



# MEGAHERTZ TIMES



October 2020

W3AI

PO Box 336, Perkasio, PA 18944

## R F Hill Amateur Radio Club 2020

**President:** KC3HHK,  
Jeff Lapin

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

**Secretary:** WA3YLQ,  
Jim Soete

**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

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**DEADLINE** for article submission is 10  
days before the meeting!  
Send to rfhillarc@yahoo.com

**The October Club meeting will be  
held Thursday, October 29th, at 7:30  
PM  
via Zoom.**

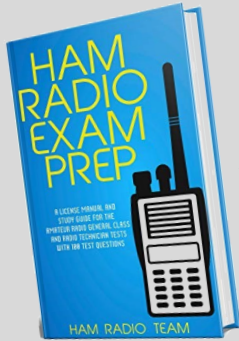
**Dan, WA3NFV, will be our Moderator and  
will send out Invitations via the IO re-  
flector. This month's program will be  
"Operations With Indoor Antennas", pre-  
sented by Joe, WS2K. See you on Zoom!**

**Due to the Covid-19 threat, Peter Becker, as well as  
most senior living facilities, have closed their campus-  
es to visitors. The administrator at PBC will let us know  
when that changes.**

**Stay safe and best 73,  
Jim Soete, WA3YLQ, Secretary  
RF Hill ARC, VE Team Liaison**



# VE TESTING



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

100 E Church Ave.  
Telford, PA 18969



*Due to various factors related to Covid-19 the board has cancelled all in-person VE Testing for 2020. If other options become available they will be announced at meetings or on the reflector. Online options are available: <https://blog.hamstudy.org/2020/04/fully-remote-amateur-radio-license-exam-administration/>.*



## Traffic 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

## Net Control Stations

10/25,10/28 KS3Z  
11/01,11/04 KB3DEN  
11/08,11/11 WA3YLQ  
11/15,11/18 W3WTT  
11/22,11/25 KS3Z  
11/29,12/02 KB3DEN  
12/06,12/09 WA3YLQ  
12/13,12/16 W3WTT  
12/20,12/23 KS3Z  
12/27,12/30 WA3YLQ

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)



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<http://twitter.com/W3AI>



# September Meeting Zooming Left+Center





# September Meeting Zooming—Right



*Thanks to Joe N3CRP for the screen shot.*

*Based on most of the expressions I think we need to reconsider the stealth screen shot. “Say Cheese...” might be a good idea!*

# RF Hill ARC Meeting Minutes

**Date** Sept. 24, 2020

**Note:** KC3HHK and KB3EWV were absent. Jim, WA3YLQ, Club Secretary presided over the meeting.

**Welcome/Call to Order** Jim Soete, WA3YLQ, Secretary

**Roll Call** 26 ARO's including 2 guests were present.

## **Officer Reports:**

**President** No Report

**Vice President** WA3YLQ reported that the October Program will be presented by Joe, WS2K, on operations with indoor antenna. November's program will be a Zoom Hamfest.

**Secretary** The August meeting minutes were published in the MHz Times. A motion to accept the minutes as published was made by KW3P, seconded by KS3Z. Motion carried. A second reading of the membership application of Len Schmidt, KC3PWB, was presented. By a unanimous thumbs up vote Len's application was accepted. Welcome Len!!!

**Treasurer** Jim, KC3LXV, Club Treasurer offered the monthly financial report. A motion to accept the report as presented was made by WS2K, seconded by KS3Z. Motion carried. Thank you Jim.

## **Committee Reports**

**Repeater** Charles, KS3Z, reported that there is a "banana" on the 31 repeater who is creating interference to ongoing QSO's. Please do not recognize this individual. Ignore him.

**MHz Times** Bill, W3WTT, encouraged the submission of photos and articles for the newsletter. As Club activities are nil, feel free to submit member photos of current projects or activities from the past.

**Nets** Jim, KB3DEN, submitted the August SEPPATN report. During the month there were 111 check-ins and 6 pcs. of traffic handled, in 9 sessions.

Dan, WA3NFV, reported that the 10meter AM Net continues with great success. The net meets Sunday evenings after the 2meter SEPPATN Net, there have been as many as 13 check-ins. WA3JRS is the regular NCS, and others have stepped up, including Len, N3EOE. Thanks to all who participate.

**Old Business** None

**New Business** None

**Adjournment** A motion to adjourn was made by KW3P, seconded by W3WTT. Motion carried, meeting adjourned.

**Program:** "Stump the Experts" commenced. Member submitted questions proved most informative AND entertaining. Thanks to KS3Z, WA3NFV and N2VUZ for their participation.

## **Respectfully Submitted:**

Jim Soete, WA3YLQ, Secretary  
RF Hill ARC

# Disco Mount!

Since my start in 2 Meter FM Mobile in 1974, I have had a variety of mobile mounts. These have included metal brackets screwed into the dash, suction cups on the windshield and/or dash and cup holder mounts. Even tried double stick tape once!

Pictured is my latest install, a CD player slot mount. Viewing angle and ease of control operation are great! Note that I have installed the mount upside down. The wing nut is supposed to be under the mount; however, this position would interfere with the audio gain control/power knob. I do not miss the CD player, as I monitor AM Talk Radio and FM/Satellite entertainment programming.

**73 de Jim, WA3YLQ**

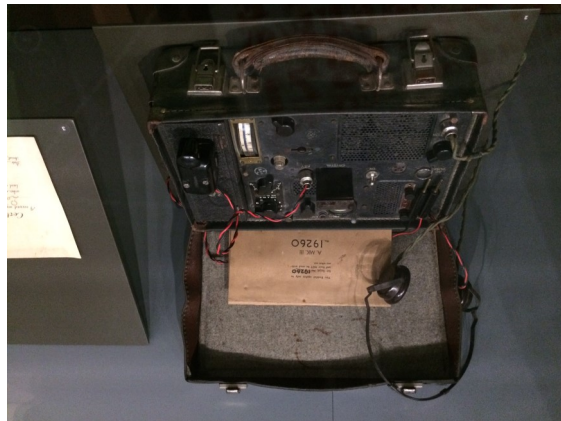
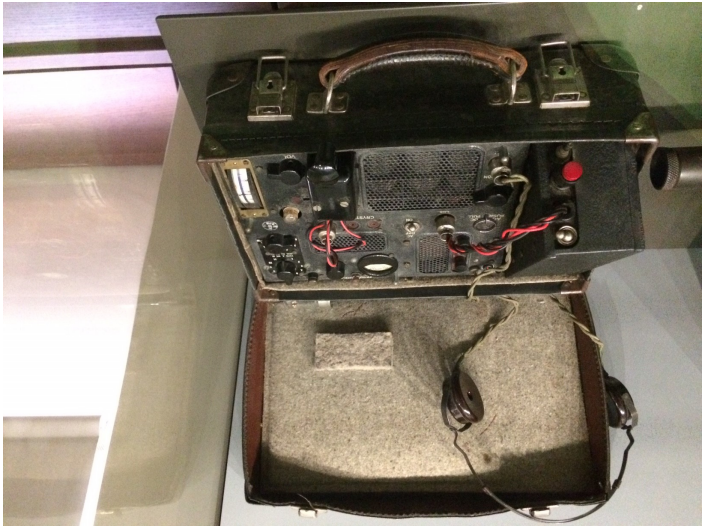




# Building the Bayou Jumper

## A Solid State Replica of the classic World War Two Paraset Spy Radio Griff NE3I

In the Spring of 2018, I worked a guy calling CQ on 40 Meters around 7.122 MHz who, was on vacation in New England. He said that he was using a “Bayou Jumper.” It took two retransmissions on his part for me to confirm that I decoded that correctly. Intrigued, I searched for the Bayou Jumper (“BJ”) on the web and found that it was one of the kits offered by the Four State QRP Group (“4SQRG”). In fact, it was a replica of the World War Two Paraset Spy Radios used by the Resistance and OSS Agents behind the lines. Cool!

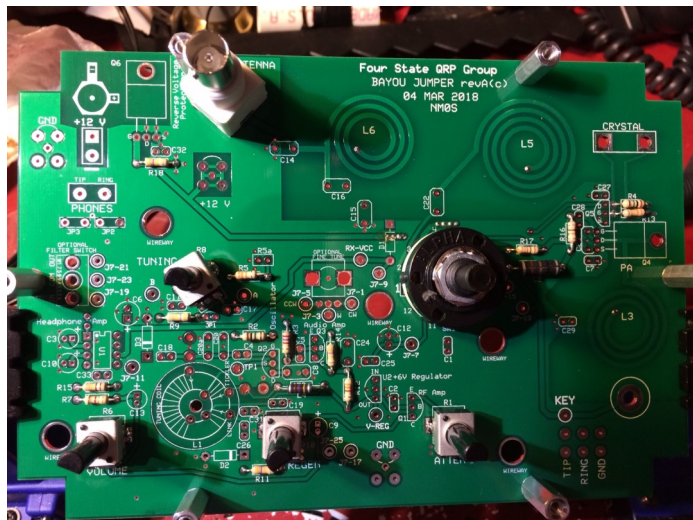


## Examples of original Parasets

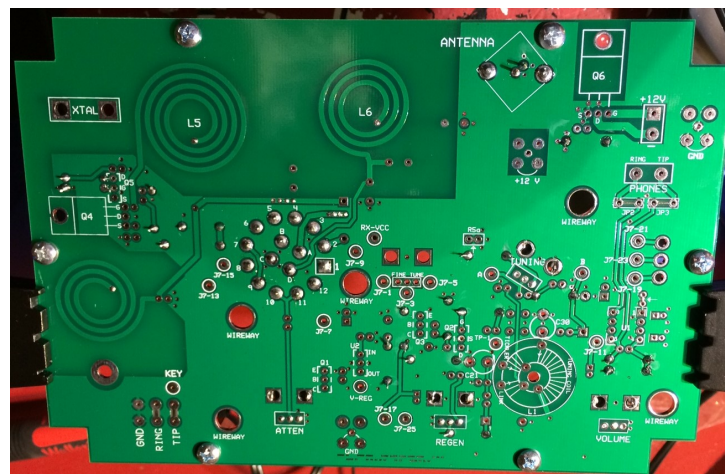
So, I bought and built one of the kits and it worked! Using my indoor 40 Meter Dipole, my initial QSO was with a W9 member of 4SQRG, (on 7.122 where I discovered BJs hang out). Another QSO followed shortly thereafter, (on 7.030), with F/ON6JUN, a Special Event Station in Normandy France, commemorating the anniversary of D-Day. How appropriate!

*Continued on the next page...*

The BJ is comprised of two separate circuits, a crystal controlled transmitter and a regenerative receiver, the same as the original Paraset. Though of simple design and with a low parts count, the receiver provides sensitivity and selectivity measured to have a Minimum Discernible Signal of better than -120 dBm. Switching between transmit and receive is performed with a rotary switch, just as was done with the original Paraset. As in the original Paraset, there is also a built in CW Key. Technically, the 2N7000 Master Oscillator, Q5, works against the gate capacitance of the IRF 510 Power Amplifier, Q4, as an unusual inverted Colpits oscillator. The Power Amplifier Q4 is tuned to operate in the Class E Mode, generating 5 Watts from 13.6 volts, at better than 85% efficiency. The entire Transceiver was designed to fit inside the smallest of 3 standard wooden boxes available as a set from Hobby Lobby. Although the Manual hypes the Receiver's selectivity, I found that you still hear stations off to either side creating, the nostalgia of radio audio heard in old World War Two movies.



Circuit Card Assembly, Component Side



Circuit Card Assembly Solder Side

I picked up a second unbuilt BJ kit (BJ#2) this summer from a 4SQRP Member who offered it on the 4SQRP BJ Sub-group Reflector. (BJ Kits have sold out and were "Retired", although there is renewed interest and some indication of a BJ Kit resurrection possibly, as a 20 Meter version.) The BJ in the smallest box fits nicely inside the largest box with plenty of room, as pictured, for a mini cw key, power cables, earbuds, counter poise, battery pack, coax jumper, BNC adapter and crystals. With the middle size box remaining, I found that I could build a box within a box to house BJ#2.



Completed Paraset kit in wooden box with accessories

I made several mistakes in construction of BJ#2. Two IRF510 Mosfets were supplied one, of superior quality, intended for the Power Amplifier and the other, for polarity protection. Scrupulously using my magnifying glass to identify and confirm each and every part, I, unfortunately failed to notice that the two IRF 510s had been conveniently marked Q4 and Q6 with pen and ink on the reverse side of their heat sink until, I had incorrectly soldered Q4 into Q6's spot. Co-Designer Jim, N5IB, promptly responded to my Reflector inquiry advising to cut it off, get a new one and then proceed. First Mouser Order. Upon completion however, the BJ receiver would not go into regeneration, despite trying all of the advised adjustments. RF Hill Cavalry to the rescue. Dan, WA3NFV, (with Jim, WA3EHD in the Bull Pen), spent an hour and a half, on a Saturday night tracking down a schematic and, over the RF Hill Repeater, talking me through trouble shooting the circuits until we located the culprit open L4 inductor. Second Mouser Order.



# Markey Park 10M QRP

This is Len N3EOE (top) and Dan WA3NFV during our QRP adventure at Markey Park on Sunday 27 September. Len is holding his 60s vintage "kids" Walkie-Talkie that now operates on 28.375 MHz, AM in the 10 meter band. The power output is estimated to be around .050 Watts! On the little table is two more of the units and a high powered 4 Watt unit. Len is "standing" in the antenna for that unit!

