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ORC Repeaters on 146.97 (-127.3PL), 224.18 (-127.3PL), 443.75 MHz (+127.3PL) - Callsign W9CQO Web site: www.ozaukeeradioclub.org Facebook: facebook.com/orcwi

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### From the President

de Pat Volkmann, W9JI



The June meeting of the Ozaukee Radio Club was held via Zoom on Wednesday June 10<sup>th</sup> at 7:30 P.M. The meeting was well-attended. The subject of the presentation was, as usual, Field Day. Ken Boston W9GA told us about the Field Day rule changes for this year.

At the May meeting we asked club members how many were interested in attending a Club sponsored Field Day event this year. The great majority said that they wouldn't attend this year due to concerns about the Covid-19 virus. Others said that they had a desire to try something different. By the time of the June meeting, the situation hadn't changed. Now it's official. There won't

be an ORC-sponsored Field Day outing this year.

This is not to say that people aren't interested in Field Day. There were lots of questions during the presentation about Field Day rules and a discussion of what everyone has planned for their personal Field Day. I asked everyone to take some pictures and send them to me. I'll put together a presentation for the July meeting so we can see what everyone was up to.

I expect that we will have a "normal" Field Day outing in 2021.

And, for our next Field Day outing, we will have another generator. Jon Gilmore KB9RHZ has donated a Coleman Powermate generator in like-new condition. The Powermate puts just over 6 KW peak power and will be welcome addition to our emergency preparedness gear. Thank you Jon!

The ORC Fall Swapfest has been scheduled for August 29<sup>th</sup>. The fall event is held outdoors which should make it easier to maintain our social distance. Tom Ruhlmann W9IPR will be organizing the Swapfest again this year. We will keep you updated with any changes that occur over the summer.

If you know someone who is not a member but would like to attend a Club meeting ask them to contact me for an invitation.

See you at the meeting.

Pat Volkmann, W9JI

# **DX'ing & Contesting**

De Gary Sutcliffe (W9XT)



bination billiard shot.

The results of the Wisconsin QSO Party are out, and ORC took first place in the local club competition! We had scores submitted by AC9JV, KC9CI, K9DJT, K9QLP, K9VIN, WT9Q, W9JI, W9KEY, W9KHH, W9MXQ, W9XT, and W9XX. With this great turn out, we crushed the competition! Let's do it again next year!

June is a great month for Sporadic E (Es) propagation. Es propagation happens when small patches of the E layer of the ionosphere get ionized. The range is usually from a few hundred miles for high levels of ionization up to about 1300 miles. Multiple hops are possible in what Ken, W9GA, compares to a com-

Propagation can also be very localized. I have had half-hour QSOs with a station in Florida or Colorado, and the rest of the band was dead. Sometimes you will hear stations 50 miles away working stuff you can't hear. Most openings are to the south. Florida and the Gulf Coast states are most common, but openings can happen in all directions.

Es is more pronounced on the higher HF and lower VHF bands. Es occurs on other HF bands, but different propagation modes mask it. Es is a good mode to get WAS contacts for 15-6 Meters. I picked up a few new 12M states in the last few weeks.

Es peaks May-July with a smaller peak in December. I mentioned that the season seemed to start early this year, mid-April, but then we had a lull for a few weeks.

My primary interest this season is working new DXCC countries on 6M. So far, I have worked 19 separate DXCC countries on 6M this season with a crappy three element beam. Three of them were all-time new countries on 6M. Most were with FT8. FT8 opens up the bands not able to support SSB or CW.

Most of my 6M DX contacts have been into Central America, the Caribbean, or South America. I did work one station in the Canary Islands, which is part of Africa. So far, I have not heard any Europeans. Looking in previous years' logs, it seemed that most of the Europeans I worked on 6M Ex was between mid-June and the end of July, so there is still time for you to get into the action.

Other awards to chase on 6M include the popular VUCC award. You get this by making and confirming contacts with 100 grid squares. FT8 makes this easy because CQs include their grid square. You can see right away if they are a new one. Most FT8 ops are very active on LoTW, making confirmation quick, easy, and inexpensive.

Another, but much harder award is the Fred Fish Memorial Award. This was named after K5FF (SK), a big 6M proponent. You have to work every grid square that contains land in the continental US. Many are very rare because most of the grid is water or sparsely populated. LoTW tracks both VUCC and FFMA.

I first got interested in Es when I upgraded from my Novice license many years ago. It was on 10M. This band is the only band Technicians have HF phone privileges. Getting on is pretty easy. The legs of a dipole are only about 8' long. Get one up 15-20,' and you can make lots of contacts.

DXpeditions are still on hold with COVID-19, so not much to report there.

The big June "contest" is Field Day. ORC FD plans are not finalized as this is being written, but it seems unlikely there will be a group operation. Most members are skipping FD this year, or operating from home. I understand this will be discussed during the June ORC Zoom meeting.

If you are going to do FD by yourself, be sure to review the rules. They are complex, and we have relied on the FC committee to handle much of that in previous years.

This is going to be my 50<sup>th</sup> consecutive FD. I was hoping for something special, but it is not turning out that way. I have gone through three different plans. These changed as the ARRL made changes and made clarifications. I am disappointed in some of the ways they handled this. I will just default to using my home station with commercial power (Class D).

Note that they made a change that allows Class D stations to contact other Class D stations. That is a special rule in effect only for 2020. Also, individual stations can specify their club name with their entry. There will be a club listing. Get on the air and submit your score! ORC had a great showing in the WiQP, let's do it in FD!

The other contest in June is the VHF contest, June 13-15. You work other stations on 6M and above and exchange grid squares. The June running always has the possibility of Es openings on 6M, and it can be a lot of fun. The digital modes may play a big role, but if the bands open up enough to support CW or SSB, you will be able to make contacts faster on the traditional modes. Full rules at <a href="http://www.arrl.org/june-vhf">http://www.arrl.org/june-vhf</a>.

A contest for early July is the IARU contest. It starts at 1200 UTC (7:00 AM local) Saturday, July 11, and runs 24 hours. You can run CW only, SSB only, or mixed-mode in high, low, and QRP power levels. Exchange signal report and ITU zone. We are in Zone 8. Full rules at <a href="http://www.arrl.org/iaru-hf-world-championship">http://www.arrl.org/iaru-hf-world-championship</a>.

That wraps up this month on the air. Things are starting to open up a bit with the virus situation, but there are still reasons to spend some time in the shack.

# THE COMPUTER CORNER No. 267: How to Clean That Radio

Stan Kaplan, WB9RQR 715 N. Dries Street Saukville, WI 53080-1664 (262) 268-1949 <a href="wb9rqr@att.net">wb9rqr@att.net</a>



What the heck is he writing about now? Well folks, with the current Coronavirus problem, what do you use to clean up a radio you bought at a swapfest? What do you use to clean that chassis you are rebuilding? What do you use to clean the resistors, capacitors and other parts for that fresh project you are about to construct? Here are some basic guidelines recently outlined by Consumer Reports (June 2020), based upon scientific studies they have reviewed recently, with a few bits thrown in by your author (I was trained as a biomedical scientist and dealt with killing bacteria and viruses on cadavers as part of my job).

**Soap and water**, of course, for our hands before and after working with devices with unknown contamination. Soap and water breaks the protective envelope around the virus quickly and effectively, as we have all heard. It cannot really "kill" a virus because they are not living entities, so we more accurately say it inactivates them and prevents them from infecting a cell. But, we can be sloppy and say it "kills" them. Make sure it is at least a 17-second rinse (recently upped to 20 seconds just to make it to the nearest round number, but Stan remembers experiments done over 50 years ago using radioactive markers on the hands of volunteers that showed a 17-second rinse after a soap and water wash to be effective). Don't use soap and water and a long rinse for intact radio equipment, though!

**Bleach**. A half cup of bleach in a gallon of water (or 4 teaspoons per quart of water) makes a solution that will definitely kill viruses and bacteria (embalmers use bleach solution plus other additives to decontaminate the exterior of bodies prior to starting the embalming process, so that tells you something). Use gloves to protect your skin when preparing the solution. Make it fresh every few days because the chlorine gas in bleach will evaporate with time (that is the smell you smell – chlorine gas, and we humans can detect as little as 0.1-0.3 parts per million in air). Bleach can corrode metal with time and damage some plastic, so it needs to be water-rinsed a few minutes after application to whatever you are disinfecting. Keep all that in mind when treating electronic gadgets or components. Not the best choice for radios or their parts.

**Hydrogen peroxide.** Household hydrogen peroxide (3% in water) will "kill" almost all viruses in 6-8 minutes. Use a spray bottle and let it sit for awhile before drying with towels and vigorous air streams. It won't corrode metal surfaces, and it decomposes into simple oxygen and water. A caution. It is in a light proof bottle for a reason. Light will decompose hydrogen peroxide, so put fresh solution in that spray bottle you will use today. And it decomposes spontaneously with time, so make sure to follow the use-by date on the container. Don't bother using that bottle in your bathroom cabinet that you purchased 10 years ago! So, hydrogen peroxide is a pretty good candidate for making old radios safer.

**Alcohol**. Specifically, 70% rubbing alcohol. Vodka (80 proof or 40%) or other drinks will not work because they do not contain enough alcohol! Don't ask me why, but even 95% alcohol is less effective than 70%! Stick with plain, inexpensive 70% isopropyl ("rubbing alcohol") from your drugstore. It is pretty safe for all surfaces, except it may discolor some plastics. Spray it

on from a spray bottle or pour it on (keep away from flames). But mop it up and dry the equipment with a fan to make it evaporate after a few minutes have gone by.

**Vinegar**. Said to be pretty good for cleaning windows. But forget it in this day and age, since it has not been shown to be effective against any viruses.

**Wipes**. There are a bunch of brands for sale. The one I use and trust is Clorox Disinfecting Wipes (bleach-free), which they claim will kill 99.9% of viruses and bacteria, including human Coronavirus. Okay for most hard surfaces (not for skin, unfinished wood, foods, worn surfaces). As always, read the cautions and directions on the package.

So the upshot is, hydrogen peroxide (3%) and isopropyl alcohol (rubbing alcohol, 70%) look like pretty good candidates. Keep safe, and Happy Computing!

## **Vintage Amateur Radio**

de Bill Shadid, W9MXQ



In the 1970's, ham radio was still progressing from a totally separate receiver and transmitter station to what we see today in the modern transceiver. But, several manufacturers like Kenwood and Drake<sup>1</sup> held on to older concept, separate Receivers and Transmitters. That was in addition to offering successful ham band Transceivers. One manufacturer that had practically defined the transceiver concept – while not inventing it – was Swan Electronics. By the 1970's, Swan was a wholly owned subsidiary of the communication and technology conglomerate, Cubic Corporation.

Things were developing in the market with Kenwood and Yaesu (and sold by American distributors we knew as amateur radio sales outlets). CIR Industries, in the 1970's introduced the PLL main oscillator equipped transceiver, the CIR Astro 200. That Astro name would come back again at the end of the 1970's decade as a product and trade name of another manufacturer<sup>2</sup>.

Both Kenwood and Swan introduced Receiver and Transmitter separates in 1970 and 1971, respectively, in the form of the Kenwood R-599 Receiver and T-599 Transmitter and the subject of this article, the Swan 600-R Standard / 600-R Custom Receiver and the Swan 600-T Transmitter. Drake was established in the "separates" or "twins" market starting with their Drake R-4 Receiver and T-4X Transmitter in 1964. The rather remarkable Drake R-4C and T-4XC version pair came along toward the end of the 1970's. These Swan "twins" were late to this market started in 1958 by Collins with what were the 75S-3B Receiver and 32S-3 Transmitter by 1964. (That market was for separate receivers and transmitters that could be connected to transceive.)

Swans "twins" were large in desktop space requirements and unique at least in their frequency control system. They pretty much dwarfed their stable mates, the Swan 500cx and 270B Transceivers of the same vintage.



Swan 600 Twins
Swan 600-T Transmitter and Swan 600-R Custom Receiver

W9MXQ

The 600-R Receiver came in two forms . . .

- The 600-R Standard Receiver
- The 600-R Custom Receiver

The receiver in the above picture is a Custom model. The Custom version included both a Dual Mode i-f Noise Blanker and an ICAF Audio Filter. (ICAF strands for "Integrated Circuit Audio Filter"). The two receivers were different in appearance – showing the absence of certain Custom

version features. The Standard unit could not be converted into the Custom by addition of options – at least not in the same form.







Swan 600-R Custom Receiver

W9MXQ

On the Standard Receiver (left), note the missing ICAS Controls (under the S-Meter) and missing Noise Blanker control just to the right of the frequency readout window.

The receiver characteristics are ruled by its excellent 5.5 MHz i-f, 8-pole crystal bandwidth filter. This i-f design carried over (except for a change in 1968 to the final 5.5 MHz center frequency from approximately 5.2 MHz) from the original five band, Swan 350 Transceiver<sup>3</sup>. The 2.7 kHz filter bandwidth of the filter allowed for a full, rich audio bandwidth and comfortable listening. If anything, this filter limited the ability of the receiver to reject very close-in interference. However, the very steep slope factor (1.7:1 at 6 to 60 dB down) of the filter made the most of its design.

Both the Receiver and Transmitter are self-contained with internal power supplies. This was like similar separate receiver and transmitter products from Kenwood but unlike Collins and Drake where power supplies were separate.

While extremely rare to find, today, even installed in a radio, Swan offered optional bandwidth filters for the 600-R Receivers. These included a 600Hz CW Filter and a 6.0 kHz filter for AM. To my knowledge, none of the aftermarket filter manufacturers (INRAD, Sherwood, Fox-Tango, etc.) ever offered retro-fit filters for Swan or Cubic products. Optional receiver bandwidth slots in Swan radios were limited to the 600 series "twins" and the later Astro 103BXA and 103 Transceivers – none of which had significant volume.

Some options for the 600 series radios were offered at the time from Swan. These included . . .

- External Swan NB500 Noise Blanker for the 600-R Standard Receiver. (Receiver modification was required the NB500 was built into the 600-R Custom Receiver.)
- External Swan ICAF Audio Filter for the 600-R Standard Receiver. (Receiver modification was required the ICAS was built into the 600-R Custom Receiver.)
- Swan SS-16B i-f Filter for either 600-R Receiver<sup>4</sup>. This replaced the standard SSB i-f filter in the receiver and offered a steeper Slope Factor.
- Swan 600-S Matching Speaker for use with either 600-R Receiver.
- Swan 600-SP Matching Speaker and Phone Patch for use with either 600-R Receiver.
   The Phone Patch was also offered as an external package and marketed as the Swan FP-1
- Swan Model 330 External General Coverage Adapter for the 600-R Receivers<sup>4</sup>.
- Selectable Swan 600 Hz Narrow CW Filter for either 600-R Receiver<sup>4</sup>.
- Selectable Swan 6.0 kHz AM Filter for either 600-R Receiver<sup>4</sup>.
- Transceive Cable Swan 500cx<sup>4,5</sup> Transceiver with either 600-R Receiver.

Transceive Cable – Swan 270B<sup>4,5</sup> Transceiver with either 600-R Receiver.

As a comparison of power levels, the chart below shows the power specifications of the various Swan Transceivers and the Swan 600-T Transmitter in 1971 – the year the Swan 600 Receiver and Transmitter were introduced:

	Swan Radio in 1971			
	600-T	500cx	270B	350c
SSB Input	600w	550w	260w	520w
CW Input	500w	360w	180w	360w
AM Input	125w (Carrier)	125w (Carrier)	N/A	125w (Carrier)
SSB Output	360w	330w	150w	310w
CW Output	300w	200w	110w	200w
PA Tube(s)	2x 6KD6	2x 6LQ6	1x 6LQ6	2x 6LQ6

Power input levels are as posted in Swan literature of the time. Power output is based on about 60% efficiency and/or personal experience (Swan 600-T, 500cx, and 350c). In actual experience, the 600-T seems to operate smoothly to 400 watts output on SSB with good waveform showing on a monitor scope. Holding the output to no more than the above chart seems to be best for tube life. As a case in point – to reference tube life, the 500cx in the chart above was operated daily from its purchase in 1971 until three years ago – and now about monthly. It still produces more than 330 watts output from its original 6LQ6 tubes. The 600-T shown above will easily produce a clean signal on the monitor scope at over 400 watts, if allowed to do so.

Any mention of the 600's would be incomplete without some mention of the rather unique method of frequency determination. It is unique – and even may explain the rarity of the units.



The Frequency Determination Controls on the Swan 600-R Custom Receiver – Typical if the 600-T, 600-R Standard, and the 600-R Custom.

The picture above is showing the Frequency Determination Controls that includes the tuning window with the Dial Set and Main Tuning disks, the Dial Set Knob, the Main Tuning Knob, and the Band Switch. This is the front panel of the 600-R Custom Receiver, but it could be just as well any of the models (Receivers and Transmitter). The process follows:

- Set the bandswitch to the desired band noting the bandswitch indication of the bottom frequency. In the above picture, the bandswitch is set for 40 meters at 7.1 (for 7.1 MHz).
- Noting that the VFO dial has a range of 200 kHz tuning (identical, by the way, to the tuning range on the Collins S-Line VFO's). Set the VFO Dial to "0." (The 600's have a 500 kHz tuning range on 10-meters.)

- Noting whether I want the VFO to tune from 7.000 to 7.200 MHz or 7.100 to 7.300 MHz, I set the Dial Set control for a starting point of "0" (to run 7.100 to 7.300 MHz) or at -100 if I want to run the VFO from 7.000 to 7.200 MHz. Engaging the 100 kHz Crystal Calibrator (and with the VFO at "0," carefully tune the Dial Set knob for zero beat with the calibrator in the small range for the -100 setting.
- Similarly, this procedure is followed for each band using the bandswitch reading as the starting point and making the Band Set setting for the proper 100 kHz offset of the starting point, as desired.
- I will leave it to the user to handle a slightly different system on 10-meters (due to a 500 kHz range on the VFO for that band). It is covered nicely in the Operating Manual for both the Transmitter and Receiver. The procedure for both is identical.

I kind of find the system intriguing and fun to do, but I have friends today that would feel ill-used if their transceiver is not controlled by their computer and if their linear amplifier does not change bands at the command of the transceiver. I am just not an appliance operator!! But, I will also admit that this procedure is not conducive to quickly checking the 10-meter phone band while operating on 40-meter CW.

Another interesting phenomenon of today's transceiver-based operator is the concept of using a separate receiver and transmitter. While the 600-T and 600-R radios will transceive using either one's VFO, they are completely at home running separate. After initially getting the two working but not yet having the interconnection cable designed and built, I made an attempt at getting on the air when I was not totally sure of the ability to get the Transmitter and Receiver on the same frequency. Several attempts never netted the other station zero beating my transmitter signal and letting me follow with my receiver. They were hung up on their own digital readout and kept telling me to, for instance, "move to 7156!!" Enough said, that trait is gone and lost on most of today's operators. A thanks and a tip of the hat" to WØAH, W9DYQ, and K9DJT – old timers who knew exactly what to do. Thank you, fellows.

If the 600-T Transmitter user is a CW operator, there is a shortcoming in the standard 600-T Transmitter that can be addressed. Out of the box, Swan required the rotation of the Function switch from PTT to TRANS position to send CW. Or, a foot switch could be wired to the PTT line to connect to a foot switch to go from receive to transmit. For many this is effective but for some, semi-break-in is more to their liking. Swan offers a VOX (for voice) that includes semi-break-in CW circuitry that integrates itself into the radio. This is the VX-2 VOX unit for which there is a dedicated socket on the rear of the 600-T.

The 600-T Transmitter and 600-R Series Receivers are rare – and difficult to find in good condition. The one pictured at the beginning of this article is the result of a search that has gone on more than 25 years. It came from an estate that included two operating 600 stations – the one acquired and one that included the 600-R Standard Receiver and in less desirable condition, overall. They both were sold almost immediately. In my searches for the radios I find that many comments are made that the 600-T sold better than the 600-R Receivers. Best guess is that only 500 to 600 of the transmitters were made and under 500 of the 600-R Receivers. The split between 600-R Standard and Custom versions seems to indicate more Standard receivers were made than Custom. Anything is a guess – but suffice it to say that a search for a Swan 350 or 500 series Transceiver would net a find in minutes while a search for a 600 series pair could take years.

The rarest of all accessory item is the Swan Model 330 General Coverage Adapter. This device, that closely matched the appearance of the 600-R Receivers, sold in small quantities. Perhaps it

is conjecture on my part, but the 600-R Receivers had an optional AM filter – essentially for pleasant international shortwave listening. But, at the same time, it seems well known that Swan had problems in supplying that AM filter – for reasons unknown now. That was also true of the narrow CW filter. I feel it was possible that the lack of a readily available AM filter limited the viability of a General Coverage Adapter.



This is the Swan Model 330 General Coverage Tuning Adapter. It is shown here with a Swan 600-R Custom Receiver. The picture is scanned from the 1972 Swan General Catalog.

I have no idea how many (or how few!) of these Model 330 Adapters were produced. I have seen the unit in personal videos but have never seen one for sale.

Here is pricing for the units listed in this article – in 1972 dollars from the 1972 Swan General Catalog, plus its equivalent in 2020<sup>6</sup>:

Swan Item	Price in 1972	2020 Dollars
600-R Receiver Standard	\$395.00	\$2,500.00
600-R Receiver Custom	\$495.00	\$3,100.00
600-T Transmitter	\$535.00	\$3,350.00
330 General Coverage Adapter	\$129.00	\$800.00
600-S Speaker	\$18.00	\$115.00
600-SP Speaker / Phone Patch	\$59.00	\$370.00
AM Filter for 600-R	\$29.00	\$180.00
CW Filter for 600-R	\$22.00	\$140.00
VX-2 SSB/CW VOX for 600-T	\$35.00	\$220.00
NB500 Noise Blanker for 600-R Standard	\$89.00	\$560.00
ICAF Filter for 600-R Standard	\$59.00	\$370.00
500cx Transceiver w/117xc Power Supply	\$588.00	\$3,700.00
270B Transceiver	\$429.00	\$2,700.00

Swan did more than others to encourage the use of the separate 600 Series receivers with the rest of their product line. Drake encouraged using their separate receivers (the 2-Line and the 4-Line) with the TR-4 series transceivers. Much later they did the same thing with the TR7 Transceiver and the use of their matching R7 Receiver. In the case of the R7, it would transceive with the TR7.

Per the 1972 Swan General Product Catalog, the 600-R Standard Receiver is shown running with a Swan 270B and 500cx Transceiver. Reference these pictures from page 6 of that catalog:





• Swan 270B Transceiver (left)

# With Swan 600-R Standard Receiver in Transceive Setup

• 1972 Swan General Catalog

• Swan 500cx Transceiver (right)

# With Swan 600-R Standard Receiver in Transceive Setup

• 1972 Swan General Catalog

And, here is the picture of a similar tie up of radios at W9MXQ, wired for transceive operation on 40-meters:



Swan 500cx Transceiver with Swan 600-R Custom Receiver (with 117XC Power Supply/Speaker and 600-SP Speaker/Phone Patch)

W9MXQ

In transceiver mode with the 600-R Receiver, the receiver sets which VFO is running the transceiver. There are three selections – Transceive with the Receiver VFO, Separate (Receive on Receiver VFO, Transmit on the Transceiver VFO) and Transceive with the Transceiver VFO.

Separate receivers and transmitters are a throwback to our historical roots. I admit to being more inclined to want a table full of apparatus – all contributing to the QSO at hand.

A special thanks go to Bob, W9DYQ, for his proof reading. I appreciate that you read my articles. Remember that I am open to questions and comments at my email address, W9MXQ@TWC.com.

#### Notes:

<sup>1</sup> Kenwood marketed the R-599 Receiver and T-599 Transmitter pair (last version was the R-599D and T-599D. Drake early on marketed the R-4 Receiver and T-4X Transmitter (last version was the R-4C and T-4XC) with the R-4C being technical very different, and much higher performance than the R-4, R-4A, and R-4B.

<sup>2</sup> In 1978, Cubic Corporation bought CIR Industries and incorporated the Astro 200's conceptual designs into later Swan products. They continued to use the "Astro" name as a model version of the radio – such as the Swan Astro 150 Transceiver. The "Astro" name lived on as Swan dropped their original Swan brand and moved to the parent, Cubic, brand name in later years in the amateur radio business.

<sup>3</sup> Swan collectors and users today must be careful with this change of i-f frequencies. While Swan, unlike Drake, but like Collins and Heathkit, typically used the same i-f frequency throughout the product line, there was one Swan i-f frequency change in 1968 that causes today's users a bit of a problem. One simple example is buying an External VFO for a Swan 350 or a post 1968 Swan 350c. The External VFO to match the 350 and 500 Transceivers was the Swan 410. But the External VFO for the Swan 350c, 500c, and 500cx (and later) Transceivers is the Swan 410c. For a few years, Swan added that "c" to the model

number to designate the later i-f frequency. However, that did not last. The final External VFO offered by Swan was also designed for the 350c, 500c, 500cx, and later transceivers. It was the Swan 508. At that point, Swan dropped the use of the "c" in the model number. Confusing? It sure is!! So, what happens if you plug in the wrong VFO? Nothing destructive but the frequency of the radio's output is about 300 kHz off the dial frequency. Beware!!

<sup>4</sup> Swan accessory items such as the SS-16B or the Transceiver Interconnect Cables or the Model 330 General Coverage Adapter are nearly impossible to find today. I have never even found schematics of the Transceiver cables and had to design one myself to try the use with my Swan 500cx and Swan 600-R Custom. Even the 600-R to 600-T Interconnect Cable – that was standard with the 600-T but mostly missing when the transmitter is found, today – is rare and, again, not described in Swan Operations and Service Manuals. For my installation, I had to determine necessary connections and make my own cable. <sup>5</sup> Swan 500c Transceive Cable also worked with the same transceive cable as the 500cx – and with the 350c if the 350c was modified to accept external frequency control (the addition of a rear panel connector). The 270B Transceive Cable presumable would work with the later Swan transceivers that succeeded the 270B. (I cannot confirm that use of the 270B Transceive Cable.)

<sup>6</sup> Reference: https://www.dollartimes.com/inflation/inflation.php?amount=1&year=1972

#### W9MXQ

# **Upcoming ORC Meeting Programs**

de Pat Volkmann, W9JI



Upcoming ORC Monthly Meeting Programs
July – ORC Members Field Day Report
August – Home Brew Night??
September – Virtual Shack Tour

#### **Home Brew Night**

Last year at the August meeting we had our first Home Brew night. Members brought in examples or pictures of project that had worked on. It was a lot of fun seeing what everybody had been up to. We will be doing the

same thing again this August. If you would like to share your project, send me some information on what you have done. It can be a PowerPoint presentation (3 slides max!), some pictures or bring it in and show it off. You still have plenty of time to work on something.

#### **Virtual Shack Tour**

I would like to try a Virtual Shack Tour this year at the September. The format would be simple – take a couple of pictures of your shack and talk about it for a few minutes. As we get closer to September I'll provide some more guidelines for format, what information to share and how much time to allow. I'd be interested in hearing from you before then to see how many people would be interested in talking about their shack.

#### **Creating a Presentation**

Almost all of our presenters use Microsoft's PowerPoint to organize and present their information. If you don't have access to or aren't familiar with Power Point there is an alternative. The Open Office package contains Impress, which is similar to PowerPoint. Impress is easy to use and available at no charge. You can check out OpenOffice here: http://www.openoffice.us.com/

The monthly program is the highlight of the Ozaukee Radio Club meeting. We are fortunate to have a number of very talented people in our club, many of whom have shared their knowledge through a presentation. Share your expertise and experience with the club. Programs can be on any topic that is ham radio related. Contact Pat Volkmann W9JI at w9ji@arrl.net to discuss your idea for a program.

# Ozaukee Radio Club May 13, 2020 Meeting Minutes

de Ken Boston W9GA



This ORC meeting was conducted via an online (internet) connection using the ZOOM app. Prior to the meeting start, those members who were able to access the 'waiting room' via phone or computer/webcam were then introduced into the meeting space hosted by Pat W9JI. At that time various audio and video connection issues were addressed for the members before the meeting began.

ORC President Pat W9JI officially initiated the meeting at 7:30 PM, as introductions were recognized when members checked into the meeting, a go-around was not conducted.

#### **Committee reports:**

Repeater VP Tom KC9ONY reports that repeater now operating well, Nels WA9JOB has checked the system RX, the 220 link is okay.

Tom KC9ONY also reported that the spring swapfest was cancelled, with no rescheduling of this fest. The fall swapfest will be considered next. Tom did remind the membership of the Tuesday night ORC net on the repeater, held at 8 PM CDT.

W9XT Gary mentioned that the Contest University (usually held in Dayton prior to the Hamvention) was held online, and is available as a free online stream. This event, moderated by Tim Duffy K3LR, has over 2700 participants this year.

#### **Program:**

Gary K9DJT presented a program on how to assemble and solder coax connectors on the ends of coaxial cable jumpers. He gave a detailed procedure on soldering PL259 or N connectors on an RG8 style cable. Tools, solder types and other details were presented, along with a fairly detailed explanation of the process of cutting the cable and assembling the connector.

Field Day polling was taken to see how the members would respond to participation this year. The results indicated that a group effort would not be supported by the majority due to the Virus.

13% indicated group effort support 70% indicated stay at home operation 17% indicated no FD operation.

Commentary on field day included the probability that there would not be sufficient tents or motorhomes available for station locations, and that band captains would be in short supply.

A general question was put forth regarding using the polling feature in Zoom to take a vote on proposals to the club, which was overwhelmingly supported by the club members.

#### Adjournment:

Bill W9MXQ moved to adjourn, Stan WB9RQR seconded the motion, and motion carried. Meeting ended at 8:55 PM

29 members (unique callsigns) were logged in. Contact Ken W9GA to obtain the list.

Respectfully submitted,

Kenneth Boston, W9GA

Hund Khite

Secretary

#### **ORC Meeting Agenda**

July 8, 2020

- 1. 7:00 7:30 PM Network & Rag Chew
- 2. Call to Order President Pat Volkmann (W9JI)
- 3. Introductions
- 4. Announcements, Bragging Rights, Show & Tell, Upcoming Events, etc.
- 5. Program
- 6. Fellowship Break
- 7. 50/50 Drawing
- 8. Auction Stan Kaplan (WB9RQR)

- 9. President's Update Pat Volkmann (W9JI)
- 10. 1<sup>st</sup> VP Report Ben Evans (K9UZ)
- 11. 2<sup>nd</sup> VP Report Bill Church (KD9DRQ)
- Repeater VP Report Tom Trethewey (KC9ONY)
- 13. Secretary's Report Ken Boston (W9GA)
- Treasurer's Report Gary Bargholz (N9UUR))
- 15. Committee Reports
- 16. OLD BUSINESS
- 17. NEW BUSINESS
- 18. Adjournment to?

### **Meeting Note:**

The July meeting will likely be held via the Zoom videoconferencing platform on the same evening and time. Details will be emailed via the ORC remailer.

Return undeliverable copies to:

The ORC Newsletter

524 Alta Loma Drive Thiensville, WI 53092 **First Class** 

#### **Next ORC Meeting (Tentative):**

Grafton Multipurpose Senior Center

1665 7<sup>th</sup> Avenue, Grafton, WI Wednesday, July 8<sup>th</sup>, 2020

7:00 PM - Doors Open

7:30 PM - Meeting Begins