you have any other questions about volunteer registration, or the 2017 Marathon generally, please get in touch: <mailto:contact@hamradioboston.org> anytime and we can help you out

Register Now! The registration deadline is Wednesday, February 7, 2018.

Sunday Net Control operators needed

de Ray KB1LRL

We still need more back-up Net Controls for the Sunday morning ARES net. This is great practice for operating in special events as well as emergency situations. Participation will be on an as needed basis but you will be guaranteed a slot so you can learn about this function. Just need one-half hour on Sunday. Give it a try! *[Please drop Ray an email if you're interested, Ed.]*.

Contesting/Operating

[The following is just a sampling of the upcoming contests. See the ARRL Contest Calendar at <u>www.arrl.org/contests</u> for more contesting information. For in-depth reporting on Amateur Radio contesting, you can subscribe to The ARRL Contest Update via your ARRL member profile e-mail preferences, Ed.]

Breaking!...Bouvet DXpedition cancelled

de Bob – K4UEE, Ralph – K0IR, Erling – LA6VM

2000 UTC 3 February 2018:

During the last 72 hours we continued to experience the high winds, low clouds, fog, and rough seas that have prevented helicopter operations since our arrival at Bouvet. No improvement was predicted in the weather forecast for the next four days. Then, last night an issue developed in one of the ship's engines. This morning the captain of the vessel declared it unsafe to continue with our project and aborted the expedition. We are now on our long voyage back to Punta Arenas. As you might imagine the team is deeply disappointed, but safe. There is already talk about rescheduling the DXpedition.

February 10-11

FISTS winter Sprint CW, (10th only) CQ WW RTTY, SKCC Winter Sprintathon CW, Page 4 Montachusett Amateur Radio Association OMISS QSO

February 14 NAQCC CW Sprint

February 17-18 ARRL DX Contest CW

February 23-25 CQ 160-m SSB

February 24 SC QSO NA QSO, RTTY

February 25-26 NC QSO

February 28 SKCC Sprint, CW

March 3-4 ARRL DX Contest SSB

VE Sessions

de Paul, KD1YH

January 2018 VE Session had 3 candidates: 2 passed tech, 1 passed tech/general. As a reminder, the MARA VE Team schedules license exam sessions monthly on the 4th Wednesday. Pre-registration is requested, contact Paul KD1YH kd1yh@arrl.net. Sessions will be canceled if no one has registered by Sunday before the scheduled session. If the session is not canceled, walk-ins are welcome, so if you are interested in upgrading or know someone who is looking for an exam session, you may contact Paul at the last minute to see if the session is being held.

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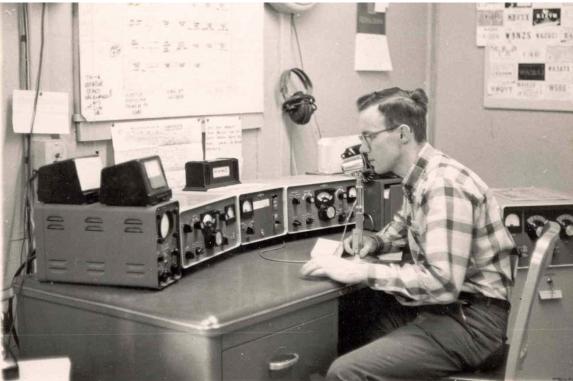
Collins History, Part 2

de Barry, W1HFN

Collins equipment photos provided by W1HFN.

Collins is most famous for its S-Line TX/RX series and the KWM tranceivers. The S-Line series started with the 75S-1 RX and 32S-1 TX. One of the major advantages of the S-Line was the fact that it could be used in the transceive mode, i.e., the VFO in the RX was used to control the frequency of the TX.

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Collins S-line at VO2HA, Goosebay, Labrador, 1967. Barry W1HFN at the mike. (W1HFN photo)

Yours truly at the Collins S-Line station at VO2HA, Goose Bay, Labrador in 1967. RX is 2nd from left, phone patch console center and TX on right. To the right of and behind the chair is the 30S-1 KW amp. Gene Senti, a brilliant engineer at Collins realized that many of the circuits of the RX were duplicated in the TX and with some judicious switching, one circuit could be used by both the RX and TX. The single box transceiver was born. Power out was 175W from a pair of 6146s.



The KWM-1 transceiver introduced by Collins in 1957 at a cost of \$770.00. Although aimed at the ham market, the military soon saw their value. A KWM-1 was on the infamous U2 flight of Francis Gary Powers when he was shot down over Russia.

The KWM-1 was superseded by the KWM-2, then the KWM-2A. The most obvious difference was the addition of a second crystal deck on the 2A, allowing coverage of all frequencies between 3.5 and 30 MHz, as opposed to the KWM-2 which was ham bands only.



KWM-2, notice band switch knob frequencies



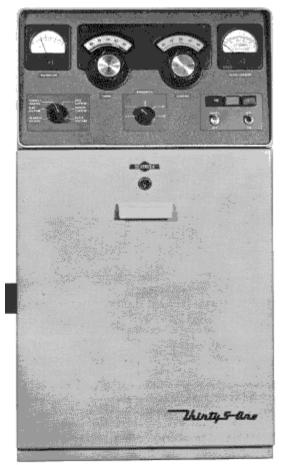
KWM-2A with addition band selection bezel and switch. When the switch was turned, a second set of blank windows appeared for the user to add frequencies outside of the ham bands, determined by added crystals under the chassis. Yours truly has one of these on "permanent loan" from its owner.

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To keep the QRO guys happy, Collins introduced two amps, the 500W 30L-1 and the full KW 30S-1. I recently purchased a 30L-1 and am in the process or getting it on the air. The 30L-1 ran four 811As and the 30S-1 a 4CX1000A.



The 30L-1, table top amp, 38 pounds and runs on 115/230 VAC.



The 30S-1, floor standing, HEAVY, prefers 230VAC.

There are tons more info on the Collins Radio Company on the web, let Google be your friend. Page 8

The MARA W1/GaZette

is published by the Montachusett Amateur Radio Association just prior to the monthly meeting. The newsletter is distributed free to members and friends of Amateur Radio. Contents copyright © 2017, MARA. Permission to use in other Amateur Radio publications with credit to MARA is hereby granted.

The deadline for materials to appear in the W1/GaZette is noon on the Sunday before the first Wednesday of the month.

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MEMBERSHIP INFORMATION:

Club Secretary: Barry Fox W1HFN Annual Dues: Regular \$25 Family \$30 Fixed income \$15 Meetings: 2nd Wednesday, 7:30pm September to June

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MARA owns and operates three FM repeaters co-located on Burbank Hospital in Fitchburg. W1GZ on 145.45 (CTCSS 74.4), AB1GF on 224.34 MHz (CTCSS 103.5) and W1HFN on 927.5625 (-25 MHz) (CTCSS 74.4). The 2m repeater is also reachable via IRLP node 8433 and Echolink node 688832.

Watt's Happening

Sundays, 0800 local 5330.5 (ch 1) USB Western Mass Emergency 60M Net Alternate frequencies are 5346.5 (ch 2), 5366.5 (ch 3), 5371.5 (ch 4), and 5403.5 (ch 5).

Sundays, 0830 local 3944

Western Mass Emergency Net. Alternate frequency is 3942 in case of QRN, QRM, or Page 9

Montachusett Amateur Radio Association frequency in-use. Also a good idea to scan up and down 10kHz if you cannot find the net.

Sundays, 0900 local 145.45-Montachusett Emergency Net

Tuesdays, 1930 local 145.37-WMEN Templeton Emergency Net

Wednesdays, 1900 local 145.37-Gardner/Templeton Emergency Net

Nightly, 2100 local 146.97-Central Mass Traffic Net

First Monday, 1900 local 3943, 7245 RACES Net

Tuesday, Thursday, Saturday, 1800 local 3978 Western Mass/RI Phone Net

February 16-18 WCC Chatham Radio Transmitter Site 70th Anniversary Celebration, 80, 40, 20 meters

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For Sale/Ads

de Tom AB1GF, <u>*AB1GF@arrl.net</u>* 978 467-6658.</u>

10 Rohn 25 ft sections	\$50 each	
EZ Way HD40 40' Crank-up tower	\$200	
Hygain TH-6 Tribander, complete	\$150	
Tarheel 100A-HP continuous coverage HF Antenna,		
with MFJ Memory tuner	\$475	
Mosley CL 33 WARC, needs insulator kit	\$175	

de Bill Leger; <u>N1UZ@ARRL.NET</u>

Mohawk ARC has a used MFJ-1798 HF vertical for sale. Operate 10 bands -- 75/80, 40, 30, 20, 17, 15, 12, 10, 6 and 2 Meters with this antenna and get full size performance with no ground or radials. All proceeds will go towards the DMR repeater project. \$100