W3BN W3CCH

The Reading Radio Club Bulletin

Volume 59 Issue Number 2 February 2021

The Reading Radio Club Was Established March 10th, 1921 , ARRL Affiliated February 17, 1922

A Monthly Publication of the Reading Radio Club
Scott (KC3PCS) & Lori Scheirer, Editors (kc3pcs@gmail.com)
More information available at http://www.readingradioclub.org

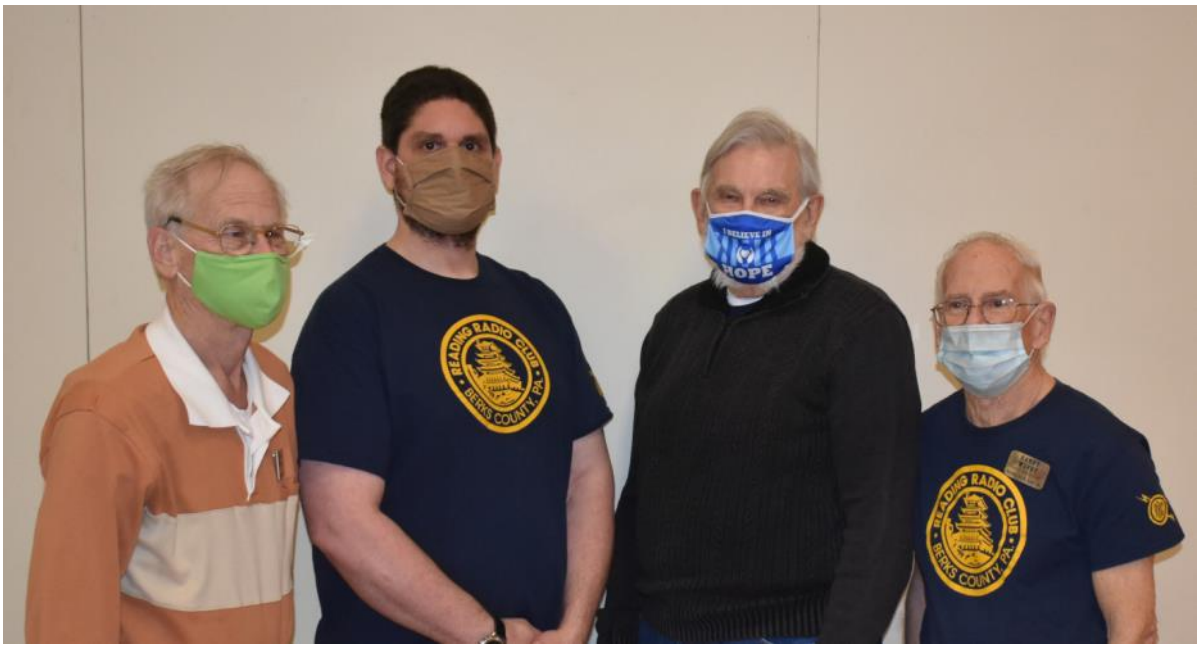
Inside the February 2021 edition of The RRC Bulletin:

Please note: Over the next few months, you will notice changes to the RRC bulletin. We are streamlining the bulletin. Certain features will be available online only at our website. Our goal is to make the Bulletin a more informative, less repetitive, and a smaller file size.

Please check out our website:

http://www.readingradioclub.org for more features and up to date information.

YOUR 2021 RRC OFFICERS



L to R - Nate Rosenthal, N2ADD, Treasurer, Chris Schlegel, K3ADA, President
Joe Pietruszynski, AC3DI, Vice President, Harry Hoffman, W3VBY, Secretary

Board of Directors & RRC Officers

2020 RRC OFFICERS

***** Please note that as of the publishing of the bulletin, the BOD had not met to vote on 2021 officers. *****

PRESIDENT	Chris Schlegel, K3ADA	Sutehk.CS@gmail.com	(23)
VICE PREZ	Joe Pietruszynski, AC3DI	JFP0250@comcast.net	(21)
SECRETARY	Harry Hoffman, W3VBY	HarryHoffmanJr@juno.com	(22)
TREASURER	Nate Rosenthal, N2ADD	NateØ1PA@comcast.net	(23)

2021 RRC AT-LARGE BOARD MEMBERS

Art Becker, KB3LDI	ABeckerBeConCo@msn.com	(21)
Jason Potter, K3WDF	Radio.K3WDF@gmail.com	(21)
John Engle, AB3SR	JEngle@830weeu.com	(22)
Ronald Waszk, K3RJW	PolishPICL@aol.com	(23)
Scott Scheirer, KC3PCS	kc3pcs@arrl.net	(22)

The two-digit number, in brackets, to the right of the BOD member's email address, is the year that their term ends on December 31.

(A normal 3-year term runs from Jan. 1 to Dec. 31, three years later).

The four officers of the RRC are elected from the BOD by the NINE board members at the annual RRC Board of Directors Reorganization Meeting held in January of each year. Please note that ALL nine BOD members have voting power.

Please note: The Board of Director Minutes are available online at http://www.readingradioclub.org or in written form by request.

meetings

Next Board Meeting: **Tues, February 9th at 7:30 PM via Zoom**

Next General Meeting: **Fri, February 12th, 2021 at 7:30 PM**

Topic: Airship History – "The Flying Carriers". (Part 2)

Location: Berks County Agricultural Center

To find the Berks County Agricultural Center,

1238 COUNTY WELFARE ROAD, LEESPORT, PA 19533

(Bern Township). Go north on Route 183 out of Reading, pass the Reading Regional Airport, continue about a mile to the traffic light controlled exit intersection and take a LEFT at "W. LEESPORT RD" (A CVS is on the northwest corner). Pass the "BERN EVANGELICAL LUTHERAN CHURCH" on your right. Then take the RIGHT at the next "STOP" sign (County Welfare Road). Go about a mile; the Berks County Agricultural Center is on your LEFT. Use the entrance at the ***REAR*** of the building.

WEB PAGE OF THE READING RADIO CLUB

= =

Scott Scheirer, KC3PCS, & Christopher Schlegel, K3ADA Web Page Committee Co-Chairs

www.readingradioclub.org

or

just Google W3BN

http://www.facebook.com/RRCW3BN maintained by Chris Schlegel, K3ADA

UNITED STATES POSTAL SERVICE MAIL (USPS)

= =

Send **ALL** USPS Mail pertaining to the Reading Radio Club to the **OFFICIAL,** and long term, (Since Oct. 1986), Reading Radio Club mailing address:

ATTENTION TO **
READING RADIO CLUB INC
PO BOX 13777
READING PA 19612-3777

** = Officer, title, or name of the person or persons to whom your correspondence is specifically addressed.

Prez Says

Hello All,

Many of you have heard me say the phrase "If you get bored with Amateur Radio, you're not doing it right." This was a thought I had while pondering the many facets of the hobby and what all it has to offer. In rolling this thought around my head, my focus was on all of the things that the radio arts entail such as HF operations, satellite operations, kit building, antenna building, emergency communications, and many more aspects of the hobby that I and other ham radio operators enjoy. There are so many things to try, do, and learn that I can not fathom becoming bored with the hobby.

This evening while listening to the weekly net, I did my usual updates and maintenance on my Linux computer that is attached to a mesh node which is in turn connected to the network in Pottstown and Montgomery County. This computer serves several chat services and a mirror of the AREDN (Amateur Radio Emergency Data Network) firmware and package repository for availability on the mesh. This mesh network is a conglomeration of internet and RF connected nodes that are all interconnected and essentially act as a separate network (the end goal is to eventually have enough "nodes up" to have a completely RF connected network that is independent of the internet). While updating the Linux machine, it occured to me that I would not know half of what I do about Linux had it not been for my interest in the mesh network. An unintended consequence of this aspect of Amateur Radio. This unintended consequence is another example of how our hobby branches out into so many other skills that may not be RF related.

What "unintended consequences" have you learned due to the hobby?

73,

Chris, K3ADA

For more information on the AREDN mesh network check out this link: https://www.arednmesh.org/

The Reading Radio Club is an IRS-designated 501 (c)(3) organization holding tax identification number 23-1660585. Contributions to the Reading Radio Club are tax-deductible to the extent allowed by law.

RON'S RAVINGS
INCLUDING THE FOH HOLE
&
SIMPLEH MEETING ON THE AIR

by Ron Wazsk, K3RJW

CQ CQ CQ Here are the latest on Fox Hunting the Pagoda situation and SMOTA?

1.Fox hunting to resume on 20 Feb 2021. As of this time, the church at 17th and Fairview will be the venue on the bottom floor large room. It will start at 1300 hours. Thanks to Kermit for getting this endeavor moving on and making contact with the Church people to get this set up. This was supposed to happen in February 2020, but everyone knows why it fell through the floor boards. I am hoping we have a good group of hunters. I will have 4 foxes set in the room for you to try your best to find them. I will also have ONE gift for the first amateur to tell me where the fox is hidden. Also what frequency it is transmitting on. The four frequencies will be announced for the 4 foxes. You must report to the controller (ME), each time you find a fox.

2. Pagoda, I have handed out a few awards recently mainly because of the SMOTA meetings on the air and allowing those that want to try for it. Get your list of 10 to me for the award with the information that is found on the web site: http://www.readingradioclub.org.

3. SMOTA is on going monthly. Listen for the next SMOTA on the Friday evening nets on 91.

It will also be announced at the general membership meeting on the second Friday of the month too. Last SMOTA was this month (January) and was run from South Mountain at WA1ELA's quarters driveway. It reached 26 amateurs and was another success. I am trying to pick a location for February's SMOTA and a date. Stand by for that information.

Ron W, K3RJW

73

Birth Announcement

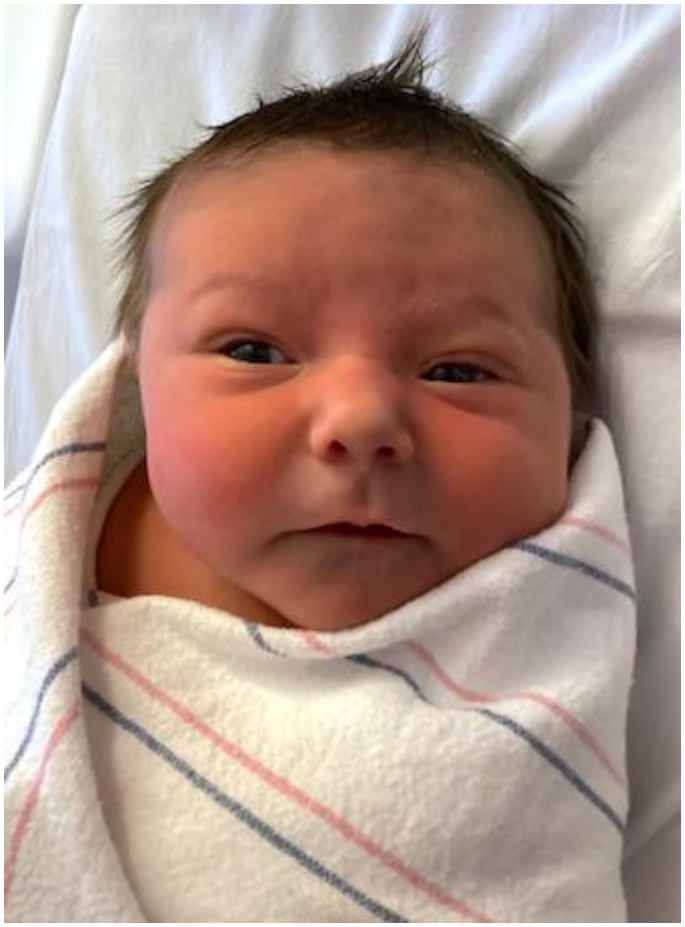
We are proud to announce the birth of

Xiomara Aurora Upham,

born January 29th, 2021 to

Harris (KC3PBI) & Tara Upham.

We wish them the best with their daughter.



RRC 2020 ARRL FIELD DAY RESULTS

= =

By: Rich Ahrens, W3WJC (01.20.2021)

The 2020 ARRL Field Day operating event was held on June 27 and 28, 2020. The Reading Radio Club was a participant along with six RRC members operating from their home stations in the 1D Class.

An abbreviated summary of the results was published in the December 2020 issue of QST on pages 69 through 76. The summary in QST only posted the aggregated scores of the various clubs and their members that took part in the 2020 Field Day exercise,

The complete results, with all the stations that entered, is posted on the ARRL Web site.

This was an unusual Field Day because of the COVID-19 pandemic cutting into the number of in the field participants. However, the ARRL reported that there was an increase in the number of entries.

This year the Field Day rules were changed to allow home stations (Class 1D), operating off the commercial power grid to contact any other Field Day station. The league has said that this would be a one time change because of the COVID-19 raging in June 2020. I personally would like to see this rule modification continue.

The rules also provided for members operating Class 1D, to submit their score and have it added to the score of their "In the field" station. In the case of the RRC, the scores would be added to the W3BN/3 Field Day operation at Heritage Park in Sinking Spring, Pennsylvania, where 31 RRC members participated in the three transmitter (3A) class, and worked 211 stations, for a total score of 1,270 points.

This aggregated score was 4,149 points, with six stations sending in their score for the RRC. The W3BN Field Day site contributed 1,270 points with the balance of the 2,879 points contributed by the six members for the total aggregated score of 4,149 points.

The following RRC Members submitted their scores for the RRC.

The scores are as published by the ARRL.

		CONTACTS	POINTS
K3ATO	Hal Messer	1,067	2,170
W3WJC	Rich Ahrens	261	311
KT4JF	Don Cwynar	53	156
W3ITH	Jim Nicholas	25	100
KB3LDI	Art Becker	15	80
W3SMP	Shawn Pauley	3	62
W3BN/3	RRC Field Day	211	1,270
			4,149 Total Aggregated Score

The following groups, in the ARRL Eastern Pennsylvania Section (EPA), entered in the 3A class. Their scores as published by the ARRL:

		CONTACTS	POINTS
WC3R	South Mountain Radio Amateurs	302	1,858
N3NZ	Marple Newtown A R C		
	and the Mobile Sixers R C	268	1,508
K3LV	Lebanon Valley Society of R A	154	1,294
W3BN	**Reading Radio Club**	**211**	**1,270**
K3IEC	Cumberland A R C	10	970
W3LP	East Penn A R C	149	848

With another 100 contacts the Reading Radio Club would be in first place in the Eastern Pennsylvania Section 3A class, in 2020. Maybe in 2021.

Let us start planning the 2021 RRC Field Day, that is scheduled for Saturday and Sunday June 26 and 27, 2021. Only a few months away.

ARRL the national association for amateur radio®

ARRL on the Purpose of Amateur Radio

For over 100 years amateur radio and ARRL — the National Association for Amateur Radio — have stood for the development of the science and art of communications, public service, and the enhancement of international goodwill. Amateur Radio's long history and service to the public has solidified the well-earned reputation that "Amateur Radio saves lives."

Amateur Radio Operators, due to their history of public service, their training, and the requirement that they be licensed by the FCC have earned their status as a component of critical communications infrastructure and as a reliable resource "when all else fails."

Amateur Radio is about development of communications and responsible public service. Its misuse is inconsistent with its history of service and its statutory charter. ARRL does not support its misuse for purposes inconsistent with these values and purposes.

2021 AM Rally

160, 80, 40, 20, 15, 10, and 6 meter Amateur Radio Bands as your license class permits.

0000Z Saturday February 6 - 0700Z Monday February 8
(7:00pm EST Friday February 5 - 2:00am EST Monday February 8)

This event is open to any and all radio amateurs who are capable of running full carrier amplitude modulation (standard AM).

You can use any type of radio equipment: Modern, Vintage, Tube, Transistor, Software Defined, Military, Boat Anchor, Broadcast, Home Brew or Commercially available radio

All are welcome to join in on the AM fun

To maximize your chances of finding AM QSOs or to get a response when calling CQ in AM, try these "AM Hotspots":

Band	Frequencies	Best Times
160 Meters	1.880-1.885, 1.930, 1.945, 1.975-1.995 MHz	Some mornings prior to or not long after sunrise, Evenings
80 Meters	3.730-3.740, 3.870-3.890 MHz	Mornings to mid-day, late afternoons, and evenings
40 Meters	7,160, 7.280 - 7.295 MHz	Late mornings, afternoons, and early evenings
20 Meters	14.286 MHz	Daylight hours
15 Meters	21.425 MHz	Propagation dependent
10 Meters	29.000 - 29.200 MHz	Propagation dependent
6 Meters	50.4 MHz	Propagation dependent

These commonly used frequencies can be good starting points. As activity grows, expand to other frequencies to prevent congestion and excessively large round tables. As always, PLEASE be considerate of existing QSOs and Nets, and ensure that the frequency is clear before calling "CQ, AM Rally".

Additional information can be found at www.amrally.com

RRC MEETING ON THE AIR (RRCMOTA)

= =

By: Rich Ahrens, W3WJC (01.29.2021)

Check into the **RRC MEETING ON THE AIR** on the Friday evenings that we do not have an in-person meeting. The net, on 146.91 MHz, starts at 8:00 p.m. with the latest AMATEUR RADIO NEWSLINE REPORT from the West Coast.

We then have an exchange of information that may be of interest to the members of the Reading Radio Club as well as those that are not RRC members.

The last part of the net is a roll call where we usually have 13 to 56 stations check-in and test their two-meter FM analog equipment.

The **C**ontinuous **T**one **C**oded **S**quelch **S**ystem, (CTCSS) frequency is 131.8 Hertz (3B). The CTCSS is often referred to as "PL" (Motorola's trade name) or "Channel Guard" (GE/Ericsson's trade name).

The net has been in operation since Friday January 21, 1994, when we had 13 check-ins during that first session, 27 years ago.

On Friday January 29, 2021, we had session number 1147. Jim Nicholas, W3ITH was the Net Control.

The next RRCMOTA will be on Friday February 5, 2021, starting at 8:00 p.m., on the Reading Radio Club 146.910 MHz W3BN analog repeater. Art Becker, KB3LDI, will be the Net Control for session number 1148, on Friday February 5, 2021, starting at 8:00 p.m. local time.

NOTE: The next in-person RRC meeting is scheduled for Friday February 12, 2021, at the Berks County Agricultural Center, in Bern Township. Put the following address in your GPS device or GOOGLE MAPS:

1238 County Welfare Road Leesport PA

Face **MASKS** must be worn

FYI: AMATEUR RADIO NEWSLINE is the "Amateur Radio's independent on the air news and bulletin service" and is not a service of the American Radio Relay League. (ARRL).

Everyone, RRC Members and those that are not members,
are invited to tune in and check into the,

READING RADIO CLUB MEETING ON THE AIR

= =

THREE SEVEN TEN
2 METER ACTIVITY INITIATIVE
= =========

By: Rich Ahrens, W3WJC (09/29/2018) (updated 1/27/2019)

You do not need to be IDing on repeaters over a period of a few weeks before you conclude that most repeaters throughout the United States are underused. You ID your station. . . . ."This is KA3XYZ listening on 91" and no one returns to your call ID –

IT MAY BE THAT NO ONE IS LISTENING.

Here is an idea that MAY, MIGHT, COULD stimulate some conversation (QSOs) on the Reading Radio Club 146.910 MHz repeater. We might call it the "Three, Seven, Ten" gathering or maybe "T S T" for short.

The thought is to turn on your 2-Meter transceiver at 3:00 p.m., 7:00 p.m., and 10:00 p.m. Identify your station and see if anyone comes back and wants to shoot the breeze. No net control, just some informal Ham Radio conversation.

Let us try this and see if we can pep up activity on the Reading Radio Club, W3BN, 146.910 MHz repeater. The CTCSS is 131.8 Hz.

Catch up with Jim, N3PRJ, he is usually on the 3:00 p.m. session.
Thanks Jim for being a regular on the RRC 146.910 MHz repeater.

VE Exams

Are you looking to take your amateur radio test? Looking to upgrade? If we get enough interest, we can set up a test session before a meeting. Please contact Harry Hoffman Tel: 610-678-8976 or email: harryhoffmanjr@juno.com.

Don't forget we have a test session scheduled in June at Field Day.

To all Hams in the Delaware Valley,

The Zoom meeting is scheduled to begin at 7:30 pm on the First and Third Tuesday evenings of the month. See link at the bottom of this email.
I am inviting hams from PWA, Warminster ARC, Packrats, Philadelphia Digital Radio, Phil-Mont, DVRA, Marc, Marple-Newtown, Reading RC and maybe a few more. Dave (N2VUZ) is helping with the current estate and Charles (KS3Z) may have another estate for us to look at as well. Attached is a doc file with items from the W3AEH estate. Dave has some items up in Telford and I have some here in Willow Grove. These are from an estate, prices listed are "or best offer".

I was just down to the W3AEH estate yesterday and picked up more items; Will list them later but for now I am reducing price on the Heathkit oscilloscope, signal generator and analog VOM, now $35. There are other Heathkit items but no radios. Look on the PWA "For Sale" page;

https://pennwireless.org/adverts/

I ask everyone to take a full sheet of paper - 8-1/8 x 11 - and write your first name, call sign and either your email address or a phone number. Please show it to us, when you display your equipment. This will allow interested parties to contact you off the Zoom meeting.

I will go over the rules we have used for the PWA "on the air" Swap Net.
1; No more than 3 items per person / per night. There's always next week to bring up 3 more.

1a; Estates may show up to 6 items per night.

2; No up front costs. If your item does sell ?? then the seller will make a donation to the club.

3; As per Fcc rules, no haggling price over the air. Mention the asking price and haggle on the phone.

4; Make up a quickie email listing your items for that week. Nothing long and drawn out. Just the 3 items and be prepared to send it to anyone who asks... not only people on the PWA email list.

5; No number 5, four is enough.

Our objective is to offer a virtual place to sell items including estate radios, test equipment, radio parts and tools to local radio operators and builders in the tri-state area -- and not to place items up on eBay, QTH, QRZ or other online auction houses where we need to pack and ship across country. Sell local and make arrangements off the Zoom for local pickup. We do not offer any warranty or guarantees of items sold other than "hey it's working" or "no it's not working". Buyer beware and please don't shoot the messenger. We are only here to offer an alternative to Hamfests until we get beyond the current virus. Currently the only Hamfest I see open is Sussex Delaware in April. All others are shut down until further notice.

Note; Proceeds from current estate items that do sell will go to the ALS Foundation as per Sarah's wishes. Allan (W3AEH) died of complications from Lou Gehrig's disease. That will be less the typical 10% commission to either RF Hill or Penn Wireless Asso.

Mark WA3QVU

Thank you to Steve (KB3ORG - PWA President) for allowing us to use his paid Zoom account so we don't run up against the 40 minute time-out.

Topic: Philly Swap Net on Zoom
Time: Jan 19, 2021 07:30 PM Eastern Time (US and Canada)

Join Zoom Meeting
https://zoom.us/j/99277623559?pwd=aFpTRDduakVONmdDT3FVcFA3c0pwdz09

Meeting ID: 992 7762 3559

Passcode: 011921

You do not need to wait for the admin to let you in, but your mic is automatically muted. Only people from the United States are allowed in... All else is blocked.

Antennas and Mounts

Several ¼ Wave Mag-Mount antennas with instruction sheet. $5.00/ea

https://pennwireless.org/advert/several-1-4-wave-mag-mount-antennas/

Pro-Am Mag-Mount with 3/8-24 Thread. $5.00

https://pennwireless.org/advert/pro-am-mag-mount-with-3-8-24-thread/

Attenuators

https://pennwireless.org/advert/rf-attenuators-hp-and-other/

Projects Unlimited Switchable attenuator D-418 1 thu 20 DB switches 50 ohm input, works correctly except 3 db position is not correct. With manual. $5.00

HP Switchable VHF attenuator 355D Functional on all positions. $25.00

Bridge Rectifiers

Motorola bridge rectifier model MDA 972-4.

These are rated at 300 volt and 16 amp. Peak forward recurrent is 60 amps with a single cycle rated at 250 amps. (built for surge protection – starting a DC motor?) Probably need to bolt to a steel or aluminum plate with silicone grease – each unit is 7 inches long. Outer two posts are marked Yellow — inner two marked black and red

Five available $1.00 each

https://datasheet.datasheetarchive.com/originals/distributors/Datasheets-X1/DSAA858000-276.pdf

https://pennwireless.org/advert/motorola-rectifiers/

FRS and other Walkie Talkies

Motorola FRS transceivers. Functional (2 units, price per unit) $10.00

GE General Electric Walkie Talkies 3-5952B 49.860 Mhz, functional (price per unit) $5.00

Heat Detector

Heathkit Heat Sniffer NE-2112 Works, with manual. $5.00

https://pennwireless.org/advert/heathkit-heat-sniffer-ne-2112/

Isolation Transformers and Filters

Stancore Isolation x-former P-6161 Pri 105-115-125 switch / Sec 115v at 250 watts. $15.00

TDK Plug-in line filter rated at 4amp $10.00

https://pennwireless.org/advert/tdk-plug-in-line-filter/

Oscilloscopes

Heathkit Dual Trace Scope IO-105 Solid State. DC to 15 Mhz, .05 to 20 Volts per cm. CRT is ok and it does function in all the modes it was tested in. It does have some dirty pots and switches which will need servicing. Produced from 1973 to 1975, with manual. $35.00

https://pennwireless.org/advert/heathkit-oscilliscope-model-io-105/

Heathkit Scope Calibrator G-4505 Functional on all switches, etc. $25.00

https://pennwireless.org/advert/heathkit-scope-calibrator-ig-4505/

NLS 15Mhz Portable Scope with probes, case and manual. Working but needs new batteries. $25.00

https://pennwireless.org/advert/nls-15mhz-portable-scope/

Relays

Unusual Cutler Hammer relay with 50 amp “make and break” contacts. 28V coil. $10.00

https://pennwireless.org/advert/cutler-hammer-50amp-relay/

Various Relays both 115v AC and 28v DC Coils. $5.00/ea

https://pennwireless.org/advert/various-relays-both-115v-ac-and-28v-dc/

Signal Generators

Heathkit Sweep Generator IG-1275 Linear/Log Sweep Generator. Powers up and is functional. With manual $35.00

https://pennwireless.org/advert/heathkit-sweep-generator-model-ig-1275/

Multiple Soldering Irons and Guns;

https://pennwireless.org/advert/soldering-irons-and-guns/

WEN Soldering Iron “75” Functional. $20.00

Weller Gun – 135w. $15.00/ea

Ludel gun – 80w $10

Several smaller irons. $10.00/ea

RF Probes and Field Strength Meters

Heathkit “Mobile Tuning Meter” PM-2. This is actually a field strength meter, magnet in bottom of unit to mag itself to a metal dash. $10.00

https://pennwireless.org/advert/heathkit-mobile-field-strength-meter-model-pm-2/

Works correctly. $5.00

Snif-it Dycomm DS-1 RF probe, Attaches to 50 uA meter (Simpson 260 for example) with instructions. Works correctly. $5.00

Meca Directional coupler 730-20-2M Uses SMA connectors. $10.00

Hickok Terminating Resistor 195994 75 ohm, 1.5 watt. $5.00

RF High Bridge

Alford Manf Co. Hybridge 1233E 2.5 to 110 Mhz, functional, no further testing. $5.00

GR General Radio Crystal Diode Modulator 1000-p6 Functional, no further testing. $10.00

Tool Kits

2 Larger Tool kits. Many hand tools, needle nose pliers, side cutters, etc. Some very nice tools. $40.00 either kit.

https://pennwireless.org/advert/two-portable-tool-kits-w-small-tools/

Several Smaller Tool kits. Needle nose pliers, side cutters, etc. Nice tools. $10.00

Variacs

2 GR General Radio bench grade variacs. Pri 120v Sec 0 to 130v at 5 amps. Nice working units. One with a 2-prong receptacle needs cord – one with 3-prong receptacle Ok. $35 and $45

https://pennwireless.org/advert/general-radio-5amp-variacs/

Volt Ohm Meter and other Meters

Heathkit VOM IM-105 Solid State With case and leads. Nice working unit, accurate with new 15v battery and manual. $35.00
https://pennwireless.org/advert/heathkit-vom-model-im-105/

GE General Electric AC Ammeter 30 Amp. $25.00

Pyramid Instrument AC Amp / volt meter Working, Lead insulation is cracked. $10.00

Weston Ohm Meter 689 Functional, two scales: 5000 ohm, 50000 ohm. Fairly accurate. Takes D cell battery. $10.00

Various Analog Meters – Call / email with needs. $3ea

Watt Meters

https://pennwireless.org/advert/bird-termaline-watt-meter-and-dummy-loads/

Bird Termaline 611 15 & 60 Watt, 30 to 500 Mhz. Functions, manual $85.00

Bird Termaline 6254 Functional, 0.5 W, 30-500 Mhz $40.00

Bird Termaline 50 Watt oil filled Coaxial Resistor, labeled 50 ohms, measures 51 ohms $25.00

Bird Termaline 81 50 Watt oil filled Coaxial Resistor, labeled 51.5, measures 54 ohms $25.00

Electro Impulse Lab PM-4 600 mW / 150 mW, 600 mW position works, 150 mW does not. Has hand draw schematic. $25.00

** SOLD ITEMS **

KLM 26 Element 432 Antenna Good condition. $50.00

440 repeater cavity with manual. Able to pass a 400Mhz signal. $15.00

HP Test Oscillator 651A Meter does not work correctly. It does indicate change with the amplitude control but is offset from 0 (not a mechanical meter adjustment) However, it is functional, with manual. $50.00

EICO RF Signal Generator 330 Solid State. 100 Khz - 54 Mhz, audio modulation does not work. $15.00

EICO RF/Audio Signal Tracer 150 Solid State, 1 mV RF minimal level, 65 mV audio level, functional. $15.00

VIZ RF Signal Generator WR-50C Solid State. 85 Khz to 40 Mhz, 10.7 and 455 sweep functions, audio modulation does not work. $15.00

Cesco Fieldometer Continental Ele & Sound Co. MC RF field strength meter, with manuals. Functional. With probe. $15.00

Cesco Fieldometer Continental Ele & Sound Co. MC RF field strength meter, with manuals. Functional. No probe. $15.00

Various Analog Meters. 8 sold/ $24.00

Please note: Ads placed here will run for 2 bulletins

unless you let the editor know you still want them posted, deleted, or changed.

List your items here.

Contact the editor.

Please Note: The Editors and/or RRC are not responsible for items listed on this page.

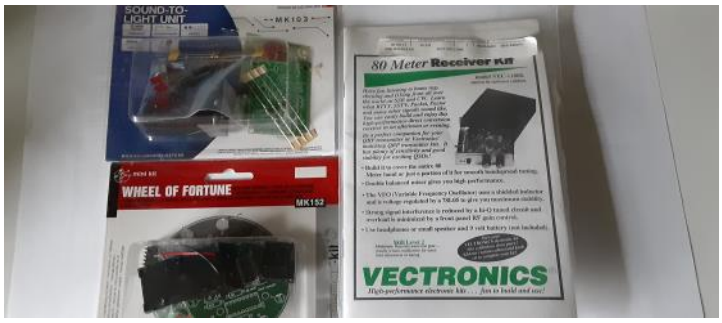
Descriptions & Pictures are supplied by the Seller.

KITS For Sale:

Vectronics 80 meter receiver	$35
Sound to light unit.	$22
IR remote checker.	$15
Wheel of Fortune.	$20

These are basic printed circuit kits. Follow the instructions and they should be fun to build and hours of fun to use.

Don W3FCT 610 693 5945



For Sale

QST Magazines, 1960s to present. Good condition.

Low price.

Call Bill Wentzel, K3BW

at 610-488-0231.

WHY DOES THE POWER OUTPUT OF THE RRC REPEATER DRIFT DOWN WHEN USED FOR AN EXTENDED TIME?

By: Rich Ahrens, W3WJC 01.24.2021

Chairperson of the RRC 146.910 MHz, W3BN Repeater Operating and Technical Committee.

From time to time the topic of why the Reading Radio Club repeater power output goes down, when in use for an extended period, is discussed. This power decrease is a good thing and not a bad thing.

The Kendecom transmitter (Purchased by the RRC on December 14, 1999), that is in use in the RRC 146.910 MHz repeater, uses a Field Effect Transistor (FET) in the output.

When the temperature of a Power FET goes up, the gain goes down. In this respect the Power FET, is to some degree, self-protecting.

This is in contrast to a Bipolar Junction Transistor (BJT), that when it heats up, the gain goes up, and it is not self-protecting in any way shape or form. This sets up a BJT for thermal runaway and failure. This is particularly important since the repeater building is not air conditioned in the summer.

This is one of the reasons the Kendecom transmitter was selected back in 1999, because it uses a Power FET and not a bipolar transistor in the output stage. Twenty-two years of continuous service is proof of a good technical decision.

Remember, the difference between 30 Watts and 25 Watts is only about 0.80 dB and imperceptible at the receiving end.

During discussion, you may want to ponder the following observation, that Mr. Samuel Langhorne Clemens suggested:

"The truly marvelous thing about science is the great return in theory that one obtains for such a meager investment in fact."

Mr. Clemens is better known as Mark Twain who died on April 21, 1910.

THE ARES LETTER (Excerpt)

FROM THE ARRL JANUARY 20, 2021 ISSUE

= =

Editor: Rick Palm, K1CE
Via: Rich Ahrens, W3WJC (01.20.2021)

Letters:

The Problem with Complex, Menu-Driven Handhelds.

Responses

I agree with Walt Mahoney, KC1DON (*Letters: The Problem with Complex, Menu-Driven Handhelds* December 16, 2020 issue). He wrote "my recommendation would be acquiring simple, durable handhelds lacking novel features but enjoying reliable and robust construction."

Complex performance comes at the price of reliability. And, as Art Botterell said: "Stress makes you stupid." In emergency and disaster recovery situations communications are best robust, not complex. How to effect such a goal is another question.

Some years ago, after 9/11, I suggested that repeater control operators turn off the tone squelch, often a barrier to quick entry at such times. I still think that's a good idea. Training and drilling can make all the difference in the world. That's readiness. But the capacity to communicate in situations of stress should be simple. A complicated radio makes a good response less likely. -- *Bart Lee, K6VK, ARRL State Government Liaison, East Bay Section, California* (Lee served with the Red Cross as Deputy Communications Lead at the 9/11 disaster site. – *Ed).*

= = = = = = = = = =

Letters:

Walt Mahoney, KC1DON, makes an excellent point about the usability of many modern handheld transceivers. While I might disagree with his apparent distrust of surface mount technology, his major point about overly complex radios with multi-level menus is significant. Of course, one could also reasonably argue that the multi-layer menus of modern handhelds are actually a great improvement over trying to find those same complex functions through various combinations of poorly marked multi-function buttons as we faced with the immediate prior generation of handhelds.

The problem I see is that many of our tools have become too complex to be reliably usable in emergency situations -- not because the radio itself is not reliable, but mostly due to the operator. And this problem is exacerbated exponentially when multiple operators become involved.

Also, basic operating skill of most operators entering the service has declined. Certainly, there was a time when *any* licensed amateur had a high probability of successfully operating *any* radio simply on the basis of understanding what each of the controls was supposed to do. Now, even a highly experienced operator is likely to have trouble *finding* the controls on an unfamiliar radio. Don't even think about trying to operate an unfamiliar handheld in dim light while wearing gloves! Even when the buttons are readably marked, you still have to guess whether the function requires a "tap" or "press" for some number of seconds, and whether you need to tap one button before pressing another. -- *Tom Currie, N4AOF, Louisville-Jefferson County (Kentucky) RACES, AUXCOMM.*

= = = = = = = = = =

Letters:

Equipment Selection Criteria for EOC Installs

In the December 2020 issue of the *ARES Letter*, an article described criteria for selecting ham equipment for the EOC. I recommend specifying equipment that is as *simple to operate* as possible. It also needs to operate on *only* the bands necessary: We only need a radio to operate 80 and 40 meters, but such a radio is not easy to come by.

Case in point: Alabama ARES specified a good, but complicated HF radio, and 200 were purchased to be installed at hospitals around the state. Operators new to the radio could not sit down and simply operate it. There were too many unneeded features. It would have been *much* better to buy a simple-to-operate radio such as the Icom IC-718, at a third of the cost.

We can't rely on having a trained operator at the EOC. Someone is probably going to get thrown into the seat with no training on the radio and be expected to communicate *immediately*. If I could engineer a radio for our EOCs, it would have only two bands, 80 and 40 meters, with memories for fixed frequency for the relevant ARES nets, and only a volume control that had volume that could not be turned all the way down. Whisper mode would be the lowest volume allowed. The only switch would be power and PTT with a hand mic. -*John Klingelhoeffer, WB4LNM, Alabama Section.*

Membership Statistics

Send all license and mailing address changes to:
RRC Treasurer Nate Rosenthal, N2ADD, at NateØ1PA@comcast.net or N2ADD@arrl.net
Please let us know if you upgrade your license. Email to Scott, KC3PCS, and Lori at KC3PCS@gmail.com with updates.

By: Rich Ahrens, W3WJC - RRC Historian (01.12.2021)

STATS as of February 1, 2021

Full Voting Members:	*60*
Associate (Non Voting) Members:	*12*
Supporting (Non-Voting) Members:	*2*
Total:	*74*

1/4 of Full Voting Members required for a quorum. (15)

40 RRC voting Members are members of the ARRL (54%).

74 RRC Members receive the RRC BULLETIN via email (100%).

67 RRC Members have a Broad Band ISP (91%).

"Life Member"

Harry Hoffman, W3VBY
By RRC BOD action on November 10, 2020.

"Honorary Membership for Life"
Jim Nicholas, W3ITH
By RRC BOD action on December 8, 2009.

"Life Member"
Rich Ahrens, W3WJC
By RRC BOD action on June 6, 2006.

74 = Total RRC membership as of Jan. 12, 2021

68	=	Feb. 2020	96	=	Feb. 2009
92	=	Feb. 2019	117	=	Feb. 2008
61	=	Feb. 2018	118	=	Feb. 2007
64	=	Feb. 2017	128	=	Feb. 2006
65	=	Feb. 2016	130	=	Feb. 2005
72	=	Feb. 2015	137	=	Feb. 2004
75	=	Feb. 2014	131	=	Feb. 2003
79	=	Feb. 2013	132	=	Feb. 2002
93	=	Feb. 2012	135	=	Feb. 2001
98	=	Feb. 2011	128	=	Feb. 2000
97	=	Feb. 2010	132	=	Feb. 1999

There were 193 Members in 1978

Extra Class:	31	(42 %)
Advanced:	5	(7 %)
General:	17	(23 %)
Technician:	19	(26 %)
Novice:	0	(0 %)
No License:	2	(3 %)

May not total 100% due to rounding

Data max`y not be up to date

Checked for upgrades Sep. 22, 2020

By Rich Ahrens, W3WJC

RRC Calendar of Events

February 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3 QCWA Virtual Breakfast 9:30	4 Digi Net 146.91 7:30 PM	5 MOTA (8 pm)	6
7	8 ARES/RACES (8 pm.) 147.18	9 RRC BOD Meeting ZOOM 7:30 PM	10 QCWA Virtual Breakfast 9:30	11 Digi Net 146.91 7:30 PM	12 RRC Meeting AG Center 7:30 PM	13
14	15 ARES/RACES (8 pm.) 147.18	16	17	18 Digi Net 146.91 7:30 PM	19 MOTA (8 pm)	20 Fox Hunt 1 PM
21	22 ARES/RACES (8 pm.) 147.18	23	24	25 Digi Net 146.91 7:30 PM	26 MOTA (8 pm)	27
28						

PLEASE NOTE:
February 3rd, 2021—9:30 AM — QCWA Virtual Breakfast—W3BN Repeater
February 9th, 2021—7:30 PM —Board Meeting— ZOOM
February 12th, 2021—7:30 PM —Club Meeting— AG CENTER
February 20th, 2021—1 PM— Fairview Mennonite Church—1701 Fairview St, Reading, PA 19606

On the Fridays, that we do not have an in-person meeting we will have a "Reading Radio Club Meeting On The Air" (RRCMOTA) on the RRC 146.910 MHz repeater starting at 8:00 p.m. The CTCSS is 131.8 Hz.

February Birthdays: Christian Dudley, WA3JXW; John Bachman Jr, N3VKI; George Andrews, K3HGQ; Frank Rose, W3RO; Rich Rhoads, W3ALG

= =

The PRIMARY purpose of The Reading Radio Club Bulletin, is to provide, to the membership, timely information about the activities of the Reading Radio Club, Inc.

IN ADDITION, the RRC BULLETIN provides an easily searchable and accurate historical record. The RRC strongly recommends membership in the American Radio Relay League (ARRL) as well as membership in a local Amateur Radio Club.

= =

February 1st, 2021 - EMAIL VERSION STARTED ON FEBRUARY 10, 1998.
CIRCULATION: 90 RRC - 106 RRC ELIGIBLE NON-MEMBERS,
FIVE CLUBS WE SWAP BULLETINS WITH, PLUS 10 OTHER CLUBS.
THE FREQUENCY OF PUBLICATION IS MONTHLY.

= =

= =

Got an idea or an article for the Bulletin? Be sure to send it to us kc3pcs@gmail.com. All submissions are welcome.

Deadline for all bulletins is the 25th of the prior month. However, earlier is better. Please submit to kc3pcs@gmail.com.