

THE eQRM

DECEMBER 2018



Merry Christmas

The BVARA in Beaver County Pennsylvania

Beaver Valley Amateur Radio Association

W3SGJ

Repeater 145.310 PL 131.8

On the cover: The BVARA wishes you a Merry Christmas!

Inside this edition

Who We Are	3	Radio Sport	11
This Month	4	Bits and Pieces	12
Propagation	6	It's Your Dime	13
Get a License or Upgrade	7	Of Interest to All Radio Enthusiasts	14
New License and Upgrades	8		
Membership	9		
Hamfests & General	10		

Check into our nets

Wednesday 2 Meter

8:30PM on 145.310 MHz PL 131.8

Wednesday 10 Meter

9:00PM on 28.470 MHz

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Who We Are

2018 BVARA OFFICERS

President: Jack Spencer, KZ3Z

Vice President: Dan Grazulis, KB3VSP

2nd Vice Pres.: Doug Lawrence, K3GTX

Treasurer: Pam Spencer, W3PMS

Secretary: Norm Trunick, K3NJT

Director: Tony Pavilonis, W6PEF

Director: Bob Winkle, N3AZZ

Trustee: Rich Soltesz, K3SOM

MONTHLY MEETINGS

E-Board meetings are now held the Saturday before the monthly club meeting.

VE testing begins at 5:00 PM.

Regular meetings are at 6:30 PM

All meetings are held at the
Beaver County
Emergency Services Center
351 14th Street
Ambridge, PA 15003
on the second Thursday of every month
(unless otherwise stated).

2018

Dec 08 Christmas Party 7 PM
(No Club meeting)

2019

Jan 10

Feb 14

Mar 14

Apr 11

May 09

Jun 14

Jul 11



This Month

Have a Very Merry Christmas.



The BVARA will be having our annual Christmas Party,
there is no Club meeting this month.

December 8, 2018 7 PM

We will be at
Yolanda's Italian Restaurant
2228 Darlington Road, Beaver Falls (in Chippewa).

More this Month

Weekly

The Freedom Square Diner in Monaca has a great wait staff. Come let them take your order.

Thursday Morning Breakfast
(or you can have lunch)



The BVARA meets every Thursday at the Freedom Square Diner in Center Township, just to the right of the Cinemark Center Township Marketplace at 09:30 AM. All radio amateurs and those interested in amateur radio are encouraged to come join us at our Thursday morning breakfast.

See you Thursday at



The eQRM urges all Beaver County licensed amateurs to participate in the County's RACES and ARES programs.

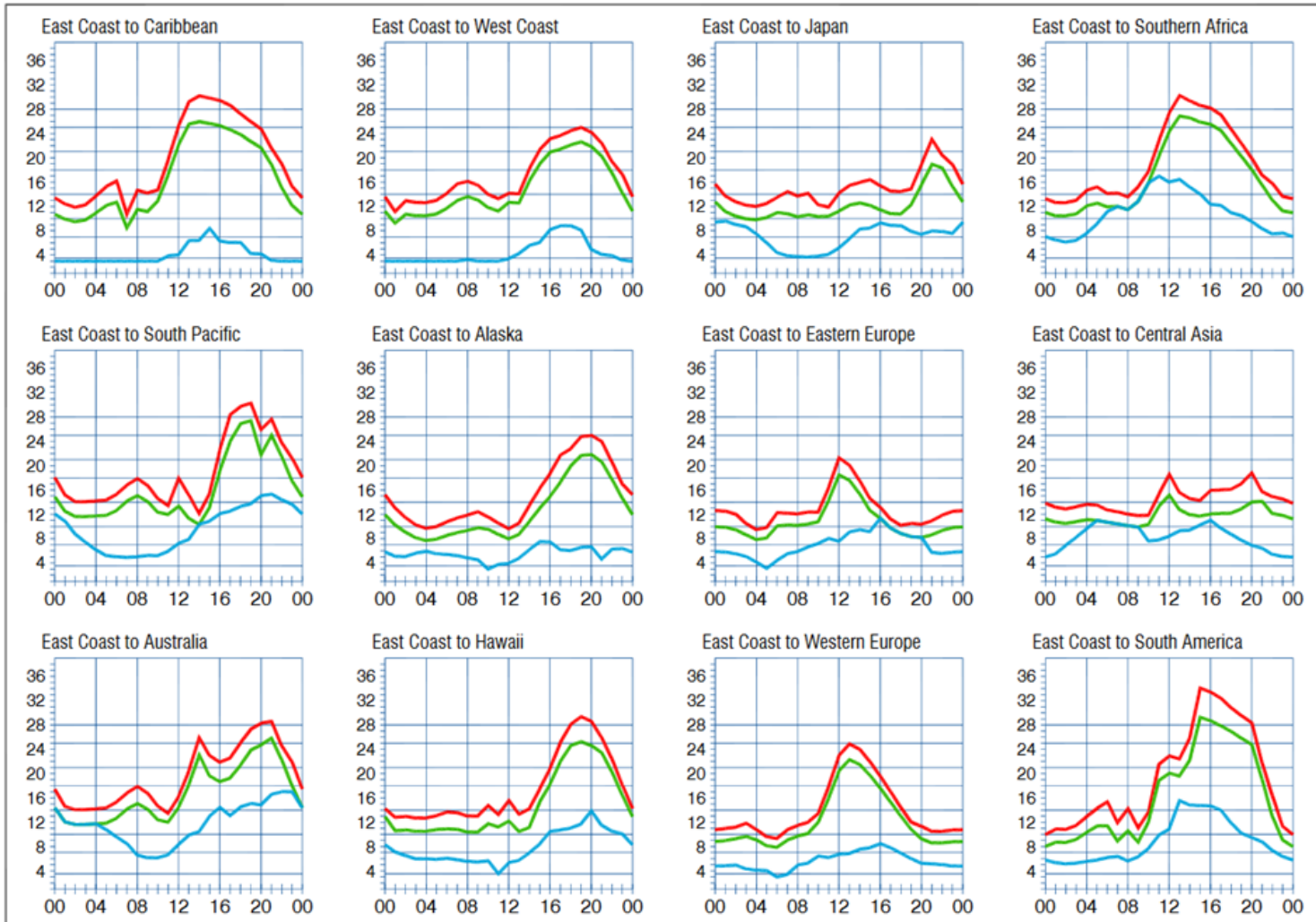
Any Beaver County Amateur that is interested in participating in the RACES/ARES programs can do so by checking into the Beaver County Public Service Net which meets every Monday evening at 8:30 PM local time on the N3TN 146.850 MHz repeater (131.8 PL)

RACES / ARES

The eQRM Urges All County Hams to Participate.



Propagation



When are the bands open? These charts, generated using CAPman, show probabilities for average HF propagation in the month of **December** for the paths indicated. The horizontal axes show Coordinated Universal Time (UTC), and the vertical axes frequency in MHz. On 10% of the days of this period, the highest frequencies propagated will be at least as high as the upper red curves (HPF, highest possible frequency) and on 50% of the days they will be at least as high as the green curves (MUF, classical maximum usable frequency). The blue curves show the lowest usable frequency (LUF) for a 1500-W CW transmitter. For SSB or a lower transmitter power, the LUF will be somewhat higher than the blue curves indicate. See Oct 1994 QST, pp 27-30, and Feb 1995 QST, pp 34-36, for more details. The predictions assume an observed 2800-MHz solar flux value of 73. This is a Very **Low** level of solar activity. See the detailed propagation tables on *The ARRL Antenna Book CD-ROM*.

PROPAGATION

The East Coast propagation chart listed here is for December 2018.

If you would like more information in general, please visit <http://www.arrl.org/propagation>

ARRL
The national association for
AMATEUR RADIO

Get your License or Upgrade

If you are interested in getting your first FCC license or upgrading your current amateur radio license, the Beaver Valley Amateur Radio Association holds VE Test sessions (Volunteer Examinations) the second Thursday of each month at the Nine One One center in Ambridge Pennsylvania prior to our BVARA Club meeting. If there is no meeting there is no test session. Please come take your test with us!

For more information, contact :
Rich Soltesz, K3SOM
(724) 847-0610
k3som@arrl.net



VE TEST SESSIONS

Beaver County Emergency Services Center 351 14th Street Ambridge, PA 15003.
Tests begin promptly at 5 pm on the same day as BVARA Club Meetings
(the second Thursday of the month).
All classes of amateur radio license tests are administered.

ALL candidates MUST bring ALL of the following:

1. 2 forms of I.D. - one MUST be a photo I.D.
2. A pencil AND a pen with blue or black ink.
3. The original AND a photocopy of any valid ham license.
4. The original AND a photocopy of any C.S.C.E.
5. The test fee of \$15 - cash, check, or money order.

New License and Upgrades

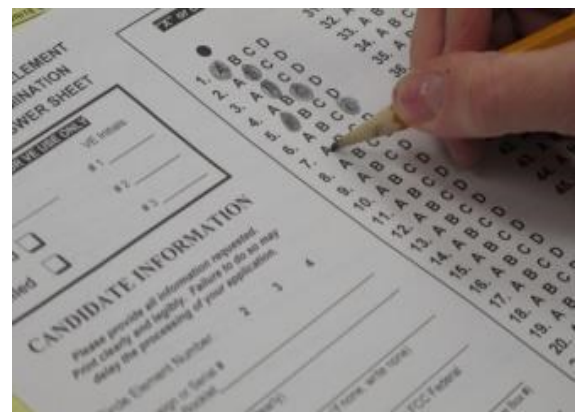
BVARA VE Testing



Here's the list of participants in our VE process for the month of November :

At the October BVARA Club Meeting, we had a candidate that took the General Exam and passed. Adam came back for our November test session and successfully passed his Extra Class!

Adam Stauber – KC3JCH, Enon Valley, Extra Class



Membership Information

By becoming a BVARA member you help secure the future of Amateur Radio in Beaver County. Additionally, the BVARA receives a portion of each ARRL membership you purchase!

Join the BVARA and ARRL

Sign up for:

Price

- | | | |
|--|-------|-------|
| <input type="checkbox"/> BVARA full membership | 25.00 | _____ |
| <input type="checkbox"/> BVARA student membership | 15.00 | _____ |
| <input type="checkbox"/> BVARA associate membership | 10.00 | _____ |
| <input type="checkbox"/> BVARA Child under 21 at home membership | 5.00 | _____ |
| <input type="checkbox"/> One year ARRL membership | 49.00 | _____ |

A Club Donation _____

ARRL Member? Yes No

Total Enclosed _____

Your License Class (If you have one.)

- | | |
|--------------------------------------|---------------|
| <input type="checkbox"/> Technician | Name _____ |
| <input type="checkbox"/> General | Address _____ |
| <input type="checkbox"/> Advanced | _____ |
| <input type="checkbox"/> Extra Class | Email _____ |

Phone _____

Your Call sign _____

Your Signature _____

Make check or money order payable to:

The Beaver Valley Amateur Radio Association, P.O. Box 424

South Heights, Pa 15081

Most of us don't want to hear this...

There are no Western Pa hamfests

till February 2019.



Contest Corral

December 2018

Check for updates and a downloadable PDF version online at www.arrl.org/contests.

Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

	Start - Finish Date-Time Date-Time			Bands	Contest Name	Mode	Exchange	Sponsor's Website
Nov 30	2200	2	1600	1.8	ARRL 160-Meter Contest	CW	WVE: RST, section; DX: RST	www.arrl.org/160-meter
1	0600	1	0800	7-14	Wake-Up! QRP Sprint	CW	RST, serial, suffix of previous QSO	qrp.ru/contest/wakeup/333-wakeup-eng
1	1600	2	1559	3.5-28	TOPS Activity Contest	CW	RST, serial, club abbreviation (if any)	procwclub.ro/TAC%20Rules.html
1	2000	2	1959	3.5-28	EPC Ukraine DX Contest	Dig	RSQ, Ukr Admin Region or serial	vinradio.ho.ua/page184.html
2	0000	2	2359	28	Ten-Meter RTTY Contest	Dig	RST, SP or serial	www.rttycontesting.com
4	0200	4	0400	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	arsqrp.blogspot.com
6	0000	6	0300	1.8	QRP ARCI Topband Sprint	CW Ph	RST, SPC, mbr or power	www.qrparci.org/contests
6	1800	6	2200	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	www.nrau.net/activity-contests
6	2000	6	2200	1.8-28	SKCC Sprint Europe	CW	RST, SPC, name, mbr or power	www.skccgroup.com
8	0000	9	2359	28	ARRL 10-Meter Contest	CW Ph	RST, state/province (DX: serial)	www.arrl.org/10-meter
8	0000	10	2359	1.8-7	PODXS 070 Club Triple Play Low Band Sprint	Dig	RST, SPC	www.podxs070.com
8	1200	9	2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
8	1600	9	1559	3.5-28	International Naval Contest	CW Ph	RS(T), mbr or serial	www.marinefunker.de
9	2000	9	2300	1.8-28	QRP ARCI Holiday Spirits Homebrew Sprint	CW	RST, SPC, mbr or power	www.qrparci.org
9	2100	9	2259	14	CQC Great Colorado Snowshoe Run	CW	RST, SPC	www.coloradoqrpclub.org
10	0100	10	0300	1.8-28	4 States QRP Group Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqrp.com
12	0130	12	0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
14	1400	14	1759	1.8-7	UN DIGI Contest	Dig	RST, serial	kfr.kz
14	2000	14	2359	1.8	Russian 160-Meter Contest	CW Ph	RS(T), Oblast code or serial	www.qrz.ru/contest
15	0000	15	2359	1.8-50	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
15	0000	15	2359	3.5-28	OK DX RTTY Contest	Dig	RST, CQ Zone	okrtty.crk.cz/index.php?page=english
15	1400	16	1400	1.8-28	Croatian CW Contest	CW	RST, serial	9acw.org
16	1800	16	2359	3.5-50	ARRL Rookie Roundup, CW	CW	Name, 2-digit year first licensed, SPC	www.arrl.org/rookie-roundup
17	0200	17	0400	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrpcontest.com/plgrun
19	0130	19	0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
21	1600	21	1700	3.5-7	AGB-Party Contest	CW Ph Dig	RST, serial, mbr (if any)	www.ev5agb.com
23	0000	23	1159	3.5-28	RAEM Contest	CW	Serial, latitude, longitude	raem.srr.ru/en/main
26	0000	26	0200	1.8-28	SKCC Sprint	CW	RST, SPC, name, mbr or power	www.skccgroup.com
26	0830	26	1059	3.5-7	DARC Christmas Contest	CW Ph	RS(T), DOK or serial	www.darc.de
29	0000	29	2359	1.8-144	RAC Winter Contest	CW Ph	RS(T), province/territory or serial	wp.rac.ca/rac-canada-winter-contest-rules
29	1500	30	1500	1.8	Stew Perry Topband Challenge	CW	4-char grid square	www.kkn.net/stew
29	1500	30	1500	3.5-14	Original QRP Contest	CW	RST, serial, power category	www.qrpcc.de
31	0900	31	2359	3.5-7	Bogor Old and New Contest	Ph	RS, operator age	www.orari-bogor.org

Bits and Pieces

Merry Christmas everyone!

What a magic season for the young and the young at heart. Festive lights, good food, visits from good friends & family and the birth of our savior are just a few of the gifts of Christmas. I pray this Christmas is the best you have ever had so far!



The night before Christmas I will be restless thinking of the little ones. They will be so excited come Christmas morning! Ah December and Christmas, such a magical time of the year.

I wonder what the Radio Santa will be bringing each of you? I encourage you to do a little giving yourself. Give yourself your first FCC License, upgrade your current license, dust off your radio & get on the air (has it been a while?), give someone the "radio bug" by inviting them to your shack, maybe it will just take you talking to them about your radio adventures, get busy learning that "new to you" type of radio adventure you haven't tried yet. There are so many facets of your radio hobby to try. Get ready for some fun. Get motivated to learn, use some of that new knowledge and share some of your past radio knowledge.

I am wishing you the best Christmas ever,

David KC3BXC

Field Day 2018 Results for the BVARA appear in the December Issue of QST Magazine on Page 77, 2nd Column, about 2/3 of the way down. Check it out!

Till next month 73 KC3BXC clear but I'll be listening...

Be courteous on the air, be safe and have fun with your hobby.

It's Your Dime

Remember back when you could communicate by "Pay Phone" for ten cents? This page is for anyone who wants to communicate with the BVARA community and beyond. Please send me your article that you would like posted on this page. Please, only topics and language in good taste. As the editor I reserve the option to post it or ignore it. Send your dime to me at:

kc3bxc.73@gmail.com



From Rich - K3SOM



This Wonderful Hobby of Ham Radio

While finishing up looking at my contest log from the CQ World-wide SSB DX Contest, I had the radio turned on to 20 meters SSB and noticed a **HUGE** pileup. There on 14.240 MHz was E44WE, Janusz from Bethlehem, Palestine working split (listening 5 KHz up). This was around 11:00 am, local time on October 30th, 2018. Bethlehem is a Palestinian city located in the central West Bank, Palestine, about 10 km (6.2 miles) south of Jerusalem.

I listened for a bit and heard him 'blast' a European ham for not listening to his instructions. He indicated that all day yesterday he worked only European stations and today it was time for just North Americans. "Harrumph", I thought! The cacophony was incredible. Maybe a thousand hams were all calling him at the same time and using every 'trick' that they knew to get his attention.

He came back to a woman in New York City. It was time for me to give him a call. I turned on the Expert Amp to full power on 20 meters. The beam was headed in the right direction. I cleared my throat and approached the microphone. I would wait about five to eight seconds to let the 'din' of voices begin to die down. It was time! Click, one call, and then I took my foot off the gas pedal. He came back to me and heard my complete call. Yes! He was now in the log with 59 reports each way at 16:03 UTC! I love those 59 reports; especially when I beat all of the others trying to make the contact. I can't help remembering the efforts of all of the club members who helped me get my new antenna and used tower operational.

Even after all of these years of ham radio activity, the thrill of winning the contact with so much competition is so exhilarating. It's just another reason for me to appreciate this wonderful hobby of ham radio.

That's my story . . . and I'm stickin' to it!

Rich



Of Interest to All Radio Enthusiasts

The following pages contain pictures of the Heathkit DX-100 transmitter that the BVARA is selling for the family of a silent key, a deceased ham radio operator. He lived in Aliquippa, Pennsylvania. He passed away last year at the age of 93.



In the photos are front, inside top, and inside under-chassis views of this vintage Heathkit transmitter kit that was carefully built by the silent key. The DX-100 manual is also available and included.

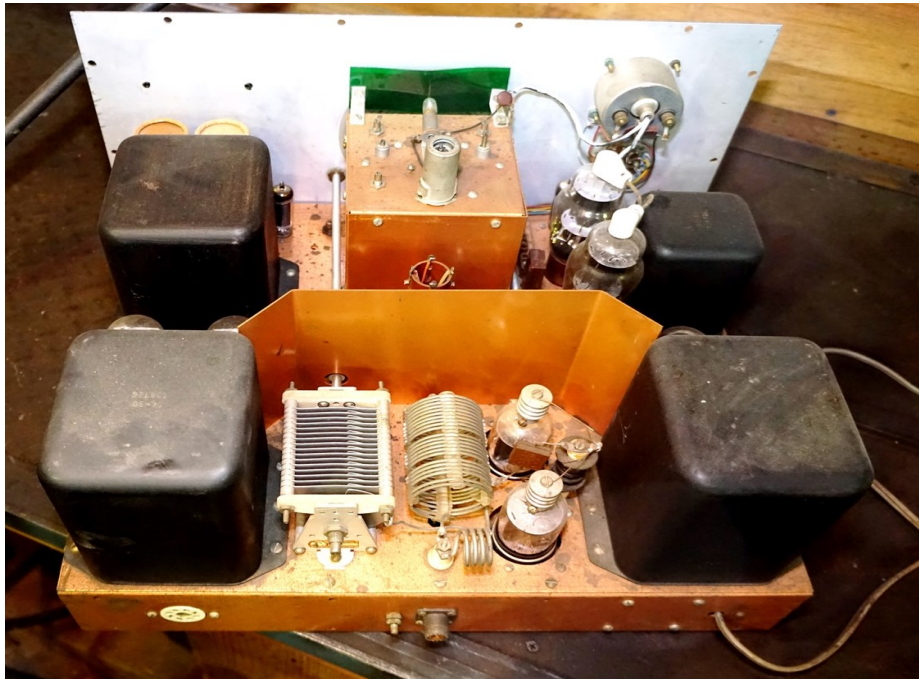
Because the unit weighs a bit over 100 lbs., it will not be shipped so personal pickup is required. Please make an offer to Jack Spencer at KZ3ZJack@Verizon.net for consideration. Jack Spencer, KZ3Z should be contacted for additional details.

The BVARA is asking \$190 for the unit, with some consideration for negotiation.

Here are the equipment evaluation and findings by a noted Vintage Radio Enthusiast with excellent experience with this type of equipment:

Of Interest to All Radio Enthusiasts

1. “A visual inspection was made before applying any power to the transmitter. The topside was dusty, but the components appeared to be OK. The underside of the chassis was a pleasant surprise. The copper plate was in excellent condition with no corrosion noted, and the components appeared to be free from heat damage or arcing.



The wiring workmanship was done by someone who knew what he was doing and looked very professionally done. Although no measurements were made on the resistors, the HV filter capacitors were checked for shorts before applying power and appeared to be good.

2. Next the HV rectifiers were pulled and the transmitter was brought up on the Variac. No arcing, smoke, or problems were noted in the VFO, oscillator, driver, and buffer stages. Initially there was no signal seen in Jack's portable shortwave receiver, but that was remedied by rotating the rotary switches through several times to make positive contact in the switches. Although contact was made with the rotation, it probably wouldn't hurt to clean the switch contacts with a non-flammable, non-conducting cleaner such as DeOxit and Q-Tips. Once the switch contacts had continuity, the front stages worked fine, there was plenty of grid drive available, and a signal was noted on Jack's portable HF receiver. Unfortunately, no BFO was available on the receiver so we couldn't check the keying note.

3. The HV rectifiers were then replaced and allowed to settle in. The HV switch was activated and the transmitter was lightly loaded for PA tuning and modulator testing. Again, no arcing or component burning was noted, and a carrier was found on the portable shortwave receiver. Initially a squeal was heard on the carrier, but that was later found to be a continuity problem with my crystal microphone. Once that was resolved, clear undistorted audio was then heard in the receiver.

Of Interest to All Radio Enthusiasts

4. Having established a good working transmitter, loading was increased to test the transmitter at higher output. It was found that the increased loading did not produce higher output. Two things came to mind. First, soft 6146s could be the problem. We had no way to test them nor did we have known good replacements. The second, and more likely, culprit would be the loading network. Heath and Johnson both used a similar multi-capacitor component in their loading networks. I once had a Viking Valiant that had this capacitor component fail. The fix is to remove the multi-capacitor component (pointed out to Jack), and replace it with individual high voltage mica capacitors. Unlike Edgar Johnson, Heath was kind enough to label the capacitor values on the schematic diagram so substitution is easy. I would be willing to bet lunch on the loading network being the problem rather than soft finals.

5. During the testing it was noted that the modulator tubes were gassy. Heath used a pair of surplus 1625s in the modulator section and their age may be a factor. However, it's my suggestion that voltage checks around the modulator tubes be done just to be sure the tubes are seeing proper voltages. And, of course, it wouldn't hurt to test the tubes as well.

6. The only other recommendation I would have with this transmitter would be to replace the fused two-wire line cord with a three-conductor line cord and fuse the hot side. There's room on the top or rear of the chassis to install a fuse holder. The chassis rear would be preferable, though, since it would not require removing the transmitter from the cabinet to change fuses.

Overall, my opinion of this transmitter is that it is well above average in cosmetics and workmanship, and with the few corrections mentioned the new owner will have him or herself a real workhorse available."

"Regards."

