



# MEGAHERTZ TIMES



August 2021

W3AI

PO Box 336, Perkasio, PA 18944

## R F Hill Amateur Radio Club 2021

**President:** WA3NFV, Dan Mitten

**Vice Pres.:** KB3EWV, John Morell

**Secretary:** - OPEN -

**Treasurer:** KC3LXV, Jim Reed

**News Editor:** W3WTT, Bill Tribley  
bill@tribley.org

### CLUB INFORMATION

**Mailing address:**  
PO Box 336, Perkasio, PA 18944

**Club Repeaters:** 145.31 MHz; input  
144.71 MHz PL 131.8 (2 meters)  
444.75 MHz, input 449.75 MHz PL  
103.5 (70 cm)

**Meetings:** The club normally meets  
at 7:30 PM on the last Thursday of  
the Month

**Web page:** <http://www.rfhillarc.club>

**Email:** rfhillarc@yahoo.com

The MHz Times is the official  
publication of the R F Hill Amateur  
Radio Club, Inc. Articles for  
submission may be made to the editor.  
Material may not be reprinted without  
the express permission of the R F Hill  
ARC. The R F Hill ARC nor it's  
officers warrant any items listed for  
sale or trade. The editor reserves the  
right not to print any material which  
may be offensive or illegal.

All articles and pictures are copy-  
righted material. ©2020

**DEADLINE** for article submission is 10  
days before the meeting! Please submit  
in **Open Office (.odt)** or **MS Word  
(.docx)** format.  
Send to bill@tribley.org

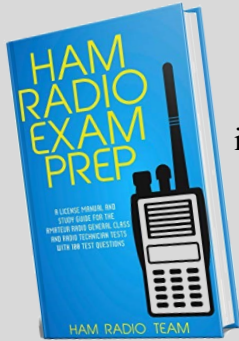
**The August Club meeting will be  
held Thursday, August 26th, at 7:30  
PM via Zoom.  
Invitations will be sent out via the  
IO reflector. See you on Zoom!**

**Due to the Covid-19 threat, Peter Becker, as well as most senior  
living facilities, have closed their campuses to visitors. The ad-  
ministrator at PBC will let us know when that changes.  
Stay safe and best 73,  
Jim Soete, WA3YLQ, Past Secretary  
RF Hill ARC, VE Team Liaison**



RF Hill Amateur Radio Club  
W3AI

# VE TESTING



VE testing for Technician,  
General and Extra Class licenses  
is held at the Indian Valley Public  
Library in Telford:

100 E Church Ave.  
Telford, PA 18969

*Testing is slowly coming back  
as pandemic restrictions ease  
and people feel more  
comfortable. .*

*Future dates  
to be announced!*



## Highlighted Nets

**SEPPTN traffic nets** are on Sundays &  
Wednesdays at 8:00 PM local time at 145.310  
MHz (-600). These nets are for anyone who would like to learn  
how to handle traffic as well as an on the air meeting place for  
members and future members.

**RF Hill A-R-C Ten Meter AM Net:** 29.005MHz on Sunday  
evening immediately following the SEPPTN

**RF Hill CW Squad Net:** Operates on 28.370.600 CW at ap-  
prox. 7pm Tuesday stopping before the NPARC net at 8pm.  
This is a non formal CWs - slow speed - net for beginners and  
ranges in speed from 5-15 wpm.

## Net Control Stations

08/25 W3WTT	11/03 W3WTT
08/29, 09/01 KB3DEN	11/07 KS3Z
09/05, 09/08 WA3YLQ	11/10 W3WTT
09/12 KS3Z	11/14, 11/17 KB3DEN
09/15 W3WTT	11/21, 11/24 WA3YLQ
09/19 KS3Z	11/28 KS3Z
09/22 W3WTT	12/01 W3WTT
09/26, 09/29 WA3YLQ	12/05 KS3Z
10/03 KS3Z	12/08 W3WTT
10/06 W3WTT	12/12, 12/15 KB3DEN
10/10 KS3Z	12/19, 12/22 WA3YLQ
10/13 W3WTT	12/26 KS3Z
10/17, 10/20 KB3DEN	12/29 W3WTT
10/24, 10/27 WA3YLQ	
10/31 KS3Z	

Any questions or conflicts, please let me know. If at  
the last minute, the assigned net control station  
doesn't show-up, any net control station on frequency  
should run the net.

Thanks to everyone for your continued support.  
Jim - KB3DEN [KB3DEN@aol.com](mailto:KB3DEN@aol.com)

## AREA NET LISTINGS

SEPPTN Southeastern PA Practice & Traffic Net	Su/W	8 PM	145.31-
EPAEPTN - EPA Emergency Phone/Traffic Net	Daily	6 PM	3.917 +/-
Pennsylvania Traffic Net (CW)	Daily	7,10 PM	3.585
Third Region Net	Daily	4 PM	7.243 (3.917 -alt)
Eastern Area Net (EAN)	Daily	2:30 PM	7.243
Bucks County ARES	W	9 PM	147.090+
Montgomery County ARES	Th	7 PM	146.835- (pl 88.5)
EPA echo link traffic net (EAETN) Echolink AA3RG-R	Th	8 PM	146.640- (pl 82.5)



Find us on Facebook and Twitter  
Join the conversation.  
Follow us today!

<http://facebook.com/rfhillarc>

<http://twitter.com/W3AI>



## President's Message

In light of the recent resignation of our Club Secretary, we are searching for a replacement.

Here is your opportunity to join the board, in a voting position. Please think about giving back to our group while having a role in the goings on and being one of the first to know!

Contact me or any other board member, to express your interest.  
73,  
Dan WA3NFV

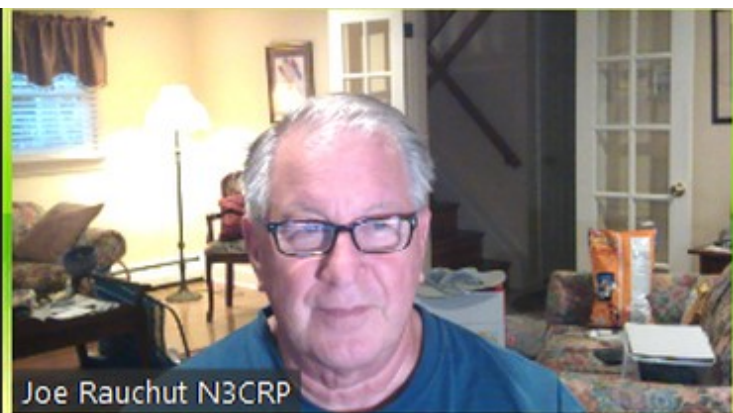
Ed. Note: No minutes were submitted for the July meeting. The need is real for someone to step forward and serve the club as Secretary.



# July 29 Meeting Zooming 1/3



Jack Sullivan W2INF



Joe Rauchut N3CRP



John kb3ewv



de w3otz



Joe WS2K



Len N3EOE

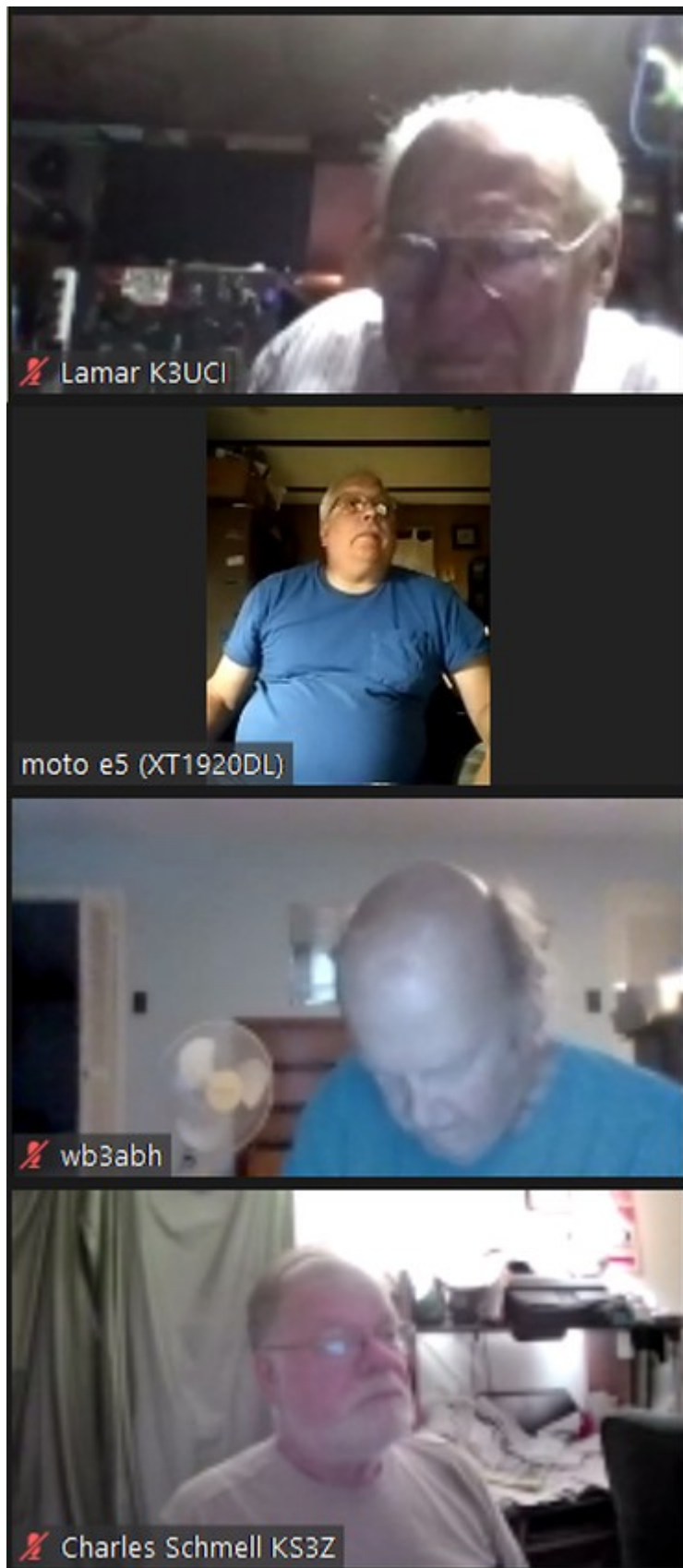


steve k3alv



Ronald Waszk

# July 29 Meeting Zooming 2/3





# July 29 Meeting Zooming 3/3



Original Zoom screen shot courtesy Joe N3CRP

# Antenna Day 2021

For those who may have forgotten, Antenna day is a random event the club does during months of better weather. All club assets are made available for experimenting testing and building. Bring your ideas, bring your unfinished projects, bring your finished projects to test or show off!! Or just join us to help and advise learn or simply hang out after such a long time inside.

**Saturday August 28,2021 10:00am Markley park.**

All members are welcome. Please let me know if your interested. If you have a project you are interested in or working on share it so we can have the trailer prepped with needed gear.

This is a member-driven event. In the past we've had several groups working on different projects with some real cool results!! We will ask all members respect each other. Social distancing will be respected as well as those who want to wear masks.

Any questions comments feel free to reach out to me directly or post to the reflector.  
John KB3EWV

# ILLY Coffee Can Vertical Follow Up

Having accumulated 24 Iilly Coffee Cans of my own, I was intrigued by Dr. Hiroki Kato's (AH6CY) August, 2021 QST Cover Photo and article "The Tin-Can Tower Vertical." Dr. Hiroki soldered and strapped together 17 Iilly Coffee Cans and found that he could cover the entire 15 Meter Band with a good SWR. Hiroki also generously answered my inquiry and included construction photos. The height of each can being 5 & 5/8 inches, his 17 Can Vertical would be just a hair under 8 Feet, a length that I thought would be more likely resonant as a quarter wave length for 10 Meters. Consequently, I found the Broadband and "Short" characteristics to be curious and worth investigation.

Not having a 100 Watt Soldering Iron like Dr. Hiroki, I defaulted to drilling holes through each Lid and the bottom of each succeeding Can above inserting sufficient "Fender" Washers inside each Lid, in between each Lid and Can bottom and on the inside bottom of the Can above. I discovered that despite the shiny appearance, the exterior of the Cans and Lids are coated with a transparent non-conductive material. The interior of each Lid is also insulated with plastic. See the attached photo showing a sanded center of the top of a Lid and plastic coated interior of a Lid alongside. The Lid's interior plastic coating presumably creates an air tight seal for coffee freshness via a rubberish stripe on the top of the Can below. (Note the brown stripe in the Can shown.) Consequently, I needed to sand away the coating to obtain contact on the top of each Lid. I also had to insert a sheet metal screw through a drilled hole connecting the closed Lid to interior of the Can below. (The interior and exterior of the bottom of each Can is bare metal.)

In my case, I found that 14 Cans bolted and strapped together, a physical length of only 6 Feet, 8 Inches, resonated on 10 Meters. In fact, the SWR Curve was under 2.0:1 over a range of 5 Megahertz from approximately 27 to 32 MHz! The SWR was close to 1:1 at 28.370 MHz. (The initial Can by itself with a coax connection, exhibited an SWR of under 2:1 from approximately 156 to 126 MHz. I have yet to try a communications test.) The curious "Short" and Broadband effect therefore seemed to be verified. Communications tests in the field on 10 Meters yielded local signal reports equivalent to multiple other 10 Meter verticals located on the test site.

My "14 Tin Can Vertical" bolted tightly together as it was with washers and lock washers, proved to be a little "wobbly." So, I opted to reduce the number of Cans and incorporate a telescoping whip into the structure. Eventually, this came down to the 5 Can configuration shown in the second photo. Bolted together by themselves, the 5 Cans provided an SWR of under 2.5:1 over the entire 6 Meter Band. Adding the Lid with the Telescoping Whip provided an adjustable Vertical for 10, 12 and with the Whip fulling extended, 15 Meters. A local communications test on 15 Meters from the Milford Township (PA) Municipal Park location shown was successful. The SWR was less than 1.5:1 across the entire 15 Meter Band. (The three green radials shown were cut for 10 Meters.) My thanks to Dr. Hiroki for his intriguing Cover Story in QST and to Members of the RF Hill Radio Club for their assistance and communications tests.

73. Griff NE3I





# Field Ops July 25, August 1 and August 8

We continue our Sunday Field Ops at The Parks activity which began in September 2020 under the leadership of our current President Dan, WA3NFV. The events are well-attended by members, as well as inquisitive visitors. Numerous radios and antennas are utilized and tested under portable conditions and variable weather factors. Off-site members assist the on-site members in the process.

Members can check the club's reflector for the next scheduled outing.

Hope to see you there as an operator, visitor or on-the-air at your location.

Here are some of the photos from our most recent outings at Franconia (Montgomery County, PA) and Milford (Bucks County, PA) Townships that occurred on July 25, August 1, and August 8, 2021.

73, Len N3EOE



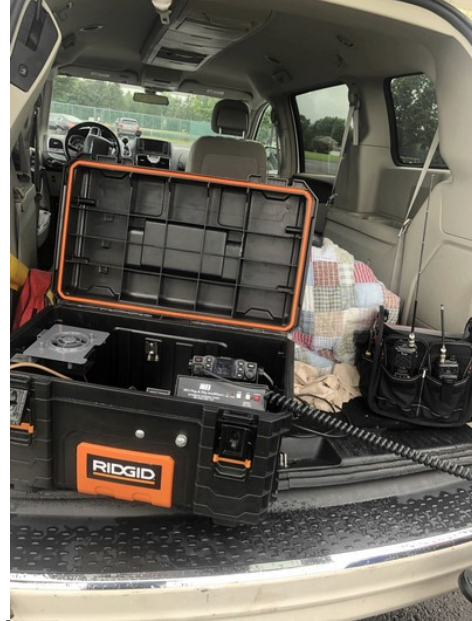


# Field Ops Continued...





# Field Ops Continued...





# RF Hill ARC July 22 Meeting Minutes

No minutes were provided for this issue of MHz Times. –ed.