



MEGAHERTZ TIMES



January 2024

W3AI

PO Box 336, Perkasio, PA 18944

R F Hill Amateur Radio Club 2024

President: John Morell KB3EWW

Vice Pres.: Cary Binder N12Q

Secretary: Unfilled

Treasurer: Tom Dumire K3KKI

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>

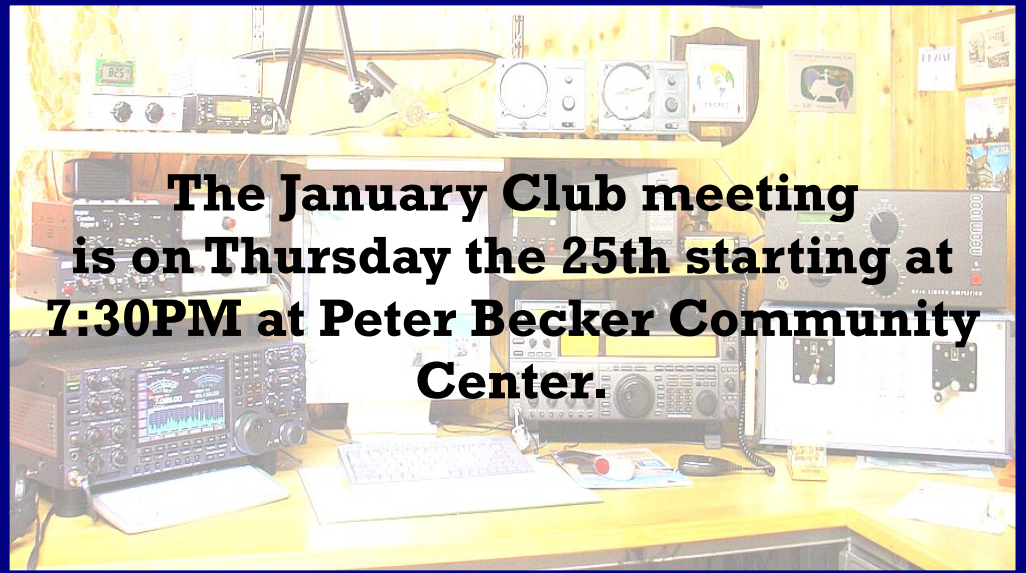
Email: rfhillarc@yahoo.com

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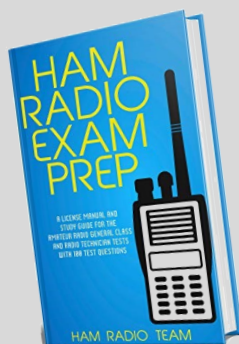
DEADLINE for article submission is 6 days before the meeting! Please submit in Open Office (.odt) or MS Word (.docx) format. No PDFs please!

Send to bill@tribley.org



RF Hill Amateur Radio Club
W3AI

VE TESTING



VE testing for Technician, General and Extra Class licenses is held at 6:00PM at the Indian Valley Public Library in Telford:

100 E Church Ave.
Telford, PA 18969



Scheduled VE Exam Sessions

2024 Dates:

March 18

May 20

July 15

September 16

November 18

Direct questions to Kevin KW3P at kw3p@arrl.net or by cell phone at 215-378-6978.



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 approx. 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

01/21, 01/24 WA3YLQ	04/03 KB3DEN
01/28 NE3I	04/04, 04/10 KB3DEN
01/31 W3WTT	
02/04 NE3I	
02/07 W3WTT	
02/11, 02/14 WA3YLQ	
02/18, 02/21 KB3DEN	
02/25 NE3I	
02/28 W3WTT	
03/03 NE3I	
03/06 KB3DEN	
03/10, 03/13 KB3DEN	
03/17, 03/20 WA3YLQ	
03/24 NE3I	
03/27 WA3YLQ	
03/31 NE3I	

Contact Jim KB3DEN with any questions or conflicts. 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

AREA NET LISTINGS

SEPPTN Southeastern PA Practice & Traffic Net	Su/W	8 PM	145.31-
EPAEPTN - EPA Emergency Phone/Traffic Net	Daily	5 PM	3.918 +/-
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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RF Hill SEPPATN December Report

QNI = 62

QTC = 2

In 7 Sessions

That's over 8 Check-in's per session. This year nets that fell on Christmas Eve and New Years Eve were cancelled. As a result, we only had 7 sessions in the month of December.

The net meets every Sunday and Wednesday at 8:00pm on the RF Hill Repeater. Everyone is welcome to join. Looking forward to the new year!

73, Jim KB3DEN

VE Exam Report

VE session was held January 15 at the Indian Valley Public library in Telford. No candidates appeared. VEs present to administer tests if needed:

- Lamar, K3UCI
- John, WB3ABH
- Ned, WQ3Z
- Joe Gura, K3KTM
- and Team Leader, Charles, KS3Z

Kevin, KW3P was isolating/recuperating from COVID, so I ran the session for him.

73

Charles, KS3Z

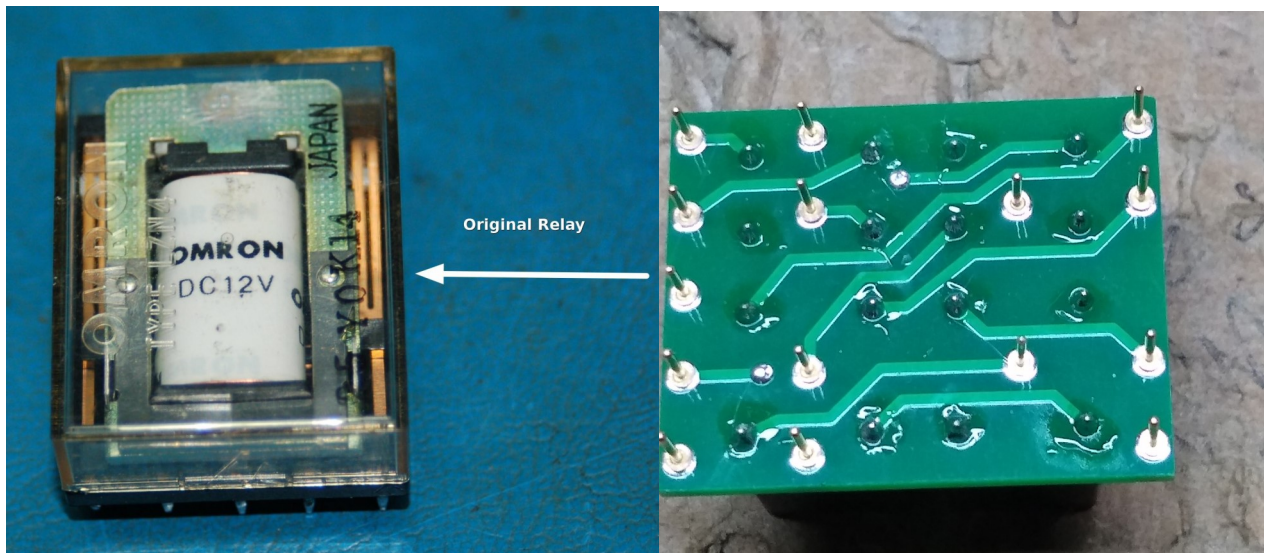
Kenwood TS-830S Repair



I have four Kenwood transceivers, three of which are hybrids. The TS-830S is a 1980's era transceiver and they occasionally require maintenance / repair, especially if they have not been used for a while. Most of the issues are with the internal connectors, deck switches, switches, potentiometers, and adjustments. However, sometimes part failures occur. In this case the original RL-1 relay partially failed on receive and is a common issue with this Kenwood hybrid transceiver.

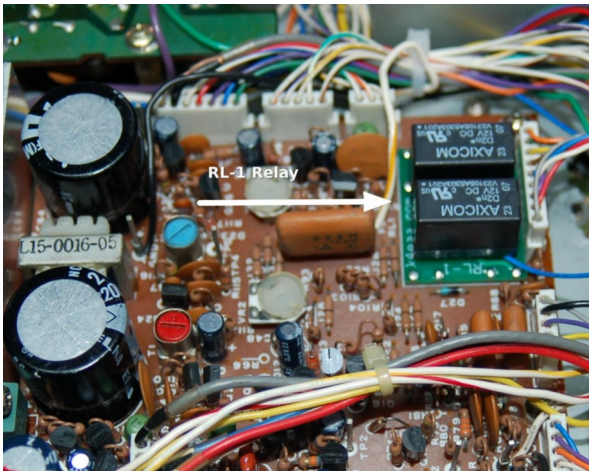
In this one case for my TS-830S, it had several common issues (previously fixed) and now the receive was intermittently low level occasionally after transmit. Transmit was fine.

If I tapped on the RL-1 relay, the received signal would clear up sometimes. See pictures. This switches the final bias, RIT, XIT, excit-er gain. Removing the cover on the relay and cleaning the contacts did not fix it. In receive, the contacts would make solid contact only occasionally. This relay, of course, is no longer made (Omron brand) and the Kenwood replacement part is no longer available. A web site for hard to find Kenwood parts makes a replacement that is plug and play. The site is <https://www.k4eaa.com>.

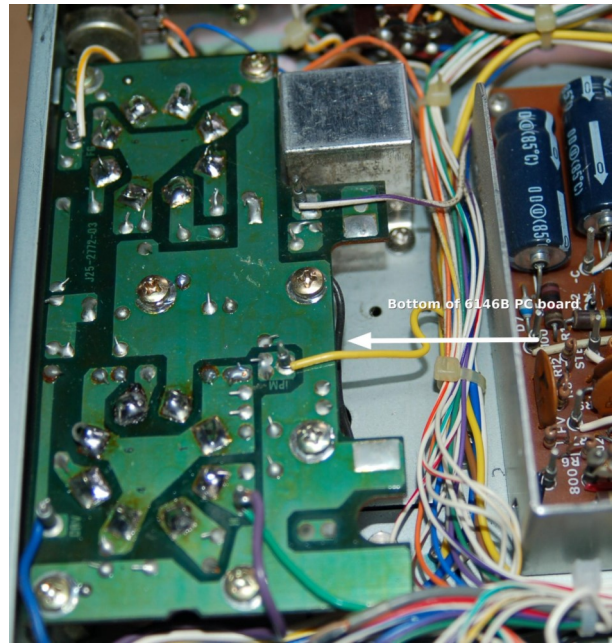


So, I bought the replacement relay board and it came quickly. It consists of two Axicon relays on a PC board. The relays are plugged into sockets for easy replacement (see picture). The Kenwood board that the relay is mounted on is the AF board on the bottom side of the 830S. The AF board must be removed to replace the relay, which is relatively easy. This is just a matter of unplugging connectors and removing the mounting screws for the board. Then the original relay needs to be un-soldered and the new relay board re-soldered in the same holes. You can't get it backwards because the pins only allow mounting it one way.

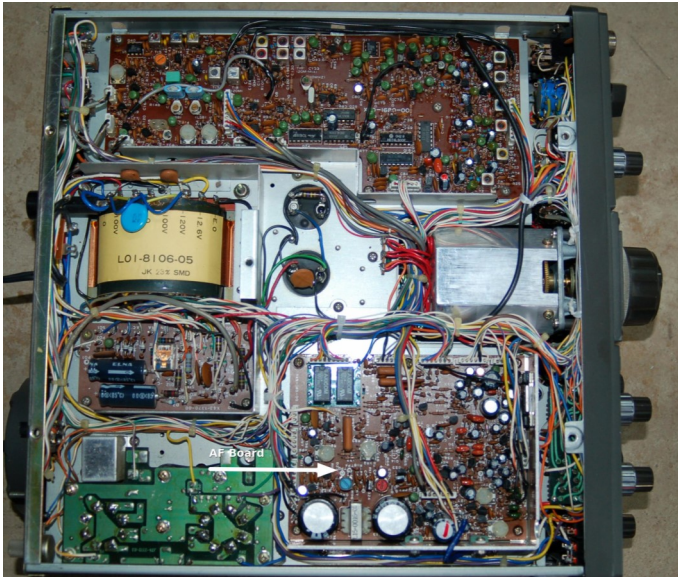
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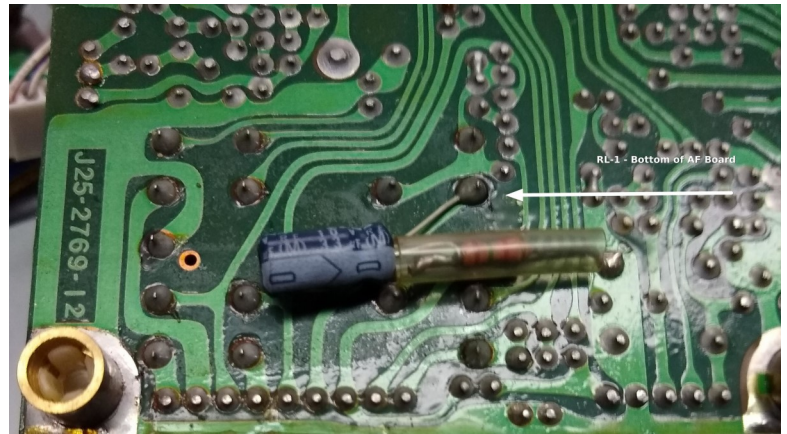
Replacement RL-1 Relay



Bottom of 6146B PC Board showing reflowed terminals



AF Board Location



RL-1 Terminals Viewed from the bottom side of the AF Board

Also, while I had the cover off, I checked the PC board that has the 6146B tube sockets mounted on them (see picture). They often will have broken solder joints on the tube socket pins and mine did. They were re-soldered and board was cleaned.

Some preliminary tests on the bench showed that both transmit and receive worked as expected. Transmit power was as expected and receive sensitivity was exactly where it should be using my HP generator. Next was an on the air test. Tuned up on 40m and found someone calling CQ and answered him. Good report from the other station and receive level appeared to be where it should be on a local 10 meter net.

I also bought two extra Axicon relays to have some spares.

Dave Carroll
N2VUZ