

The Salami Merchant

Newsletter of the Silvercreek Amateur Radio Association

www.w8wky.org

Monthly Meeting: 3rd Saturday of the month.

Place: Buehler's Resturant Wadsworth, Ohio

Time: 7:30am

All are welcome!

Current Officers:

**President: WB0IQK
Mark Gilger**
**Vice President: K8PQ
Ray Irwin**
**Secretary: AI8P
Dennis Conklin**
**Treasurer: KI8B
Barry Youmans**

Trustees:

Debbie Conklin KD8DEB
Bob Bohn W8IJG
Willard Houston W8WDH
Barry Youmans KI8B

The Association operates two open repeaters:

147.395 +600 PL 114.8

442.275 +5M PL 110.9

Nets are every morning except Sunday at 7:25 am and Tuesday nights at 8:00 pm.

The Barometer Net operates Monday thru Saturday starting at 7:25am. This and the Tuesday night net are run by Ron, KD8CVS

The Barometer Net goes until all have signed out. Ron says that there have been numbers pushing 20 joining the net with participants coming and going as their time permits.

The Tuesday night net is a controlled net. When checking in give your call, name, location., and whether or not you have traffic for the net. Speak slowly and clearly so Ron has enough time to write down your information.

VEC Exams are given quarterly by the club. Usually the time is 9:15am at the Rittman Library.

Be sure to bring a photo id or some other positive form of identification and the present examination fee.

If you are licensed be sure to bring a copy of your license. See the web page (www.w8wky.org) for details.

INFORMAL 10 METER GROUP

An informal group meets with some degree of regularity nightly on 10M at 28.410. The group usually starts at 7:30 pm and runs until 8:00.

There are usually only 3 participants AB8GO, KI8B, and W8WDH. More participants are sought. Sometimes N8OGK and WB0IQK show up.

If you hear no one after 7:35 it is because no one showed up or only one person showed up.

If you hear no activity before 7:35, announce yourself. Someone may be lurking out there.

Local hams meet every Saturday morning at Buehler's in Wadsworth. Everyone is invited to meet with us. We usually meet at about 7:30, gab, order, eat, and gab some more.

Join us if you can.

Other nets or news that might be of interest to the membership? Other links that might be interesting to the group?

Send me the information and I will try to get it into subsequent *SALAMI MECHANT* editions.

**Willard Houston
W8WDH
willardhouston94@gmail.com**

Something to sell?, put it in the *SALAMI MERCHANT*.

Send me a picture of your shack. Preferably with a picture of you at the "controls".

I will choose the shack that I think is the "most impressive" or "neatest" or "interesting" or "something" and feature it each month.

The shack that that I think is the "best" each quarter will be entitled to a breakfast at Buehler's in Wadsworth on a Saturday morning at my expense.

You will be limited to the "Special" which includes hash browns, eggs, meat, and coffee. Any substitutions are at your expense.

The decision of the judge (me) is final. No appeal and no whining.

Next Edition November 15. Submissions should be sent by November 1.

Send to willardhouston94@gmail.com .

SWAP NETS

TUESDAY (Drake Antique Tube Net)	3.865	8:00 PM
WEDNESDAY (Scars Swap)	7.251	10:00 AM
WEDNESDAY (Ecars Swap)	7.255	11:00 AM
WEDNESDAY (Swap)	3.938	8:00 PM
FRIDAY (Texas Traders)	3.870	8:30 PM
SATURDAY (Old Gear)	7.275	10:00 AM
SATURDAY (Swap Net)	3.938	8:00 PM
SATURDAY (Marconi Net)	3.872	9:30 PM
SUNDAY (Georgia Traders)	7.275	10:00 AM
SUNDAY (Texas Traders)	7.245	11:30 AM
SUNDAY (Ontario Swap)	3.755	7:00 PM
SUNDAY (Continental Traders)	3.922	7:30 PM

VHF Swap Net

**VHF swap net 147.015 +. Tuesday nights at 7:30
Newberry Repeater**

**VHF Trivia Net: Each day at 9:00 am 146.940 - 110.9
tone Chardon Repeater**

If you have any nets to add to the list, send them to me and I will try to include them in the next edition of the *SALAMI MERCHANT*. (willardhouston94@gmail.com)

HF SSB/AM NETS

AWA SSB Net	Sunday	7.237mhz @ 1600z
AWA SSB Net	Sunday	1.945mhz @ 8pm Eastern
AWA AM Net	Sunday	3.870mhz @ 1300z
AWA SSB Net	Wednesday	14.274 @ 1130z
Brothers Net	Daily	7.191mhz @ 9pm Eastern
Collins Net	Tuesday	3.805mhz @ 9pm Eastern
Collins Net	Thursday	3.805mhz @ 9pm Eastern
Collins Net	Sunday	14.263mhz @ 2000z
Drake Net	Sunday	7.238mhz @ 2000z
Drake Net	Tuesday	3.865 @ 8:00pm
Kenwood Hybrid	Saturday	7.235mhz @ 3:30pm Eastern
Kenwood Hybrid	Sunday	14.316 @ 1800z
Hallicrafters Net	Saturday	7.280 @ 1pm Eastern
Swan Technical Net	Saturday	7.235mhz @ 2 pm Eastern
Swan Technical Net	Monday	14.230mhz @ 2300z
Swan Users Net	Sunday	14.250mhz @ 2100z
Heathkit	Sunday	14.275mhz @ 2200z
DX-60 Net (AM)	Sunday	3.880mhz @ 8:00am
Icom	Sunday	14.316mhz @ 1700z
14305 DX Net	M-F	14.305mhz @1300z
ECARS	Daily	7.255mhz @ 7:30am – 2pm
SCARS	Daily	7.251mhz @ 8:00am – 2pm
MCARS	Daily	7.258mhz @ 8:30am – 2 pm
ARUFON (UFO)	Saturday	3.9777mhz @ 8:00 pm
ARUFON (UFO)	Tuesday	3.9777mhz @ 8:00 pm
CFARC	Monday	28.360 mhz@9:30 pm

VHF NETS

Pioneer Amateur Radio Fellowship: Monday 7:00 pm 147.135 + 110.9 tone

Summit Co. ARES: Monday 7:30 pm 444.50 + 131.8 tone

PARC Net, Ravenna Repeater Monday 8:00 pm 145.39 -

CFARC Net Monday 8:00 pm 147.270 + 110.9 tone

SARA Barometer Net Everyday except Sunday at 7:25 am VHF Repeater

SARA Net Tuesday at 8:00 pm VHF Repeater

VHF Trivia Net: Each day at 9:00 am 146.940 - 110.9 tone Chardon Repeater

Net Millersburg Repeater Tuesday Night 9:00 pm 146.670– 71.9 tone

Swap and Shop

FOR SALE : Aluminum mast pipe, 2 inch OD, 8 feet long, excellent condition. Original cost: \$69.00. If you need it make me an offer.

FOR SALE : MFJ-929 Auto Tuner with original manual and factory packaging. Also included is a factory Icom interface cable (MFJ-5114I) and an additional homebrew Icom interface cable. The tuner is in excellent condition, has been used very little and has always been in a nonsmoking environment. Make a reasonable offer.

Contact: nx8g.01@gmail.com

For Sale: Small Wonder Labs PSK 20. Includes enclosure. Works well. \$95.

Contact: willardhouston94@gmail.com

Sean P. Smith, KG4WSS, of Falls Church, Virginia, was killed when the US Consulate in Benghazi, Libya, was attacked on September 11. He was 34. Smith was one of four Americans, including Chris Stevens -- the US Ambassador to Libya -- who was killed in the attack.

The following local hams are listed in QST this month as SKs:

**KB8FFC, Sam Calhoun, Canton
WA8GMT, John A Ianetta Sr., Lake Milton
WB8RZQ, Knotts, Dale A., Springfield Township**

HAMFESTS

The following hamfests are coming. Try to attend one or more of them. Remember, one man's junk is another man's treasure.

:Oct. 28 Massillon ARC Massillon Boys and Girls Club, 730 Duncan St. SW

Fort Wayne Indiana November 17 and 18.

Minutes of the August Club Meeting:

SARA Meeting of Aug 18 2012:

The meeting was called to order at 7:35 by the President Mark, WB0IQK

Secretary:

The minutes of the previous meeting were approved as corrected and emailed.

Treasurer:

Balance unknown. No report-Treasurer absent.

Old Business

The Wanzie radios were sold by Mark for \$30 and the funds deposited in the club treasury.

No new business.

The meeting was adjourned at approximately 7:55.

Respectfully Submitted,

Dennis, AI8P

The History of “The Mighty .39 Repeater”

(At least as I recall!)

By Bob Bohn W8IJG

I got my ham license back in 1994 and was first licensed as KB8UHU. I had a long affinity with the SARA repeater though. I worked at the Radio Shack Store in Norton, OH and probably sold half of the parts that made up the original repeater to some of the founders of SARA. I was fascinated by the brick-sized HTs they all carried, and was amazed that they could do things like make phone calls and play “brag tapes” by the push of a couple of buttons. Of course, as soon as I started asking questions I was hooked! I found out the SARA repeater frequency and programmed it into my portable scanner. I soon became acquainted with a lot of members and even though I never met most of them I came to love the club and the concept of a repeater. As an aside, the original W8IJG was a gentleman from Richfield name Darryl Whithington. He lived near the highest point in Summit County and he came in every Wednesday evening to visit while his wife shopped at the nearby Hallmark store. He provided a pleasant distraction to my otherwise boring evening shift. I accepted his invitation to visit his shack and see all the cool stuff he did, including SSTV. He was a radio engineer from way back when and he told me how he bought parts from the Olson brothers when he had a radio shop in Wooster back in the 1930's. You might remember Sidney and Irving Olson as the founders of Olson electronics—the “Dollar Store” of the radio world. You can thank him for setting the hook when it came to ham radio and me. When he passed, I mailed his widow a letter asking her permission to take his call. She was thrilled, and that is how KB8UHU became W8IJG.

Now, on to the story of the repeater. I joined SARA immediately after receiving my license. As fate would have it, the repeater had some issues on the night of the very first SARA meeting that I attended. I asked if I could help and was thrilled when I was told to dive right in. The repeater was located in a utility room in the basement of the Doylestown Town Hall. I had all sorts of magical images dancing in my head as to what a “repeater” must look like. It had to be tall, with all sorts of dials and adjustments, plated with chrome, and lovingly polished. No wait, it had to be small and intricate with data ports that you needed a computer to talk to. It turned out to be a squat cabinet missing panels, containing mystery hand-built modules that looked like it was assembled by a crew of drunken third graders on drugs. Well, maybe not that bad, but as soon as I laid eyes on the collection of mismatched parts hay wired together, I knew we could do better.

The original cabinet contained a homemade 100 Amp analog power supply that Barry KI8B (then KB8YSE) dubbed “Bertha”, a receiver deck from a Motorola Micor commercial radio that was built into the gray cabinet with the meter on the front of it, a commercial two watt exciter, a repeater controller (that got its EEPROM reprogrammed “the hard way” twice by lightning strikes), an automotive frequency equalizer for audio processing, a rack full of tuning cavities of dubious worth and origin, and enough wire, wire nuts, splices, and taped connections to test the patience of Job. For those of you unfamiliar with the tale of Job look it up—it's in the Bible.

The new repeater that was built was put together by John N8CD, Barry KI8B, “evil Bob” N8ZCC, Del N8OFP, and myself the “good Bob” W8IJG. I managed to score a beautiful 19” rack mount cabinet with extra panels from the bone yard of the company I

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worked at. The cabinet originally housed an Ohio Nuclear VIP 450 nuclear medicine computer. That is not really important, but what was left inside was. I left the original 3 KVA isolation transformer in place so that we were now going to be electrically isolated from the building's wiring, and I designed a master cutoff switch so that everything could be killed at once without having to disconnect a myriad of plugs and extension cords. I put the repeater cabinet together in my basement and did all of the panel fabrication and wiring there. I had about six inches of clearance to the bottom of the floor joists, and it took two of us to drag it out the back door and through the yard onto my truck when it was ready to stuff. There was enough room in the rear of the cabinet that we could mount the brand new duplexers that were donated to the club by Dick—I forget his call—and his lady friend Mary. I trucked the whole thing over to Doylestown where the repeater committee was assembled for a repeater party.

We put all of the components into the repeater in the span of a day. There was the Motorola receiver, the exciter, "Bertha" the power supply, the duplexers, the controller, and a 100 watt TE systems amplifier. Note the black local monitor speaker on the front. It came from my 1971 Ford Torino. It was all I had left of it. All was well until about the second lightning strike. We managed to resurrect the controller again, but the receiver deck was toast. It was decided that we would substitute two GE commercial radios for the receiver and the exciter. Bob N8ZCC worked his magic on the crystal-controlled radios, and we were off and running again—for a while. Soon we started to experience a lot of static and hash and trash on our output signal. At one time, we were even spreading harmonics onto a couple of Public Service frequencies—never a good thing! Investigation revealed that we had arcing and heat damage to the TE systems output amplifier. We re-soldered all of the output transistors and the problem was gone—for a while. We finally replaced the amplifier and the problem was gone—for a while. Barry was able to get his hands on a spectrum analyzer and we found out that GE commercial radios back then had a really dirty output with lots of spurs and harmonics. It may have been the radios, or it may have been the fact that we modified them to go where we wanted. At any rate, it appeared that the dirty output of the GE radio was causing oscillation in the TE systems amplifier that caused the output transistors to get so hot that they un-soldered themselves. I soldered the transistors with silver solder one last time, and when the amp gave up the ghost for the last time, we operated on just the output power of the exciter. Even ten watts gave the mighty '.39 some bodacious coverage!

The club had a meeting, and it was decided to purchase the commercially made repeater that we are running today. We all got to see a lot more of our families, and there was much rejoicing. We were eventually forced to vacate our utility room and water tower to make room for a cellular phone site and new police radios. We are now located on the water tower in the park in downtown Doylestown.

Some of you might wonder what became of the shiny white cabinet in the pictures. The saga of the cabinet does not end with our second repeater's demise. About twelve years ago a guy that I sublet space from for my business was frantically searching for a rack mount cabinet to install a digital x-ray controller in. His business was on the ropes and he had no money to spend on new hardware. Coincidentally, the village of Doylestown had been bugging us to get rid of the cabinet that was still in their utility room in the village hall. The guy looking

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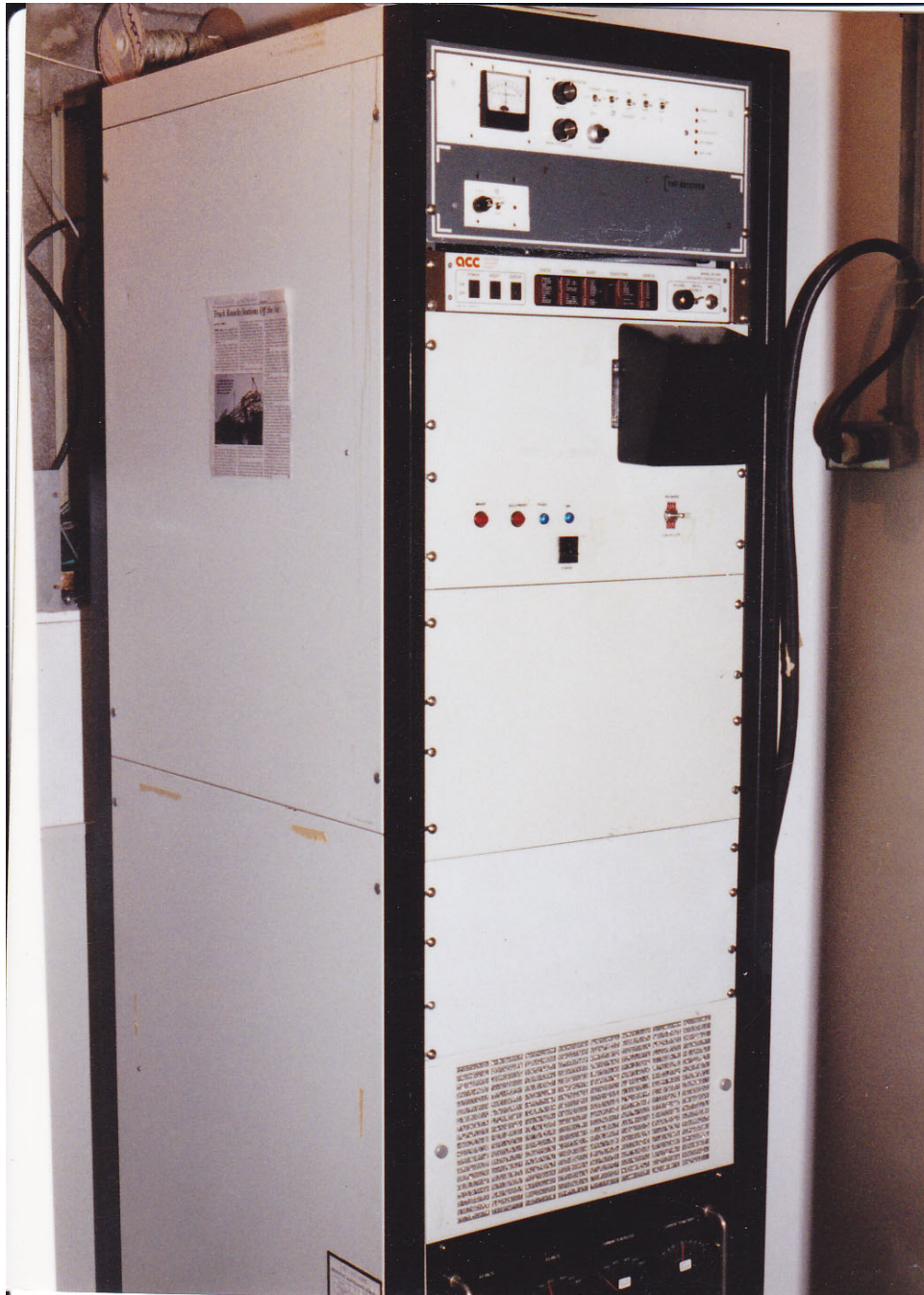
for the cabinet lived in Doylestown. I put him in touch with the proper officials, and he pulled out the cabinet for free. Funny how hams can kill two birds with one stone—but then again, that is what the hobby is all about. The last I heard, the guy that pulled the cabinet out was out of business, and the mighty .39's repeater cabinet was at an imaging center in Newton Falls putting out a different kind of RF. Take care everyone, and let me know if you have any questions or memories of the old repeater that I overlooked.

73's de Bob W8IJG.

The Original "Mighty 39".



THE "MIGHTY 39" TODAY.



AHOY MATEY!

Bob, W8IJG, has sent me a link to VHF Maritime Frequencies on the Great Lakes that can be heard on a scanner. The list is way too long to publish here, but those of you with scanners can find the list at the website called: boatnerd.com. Take a listen.

I was returning from Tiffin on Saturday night September 22 and had my mobile rig on a uhf repeater at 443.800 Mhz and entered the regular Saturday night net there. Since I was driving and it was dark and I am getting along in years, I did not participate long in the net. I listened until almost Willard Ohio. During that time I got a link that might be of interest to some.

If you remember when phones were black and belonged to Ma Bell. If you remember when Bell Labs was a top notch leading edge research institution. If you remember when external Touch Tone pads were necessary to get into the autopatch on the local repeater and those pads were difficult to obtain, then go to:.

<http://techchannel.att.com/showpage.cfm?ATT-Archives>

Delve into some of their archives. You might find something of interest. I did!



Bill, KD8HXV, has given me access to a scrapbook he obtained. It has a lot of information about Akron area amateur radio from the late 30's to the late 50's. It will take me a while to go through it. Much of it undated. I will try to organize it and maybe put out a special edition of the *Salami Merchant*. Meanwhile, here are two photos of the same station. One in 1951 and one at later date. I don't know the name of the ham but his call letters are in the photos as W8OYL. Does anyone know or remember him?



National Mole Day

National Mole Day is celebrated in October of each year. The day begins at 6.02 am on 10/23 and ends at 6.02 that evening.

The day is celebrated by chemists, chemistry students, and chemistry teachers each year by telling mole jokes, having mole riddles, and singing mole songs.

Everyone is invited to participate in mole day whether chemists, chemistry students, chemistry teachers or other science geeks.

Mole day celebrates Avagadro's number which is 6.02×10^{23} .

A mole of a substance is the formula or atomic mass of that substance expressed in grams. As the expression "pair" indicates 2 of something, the term "mole" indicates 6.02×10^{23} pieces of something.

A mole of water would consist of Avagadro's number of water molecules and have a mass of 18 grams since the formula mass of water is 18 amu. H_2O - water contains 2 atoms of hydrogen each with a mass of 1 amu and 1 atom of oxygen with a mass of 16 amu. The beauty of the mole is that if you, as a chemistry student, would need for some reason 6.02×10^{23} molecules of water, all you would have to do is go to the balance and mass out 18 grams of water. 2 moles of water would be 36 grams etc. The mole is useful in chemical calculations.

Molecular oxygen (O_2) has a molecular mass of 32, so 32 grams of O_2 would contain Avagadro's number of molecules and at STP occupy a volume of 22.4 liters.

All of the above masses are rounded to the nearest whole number in the examples. See a periodic chart of the atoms if you want to know the accepted atomic masses of the elements.

Amedeo Avagadro, our hero!

Q: What did Avagadro teach his students in math class?

A: Moletiplication

Q: What do you call a 10th grader who is taking chemistry?

A: A sophomole.



What is a mole's favorite kind of pop? - Coca-mola

What did the witch say on the wizard of oz? - I'm moleting, I'm moleting!

Google National mole day for more information about moles and mole day.

Kenwood TS-830

Written by: Mark Gilger

The Kenwood TS-830 radio was introduced in 1981. Although it looks very close to the earlier TS-520 and TS-820, reviewed here in previous issues, it was a completely different radio. It is mostly solid state with the exception of a RF driver tube and 2 RF final tubes. They typically provide 100 watts output on 160 – 10 meter bands, possibly a little less on 10 meters. It included a RIT control that was capable of shifting the receiver +/- 2.5kHz. Also included was a speech processor, 20db attenuator, IF shift and noise blanker. Two of the most impressive features are the IF shift and noise blanker. During heavy QRM, by shifting the IF bandpass, you could, in most cases, eliminate the interference. The Noise Blanker was extremely effective in eliminating pulse type noise. In fact, all of the noise blankers that were incorporated in the TS-520, 530, 820 and 830 series were excellent.

One of the new additions to this model is the VBT – Variable Bandwidth Tuning control.

Here's a short blurb from one of the sales flyers.

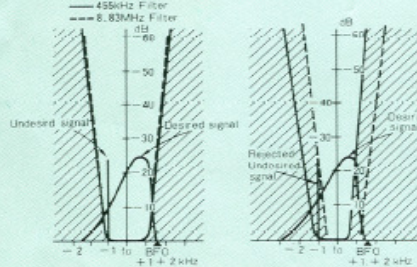
VBT – Variable Bandwidth Tuning

With the inclusion of the VBT (variable bandwidth tuning) circuit capable of varying continuously the IF filter passband width, optimum IF bandwidth may be established relative to varying conditions of interference.

IF passband shift and VBT are independently adjustable. Therefore, it is possible to change only the IF passband width while the center frequency of the IF passband remains unchanged, or, while maintaining the passband width established by VBT, shift the passband (center frequency) of the filter to an optimum point with the IF shift.

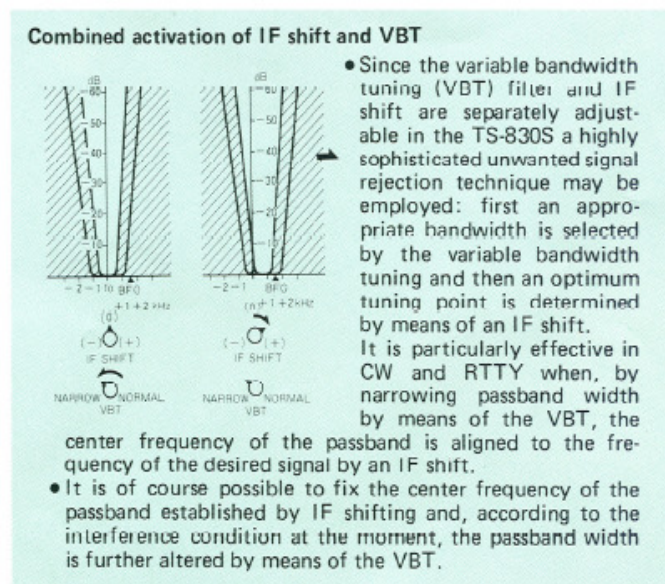
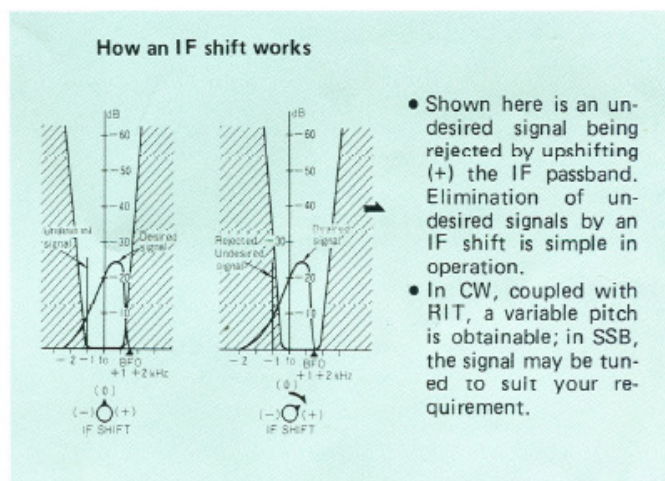
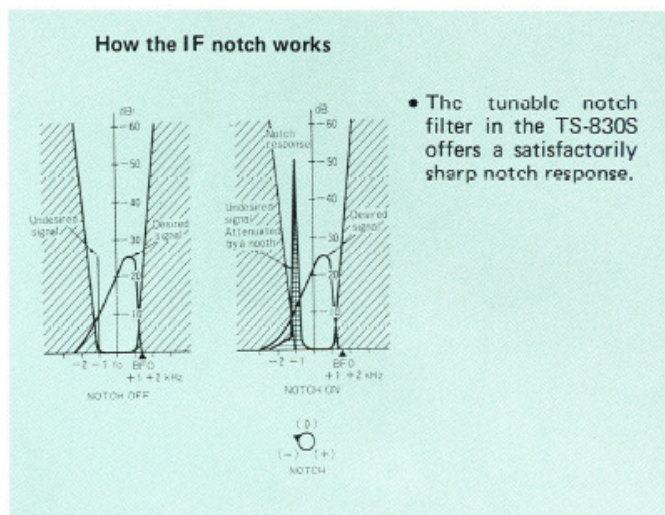
Combined application with an IF notch may also be used.

How VBT (Variable bandwidth tuning) works



- Passbands of both the 8.83 MHz and 455 kHz IF filters are made to intersect, in an equivalent sense, to obtain a narrow bandwidth filter response. See how the unwanted signal is rejected from the passband thus obtained.
- In cases where interference from adjacent signals isn't too serious, signal-to-noise ratio may be improved by narrowing proportionally the IF passband width, as the noise content theoretically varies with bandwidth.
- The variable bandwidth tuning (VBT) filter circuit in the TS-830S is so designed that the center frequency of the passband may be set to the desired point (by adjusting or by an IF shift), irrespective of the amount of bandwidth changed.

In addition to the VBT the IF Notch and Shift provided extra features not seen in radio's of this time period





Out of all of the Kenwood Hybrids, the TS-830 is the most sought after due to being the last one in the series plus the additional features.

The TS-830 covered 160-10 meters You can usually find these at Hamfest anywhere from \$300 to \$500. A good quality manual can be downloaded from :

<http://www.wb4hfn.com/KENWOOD/Kenwood-Manuals.htm>

Split mode operation was provided using the optional remote VFO-240 or the VFO-230. The SP-230 speaker matched the radio and gave good overall frequency range with selectable audio filter switches from the front panel. A very nice AT-230 was also provided giving a good match on any band from 1.8 to 30.0mhz.

One of the best things about the Kenwood hybrids is the receiver audio. It's very pleasant to listen to and you don't get tired out after operating it for hours on end. Guess we should expect this from a company noted for it's quality stereo receivers.

There are still plenty of people specializing in repairing these so they will be around for many more years as long as parts can be obtained. Even though parts are no longer being manufactured they are available on the used market for reasonable prices.

**See you
next month!**

