

THE WOBBLY OSCILLATOR

September 2017

VOLUME 47

ISSUE 9

HAPPY LABOR DAY
BACK TO BUSCH

New Editor

From The Prez

The Repeater

I would like to say one thing to my fellow CARS members about our repeater: USE IT MORE. Most members know the repeater has been upgraded to increase coverage to the East, downtown and the Southwest. There is also the stand-alone UHF repeater in Shaker Heights that has excellent coverage for the eastern suburbs and downtown. The installation of the UHF digital repeater in Parma is in the works. Many members want to re-establish an internet connection for EchoLink or similar system use. The big controversy is that some say the current minimal use of the repeater does not justify the expense of the hook up. The best way to argue the case for EchoLink is to get the repeater busy. Check into the nets if you haven't been. When you get into your car, use your mobile; call out on the repeater. If you don't have a mobile, consider getting one. Try experimenting with your HT from different locations to see it's capability. And learn how to use EchoLink or another form of internet based worldwide communication.

I took over as the *Wobbly Oscillator* editor "temporarily" at the end of last year. I am still doing it. When I mention at meetings that we need a new editor, people look at the ceiling, or the floor, or the wall or stare into space. For personal reasons, I really cannot continue doing the *WO*, we need someone to step up and take it. There are two options, either we get a new editor, or we don't have a newsletter. We can have one person, or a team, do the newsletter, whatever it takes. Please consider helping out with this endeavor, we will discuss it at the September meeting.

September Meeting Program

Gordon, AI8Y, and I will be doing a program at the September meeting on Anderson Power Poles. Although we have done one in the past, there are new members who may not be familiar with those great little devices, plus there are new wrinkles in products and uses. Don't forget, we will be back at Busch. Hope to see you there.

73, Toby, WT8O

Cuyahoga Amateur Radio Society August 8, 2017 Meeting Minutes

The CARS membership was called to order by President Toby Kolman, WT8O, at 7:30 PM on the 8th day of the month at the Harriet Keeler Pavilion in the Brecksville Reservation of the Cleveland Metro parks. The Pledge of Allegiance was said and introductions were made by the members and guests. The July meeting minutes were approved as they appeared in the August *Wobbly Oscillator*.

Bob, W8GC, gave the report on the treasury balance. He asked the group if they had any fundraising ideas to generate some cash for the club. The Club balance is going down! Maybe the club can look into investment options. Larry, N8OWS, suggested a club yard sale to help generate some revenue.

Toby, WT8O asked if anyone would like to help Bill, KD8QBB, with ideas for Club presentations. He is currently working on ideas for September and October. Toby handed out certificates to all in attendance who participated at Field Day.

Please be reminded to pay your ARRL dues through the Club. The club gets a reimbursement on renewals as well as new members.

The Vice President and the Secretary had nothing to report this evening.

Please contact your Congressman concerning the Amateur Radio Parity Act. They are our voice in Washington.

Scott, AC8NW, is the NEW Tech Committee Chairman and he reported that the Parma repeater was returned to Yaesu for troubleshooting.

There was no "Old Business" to discuss.

The Club will distribute rosters to members who do not have Internet access.

Andy, KD8SCV, announced that at the last

Board of Directors meeting a dues increase of \$6 dollars a year was recommended. The membership would have to vote on the increase. Andy made a motion to place this item before the membership at the September meeting. Bill, KD8QBB, made the 2nd. This information will also be included in the September edition of the *Wobbly Oscillator* for viewing by members who could not attend the meetings.

If you hear QRM during the Net or at other times, do not respond to it. This will only encourage more and intensify the problem. Contact Vince if you encounter the harmful interference.

Arp, K8ARP, gave a short report on upcoming Public Service events.

8/19 - The Beck Center for the Arts in Lakewood is having a bicycling event.

8/27 - The Bellefaire Biathlon and 5K in Shaker Heights.

9/10 - The River Run Marathon in Berea to Lakewood.

Toby thanked the refreshment committee, Ed, WB8ROK, Darren, K8DMT, and Rich, NW8X.

The 50/50 raffle was won by Ron, K8RJH, who collected \$29 dollars.

Bob, KC8MRC, delivered a presentation on "Safe Viewing of the Solar Eclipse".

The meeting was adjourned at 8:27pm.

Submitted by Larry Shimerka, N8OWS.

VE Session September 10, 2017 Metro, W8MET

Time to get licensed or upgraded for those extra privileges at the Independence Town Hall, 6652 Brecksville Road at 9am Sunday September 10, 2017.

Peep from the Veep
Mark, WJ8WM

Like it or not, we are heading into fall. Along with raking the leaves and other preparations for winter, now is the time to check our antennas, masts, towers, and grounding to get ready for winter operating.

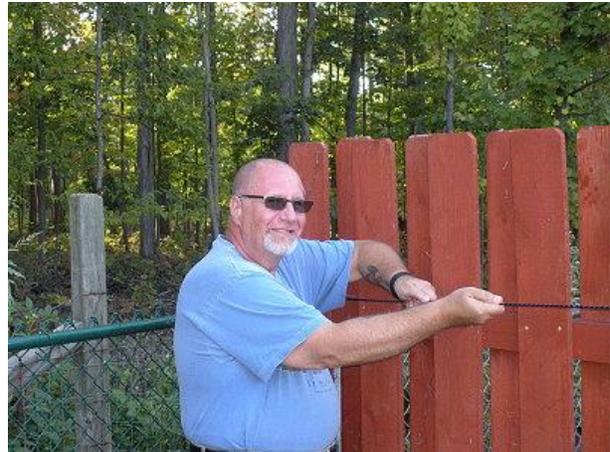
We should be checking mounting hardware for tightness and corrosion. Rust has a way of weakening fasteners and causing poor electrical connections. Make sure antenna elements are secure. I personally had an element fall off my antenna; it loosened with the high winds we experienced over the summer.

Coax connections are susceptible to water infiltration which is a leading cause of high SWR. Connections should be opened, cleaned, and resealed with compound and taped.

Grounding is an area often overlooked. Connections to towers, masts, and ground rods should also be opened and cleaned. Poor connections can cause electrical noise and not be able to carry stray electrical currents or heaven forbid lightning strike properly.

Guy wires and ropes should be checked for fraying and attachment to their anchors. These are the unsung heroes to keep our antennas in the air and us on the air!

And as always there are members here who can help with these tasks. Whether you're at a point where you are uncomfortable with heights or unsure how something works, just reach out to the membership. We are here to help.



Gordon, A18Y, happily adjusting a guy line on his new home brewed delta loop antenna.

National POW MIA Recognition Day
Special Event Station
Metro, W8MET

This Special Event will take place September 13-17, 2017 on 15,17,20, and 40 meters SSB. Linda, N8LRS, will be at the microphone and I will be logging. This is our second year for this event. I had many people last year who missed this operation and wished that they would have known in advance. We will be a sister station and signing as K4MIA/8. Other sister stations will be K4MIA/1, K4MIA/5, and K4MIA/7. A special QSL will be available. This is in recognition of our POWs and MIAs. Check on QRZ.com under K4MIA (www.qrz.com/db/k4mia) and September QST page 98 for details.

“Whenever possible, learn from the mistakes of others.” (Patrick Sweeney)

**NOTES FROM THE TECHNICAL
COMMITTEE
Mike, KD8OUE**

The Technical Committee current members are: Mike Kemmett, KD8OUE; Vince Bak, N8OVW; Mark Morro, WJ8WM; Scott Smith, AC8NW; Mike Toth, KB8RKF; David Noeth, KD8ACO; Terry Pillat, KB8DTC; and Toby Kolman, WT8O.

If you have any technical issues you'd like assistance with, or would like to contribute to the work the Technical Committee provides, please contact one of the above listed members. We can't provide a helping hand, or information, if we aren't aware of your needs. So, please, don't be shy. ALL of us still have much to learn, so you're not alone with your struggles.

The committee is continuing work on installation of the new repeater at the Parma site, but some technical, issues have caused unexpected delays. Exact date of the installation has yet to be determined. We will keep everyone informed of the progress of the installation, at our meetings and through this newsletter, as information becomes available.

I want to, once again, remind everyone that we've reactivated the stand-alone 444.750 repeater in Shaker Hts., which provides alternate repeater coverage for downtown Cleveland, and areas East. It's there to use. Please continue to spread the word.

The following is an informative article I found on **hamuniverse.com** on how to get a dipole to the proper length, without the hassle of putting it up and taking it down numerous times.

The article was submitted by **John / N0KHQ / St. Louis**

This short bit of information hopefully will save you much time when "tuning" a dipole whether you have built it yourself or purchased commercially. Yes, most commercially purchased dipoles need tuning.

This method can be used by hams that want to make a dipole, (any frequency), so they usually begin by using the standard formulas below:

$234 / \text{design frequency} = \text{each dipole side length in feet,}$

OR - $468 / \text{design frequency} = \text{total length in feet.}$ Most builders cut long and trim the total length for lowest SWR on their design frequency.

The only problem with this, when you put it in the air, it isn't even close to that magic 1:1 SWR that most of us seek. In fact, after your first SWR check, the antenna may be lowest in SWR way low in frequency or just the opposite, too high.

So.....up and down, up and down, up and down.... you start chopping off or adding pieces of wire until the antenna comes up to your design frequency with the lowest SWR. This can take many, many trips to the rig, back to the antenna, back to the rig, etc., and can be very time consuming to get the dipole tuned where you want it. The solution to fewer trips up and down guessing at tuning the antenna a bit of simple math should help do the trick! Example:

Lets say you want a dipole for 18.130 MHz. You just used the standard formula $234/\text{frequency} = \text{length of each half in feet}$ or $468/\text{frequency} = \text{both lengths total in feet...}$ you then cut each wire (each leg) to 12.9 feet from the formula..... $(234 / 18.130)$ or 2 times that length for the total length in feet, then cut in half using the 468 constant formula. You put the antenna in the air and to your horror the antenna is resonant at 17.80!

(Continued on next page.)

You rotten no good sacafragamatz punka mocha fritzalitz !!!!!!! (Choice words edited due to family rated website.)

What to do? Here comes that bit of math with a formula to save the day! Get your calculator out. The formula = Old Frequency (17.80) / New Frequency (18.130) X Original length from the formula, (12.9 feet) = New dipole length (12.7 feet) per half.

Now since it's much easier to use inches rather than 10th's of a foot, doing the math to find out how many inches 12.9 feet is. 12 feet + .9 feet = how many feet and inches? 12" X .9 = 10.9 inches. Add this to 12 feet.....12 feet + 10.9 inches rounded off = 12 feet 11 inches per half.

Doing the same with the new dipole length.....gives us, 12 feet + 8.4 inches = 12 feet 9 inches (rounded off) for the new length for each half of the dipole!

So there is a difference of about 2 inches between the old length and the new length. Now since the new length is shorter than the old length...you cut of 2 inches from the original length that you arrived at using the formula the first time making the antenna resonate higher in frequency.

This should get you very very close to the exact frequency using this formula! If by some quirk of Murphy's law it still is off a bit, just repeat the procedure again with no guesswork involved!!!!

Here is another example using the same frequency. 18.130 MHz and you find the best SWR is 18.500 MHz. Now the antenna is too short....but how much?

$18.500 / 18.130 \times 12.9 \text{ feet} = 13.16 \text{ feet}$
so....., the difference between the new length and the old length is $13.16 \text{ feet} - 12.9 \text{ feet} = .26 \text{ feet}$ which is what would have to add to the original length to make it longer and much closer to the correct length. So we get .26 feet added to 12.9 feet = 13.16 feet for 1/2 of the dipole!

Just in case you need to know, a foot divided into 10th's of a foot = 1.2 inches per 10th of a foot.

Don't let this formula confuse you. It is not a formula for designing a 1/2 wave dipole.....not even close...it only helps you tune the antenna much quicker than the cut or add and try method! Math comes to the rescue from lessons in school, years ago, that you thought you would never use! Thanks to the teachers, math made your antenna building experience much easier!

Don't forget to add length when the dipole is too short and to take away length when it is too long!

Practice the formula in your spare time using various design frequencies and results. This formula works very well and has been around for a long time. Just thought I would send it your way. I use this technique all the time, I'm just too old (smart)..... to make all those trips anymore. I am interested in getting it on the air, not on the ground! Have fun!"

Here is another way of stating the formula in real life words:

Unwanted lowest SWR frequency divided by Wanted frequency multiplied by results of standard formula equals new total length for half of the dipole.

73, Mike Kemmett, KD8OUE

Berea Hamfest Metro, W8MET

The Cleveland Hamfest will be Sunday September 24th from 8 AM-2 PM at the Cuyahoga County Fairgrounds. Call in Frequency is 146.73. Admission is \$6.00. Info at www.hac.org. Mark your calendar.



Member Profile

Robert Robbins, K8RGI

How did you become interested in ham radio?

I have always been interested in electronics, but my earliest memory of a ham related activity was at our local park in Columbus, Ohio when a bunch of guys showed up and started setting up tents and antennas. That was my first Field Day back in the 50's. I would have been 11 or 12. My brother and I were allowed to take pop from a central point to the various stations. I remember going home and trying to listen for them, but all I had was an AM tube radio. My first transmitter, before I was licensed, was an ignition coil and a spark gap connected to a long wire antenna. My brother would key it while I walked down the street with a transistor radio to see how far I could hear it.

What made you decide to take the test and when did you get your license(s)?

I cannot remember who helped me get my license, but I was first licensed in 1959 or 1960. I was very active in high school. I started the first radio club at West High School and served as its first president. I built a TV camera and made one or two contacts. There were only a few amateur TV stations on the air. I also built a 1,200 MHz station but only made one contact with it. I was very fortunate to have many "Elmers" along the way to give me encouragement and help. I got out of amateur radio in the seventies due to family and job responsibilities. In November of 2015 I saw that my old call was still available so I studied over a weekend and took and passed both the general and extras class tests.

What are your base station radios and antennas?

When I got out of amateur radio in the seventies I had a Drake T-4XB and R-4B station so naturally when I got back into amateur radio I wanted to put the same station back on the air. I did that but only made a few contacts before going to Florida for the winter. In the spring of 2016 the Icom IC-7300 was introduced and I had one of the first ones sitting on my porch when we got back from Florida. I sold my Drake equipment and never looked back. For an antenna I put up a long wire antenna with an Icom AH-4 antenna tuner. First in the attic and then outside. I have had some issues with it but today it is 118 feet long and I can tune all bands, and have made contacts on all bands, from 160 through 6 meters.

What is your "go to" base station HF radio?

(Continued next page)

Since it is the only one I have, the Icom IC-7300. Did I mention I love it?

What is your mobile set up?

My mobile, and only 144 MHz and 220 MHz rig, is the Baofeng UV-5RV2+ hand held. I bought this radio initially to use on the Cuyahoga Valley Scenic Railroad when I volunteer as a Trainman. I still use it for that but also to check into the CARS net on Wednesday evenings with a Slim Jim antenna.

What are your favorite on air activities?

I was first introduced to digital modes at the CARS field day in 2016. Since then, that has become my favorite mode of operation. I enjoy CW and more recently I have done several contests. I also have greatly enjoyed Field Day operations and am planning for the next one.

Why did you join CARS?

I joined CARS to meet people with similar interests and the opportunity to participate in group activities. I have also found it to be a great source of knowledge and experiences.

What would you like to see CARS do to improve?

I would like to see more people involved. I understand we have a large membership, but not many people come to the meetings. It would be nice to see some younger people too.

Anything else you would like to say?

Thank you to CARS for letting me be involved. It has been fun and I look forward to more great experiences.

**Dues Increase Vote
Toby, WT8O**

A motion to increase the annual dues was presented at the August meeting. In accordance with the CARS constitution and by-laws a vote on the motion could not be taken until the next monthly meeting, which will be in September, and must be presented in writing in the *Wobbly Oscillator*. The details of the motion are included in the August meeting minutes elsewhere in this issue. The motion proposed a dues increase of six dollars (\$6.00) per year for all membership categories. Please do your best to attend this meeting to vote on this issue.

Honorary Members

Any person who by nature of outstanding or meritorious contribution to the furtherance of amateur radio and the ideals of the Cuyahoga Amateur Radio Society
Robert Check, W8GC
Elected 2/10/15

Thomas Wayne, WB8N
Elected 1/10/17

Dwaine Modock, K8ME, SK
Elected 5/9/17

The Random Wire
Tom Wayne, WB8N

Well fellow hams, it's been a rather slow month for the ole Dukester (that's me). Haven't done a whole lot on the low bands. I got on the big rig a little and made a few contacts, but nothing to write home about.

I *really* wanted to work the Ohio QSO party this past Saturday, but something came up at the last minute and I wasn't even able to work that! Oh well, better luck next year I guess.

I really have to spend some time and effort one of these days and reorganize my shack. I've got wires and cables running all over the place and I don't even know what they are all for or where they all go! This time I'll label each one to eliminate at least MOST of the confusion.

I *have* been checking in on the CARS Wednesday night weekly nets at least. I hope Mike Lorens out there in Walton Hills gets his mom, Lynn, to tune us in on his scanner. She usually does. Maybe he'll even read this news letter.

Metro, W8MET will keep us up to date on the next *on the air* events coming up. He usually does, and does a fine job doing it, I might add.

This is going to be a short Random Wire this month, as I just don't have a lot to say. Keep those cards, letters & emails coming.



One apex of the delta loop at AI8Y

September Birthdays

Bob Robbins, KSRGI
9-4-45

Dennis Rabbitts, KDSAPY
9-11-49

Jeff Bolek, KDSGIR
9-28-50

[Editor's note: If your birthday does not appear in the WO, please notify the editor so the member database can be updated. We will include your birthday belatedly in the next issue.]

FCC FORM 605
Metro, W8MET

A revised FCC Form 605 will go into effect September, 2017 will ask applicants to indicate if they have been convicted of, or pled guilty, to a felony. This action will correct it's omission on Form 605, which has existed for years. More details are available in the September 2017 QST on page 81.

Again this month Metro, W8MET, star DXer and contester has taken time out to suggest to fellow CARS members and *WO* readers operating activities and events he believes would be FUN to partake in.

Metro's Picks

On The Air

Contests

Sept 2, 1300-Sept 3, 0400 Colorado QSO Party CW Ph Dig 1.8-UHF ppraa.org/coqp

Sept 3, 1800-Sept 4, 0300 Tennessee QSO Party CW Ph Dig 1.8-UHF tnqp.org/rules

Sept 9, 1400-2200 Ohio State Parks on the Air Ph 3.5-28.0 www.ospota.org/ospota

Sept 9, 1800-Sept 11, 0300 ARRL September VHF Contest CW Ph Dig 50 and up

www.arrl.org/september-vhf

Sept 16, 1400-Sept 17, 0200 Iowa QSO Party CW Ph Dig All Bands www.w0yl.com/IAQP

Sept 16, 1600-Sept 17, 2000 New Jersey QSO Party CW Ph 3.5-28.0 k2td-bcrc.org/njqp

Sept 16, 1600-Sept 17, 2200 New Hampshire QSO Party CW Ph Dig All Bands

www.w1wqm.org/nhgso

Sept 23-24, 0000-2359Z CQ Worldwide DX Contest RTTY Dig 3.5-28.0 www.cqwwrtty.com

Sept 23, 1200-Sept 24, 1200Z Maine QSO Party CW Ph 1.8-28.0 www.qsl.net/ws1sm

Sept 23, 1400-Sept 24, 2000Z Texas QSO Party CW Ph Dig All Bands www.txqp.net

Special Events

Lorain Lighthouse, W8HN September 8-10, 2017 1800-1200. Ph146.520 14.275 7.210 3.810

World Trade Center, WA2NYC Sept 8-12 0000-0300 Ph 7.220 14.265 21.350 28.45

www.grz.com/db/wa2nyc

Route 66 On The Air, W6Q (21 call signs along the route W6A-W6U) Sept. 9-17 0000-2359

<http://w6jbt.org>

Route 66 Military Vehicle Convoy On-The-Air, K4M, K4V, K4P, K4A Sept 16-22 0000-2395 Along Route 66 from Chicago, IL to San Pedro, CA 6-160 Meters Ph CW PSK31

convoyontheair.org

All times in Zulu

Participating is FUN, FUN, FUN...ENJOY!!!

The *Wobbly Oscillator* is a publication of the Cuyahoga Amateur Radio Society, P.O. Box 31264, Independence, Ohio, 44131-0264. Articles from this publication may be reprinted in any ham radio publication, provided that credit is given this publication and the author, if known. All submissions should be emailed to: newsletter@2cars.org by the end of the month for publication in the next month's issue.

CARS 2017 Officers & Committees

Audit

WJ8WM ** WT8O, KD8OUE

Audio/Video

KD8OUE **

ARRL Liaison & Media Representative

WJ8WM **

Awards

W8GC ** WT8O

Christmas party & Summer Picnic

W8GC** WJ8WM, KD8SCV, K8ARP

Club Photographer

N8OWS **

Diabetes Walk

WB8N ** All CARS members

Field Day

WT8O**, WJ8WM, K8ARP, AC8NW

Find a Club Station location

K8KR** Ni8Z

Flag Committee

KB8RKf, KD8ACO, N8DJX

50/50

KD8OUE

License classes

W8GC ** WT8O ** NI8Z, WJ8WM, KD8ACO, K8SHB

Membership

W8GC **

NET

WT8O **

Newsletter

WT8O ** 440-525-6109

Operating

WT8O ** K8ARP

Program's at Meetings

KD8QBB **

Property Custodian's

KB8DTC records, W8GC equipment

Public Services

KD8FTS **, K8ARP **

QSL Manager - W8HBI, W8BM

WB8N **

Refreshments at Meetings & Picnic

WB8ROK ** pop, K8DMT ** coffee, NW8X ** eat's

Scholarship

W8GC ** WJ8WM, WT8O, N8OWS, WB8N

Sunshine (welfare)

Andy Evridge, KD8SCV ** 440-886-0723

Technical

AC8NW** WT8O, N8OVW, WJ8WM, KD8ACO, KD8RKf

VE Exams

W8MET ** 216-520-1320

Web Master/e-mail

W8GC **

** chairman or co-chairman

2017 Officers

PRESIDENT

Toby Kolman WT8O 440-525-6109

president@2cars.org

VICE-PRESIDENT

Mark Moro, WJ8WM 216-661-0342

SECRETARY

Larry Shimerka, N8OWS 216-647-2484

TREASURER:

Bob Check W8GC 216-524-1750

Board Members & License Trustees

Board Chairman

Andy Evridge KD8SCV 440-886-0723

even year executive board 2 year term

N8SHB, KB8DTC, KD8OUE

odd year executive board 2 year term

KD8SCV, K8ARP, WB8ROK

License trustee K8ZFR

WT8O

License trustee

W8HBI, W8BM,
W8GC



July 12, 2017