



# The *ORC* Newsletter

Official publication of the Ozaukee Radio Club, Inc. Email all contributions to the editor, Bill Shadid, W9MXQ (W9MXQ@TWC.com). Permission to reprint articles published in any issue is granted provided the author and the Ozaukee Radio Club Newsletter are credited.



ORC Repeaters on 146.97 (-127.3PL), 224.18 (-127.3PL), 443.75 MHz (+127.3PL) - Callsign W9CQO

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Volume XXXIII

September 2021

Number 9

## From the President

de Pat Volkmann, W9JI



This past month the Club lost a long-time member and good friend to many. Nels Harvey, WA9JOB, passed away on August 25, 2021, following a long illness. Nels was well known for not only his extensive knowledge of radio but his willingness to share that knowledge with others. The many positive comments left by Nels' friends on the Club reflector are a testament to his fine character. A memorial service is planned for Saturday October 2<sup>nd</sup>. Details will be published as they become available.

The ORC Fall Swapfest is set for Saturday September 11<sup>th</sup>. This will be the first time we have been able to get together in quite a while and many are looking forward to the event. Tom Ruhlmann, W9IPR, is once again organizing the Swapfest. Tom is looking for more volunteers to help with the event. People are needed for setup on Friday, working the gate on Saturday and a variety of other jobs. We do need your help, so please consider volunteering. You can contact Tom at [teruhlmann@wi.rr.com](mailto:teruhlmann@wi.rr.com).

Covid 19 and all its variant strains are still with us. The CDC has some new guidelines, and we plan to follow those guidelines for the Swapfest – see the next article. The newest addition to the CDC guideline is a recommendation for unvaccinated people to stay home and not travel. The Club Covid guidelines can be found in this issue of the Newsletter.

I polled the members at the last two Club meetings and found limited interest in attending a meeting. The surge in Covid illness and the uncertainty of the emerging variants seem to have further dampened interest in an indoor meeting. We will therefore continue with Zoom meetings for the foreseeable future.

Ever have one of those projects that started out small and then grew into something that you weren't expecting? I decided that it was time to update my 20-year-old rig and replaced it with a Yaesu FTDX-101MP. I realized shortly after I got it that the shack was too crowded, and some changes were needed. I don't know yet how things will end up but it is great fun to be designing a new station layout.



See you at the meeting.

Pat Volkmann, W9JI

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## ORC Fall Swapfest Covid 19 Guidelines

Ozaukee Radio Club Board of Directors, August 26, 2021

The Ozaukee Radio Club will follow the CDC recommendations for Covid 19, in addition to state and local regulations. At this time, the State of Wisconsin Department of Health Services (DHS) and Ozaukee County follow the CDC guidance.

**If you are fully vaccinated**, you do not need to wear a mask or practice social distancing *when outdoors*. A mask is recommended when indoors in areas of high transmission, which currently includes Ozaukee County. You may also choose to wear a mask, regardless of the level of transmission, especially if you are around someone who is at increased risk of severe disease.

**If you have been vaccinated but it has not been two weeks** since you had the last (final) shot, you are not fully vaccinated. See the next paragraph to follow DHS rules in this case.

**If you are not fully vaccinated**, we ask that you wear a mask and maintain a 6 foot distance from others. On the other hand, if you are not fully vaccinated, DHS continues to advise against attending gatherings with people who don't live with you and who are not fully vaccinated, so you should reconsider attending at all.

If you have health concerns, discuss them with your doctor prior to attending the Fall Swapfest.

Board of Directors  
Ozaukee Radio Club

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## **Upcoming ORC Monthly Meeting Programs**

de Pat Volkmann, W9JI

### **Upcoming ORC Monthly Meeting Programs**

September (this month) – Morgan Bailey, NJ8M, End Fed Half Wave Antennas

October – Open

November – Open

December – Open

At this point we do not have any programs scheduled for the rest of the year. Please contact Pat W9JI with your program ideas.

### **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 PowerPoint 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/>

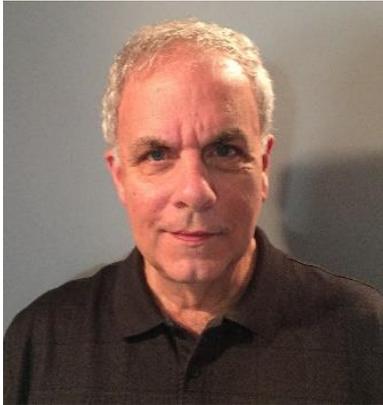
The monthly program is the highlight of the Ozaukee Radio Club meeting. We are fortunate to have a number of very talented people in our club, many of whom have shared their knowledge through a presentation. Share your expertise and experience with the club. Programs can be on any topic that is ham radio related. Contact Pat Volkmann, W9JI, at [orc\\_pat\\_w9ji@outlook.com](mailto:orc_pat_w9ji@outlook.com) to discuss your idea for a program

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## A Message from the Editor

Bill Shadid, W9MXQ



On advantage of being the Editor of a publication is total freedom as to where something I want to say is where I want it to appear in the Newsletter! I want to extend a sincere invitation to budding writers in this organization (or elsewhere) that want to be published. Special projects around the shack, operating/on the air experiences, radio comments, or whatever you have that is ham radio or shortwave radio related. Interesting tidbits on Shortwave Listening are also most welcome. Contact me ([W9MXQ@TWC.com](mailto:W9MXQ@TWC.com)) and let's discuss your article ideas. I am intrigued of late with a lot of activity on weak signal modes with VHF and UHF. Are you involved? Let me know and let's get it in from of the rest of the club.

This month check out Gary Sutcliff, W9XT, and his monthly **On the Air** column. This month he covers the beginning of the fall season of the year. Gary also includes notes about interest within Ozaukee Radio Club on a topic mentioned just above – “weak signal modes with VHF and UHF.”

Stan Kaplan, WB9RQR, talks about upgrading to the latest version of Linux Mint (v20.2) in his 282nd edition of the monthly **Computer Corner**.

Pat Volkmann, W9JI, not only provides us with his monthly **From the President** message, but he also presents another of his **Vintage Magazine Cover Art** articles. I think these started as a single article, but I find an increasing fascination with monthly column, as it has become. Pat has material herein about upcoming programs for club meetings – and the process for making presentations for all to enjoy.

Check out the article from your Editor, Bill Shadid, W9MXQ, in the monthly **Vintage Amateur Radio** column, about the ground-breaking Hallicrafters FPM-300 Safari Transceiver.

Check references in this month's Newsletter concerning Covid-19 related issues and guidelines – including those for general meetings and the upcoming Fall Swapfest.

On to the Newsletter . . .

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# THE COMPUTER CORNER

## No. 282: Upgrading to Linux Mint 20.2

Stan Kaplan, WB9RQR, 715 N. Dries Street, Saukville, WI 53080-1664  
[wb9rqr@gmail.com](mailto:wb9rqr@gmail.com)

If you are already running Linux Mint 20 or 20.1, upgrading is easy.

1. Create a system snapshot using Timeshift so that if anything goes wrong, you can restore the system to the previous configuration. That just makes sense. Left-click the Linux Mint icon in the lower left of the tray, type the letter t and click the Timeshift logo from the choices shown. Type in your password and left click the Create logo at the top of the window. All that might take 10 minutes or so.
2. Disable the screensaver temporarily if you use it. That will prevent the screensaver from interrupting the update process and potentially garbling it. That makes sense, too.
3. Click the shield logo in the tray to bring up the Update Manager and click Refresh to make sure your system is up to date. Install anything shown. Refresh again to make sure there are no more updates. Also common sense. You are now ready for the upgrade.
4. While still in the Update Manager, click Edit at the top and select Upgrade to 20.2, Uma (Uma, the name of a goddess, is the code name for 20.2). From there, just follow any instructions as they come up. Give yourself at least half an hour of free time for the upgrade, though in my experience, you won't need that much time. For one of my upgrades, there were 16 security updates and 21 software updates, but they go pretty fast. Nevertheless, don't start it 5 minutes before you have to leave for work! That makes sense, too.

You will need a reboot after the upgrade to complete installation of many of the updates.

Yes, it is worth it. Besides being relatively simple to do, there are a couple of important changes that are largely in the background, but nevertheless, they are important. There is a reworked desktop that uses less memory to operate for you, though you may not notice it as being different. The search feature has been improved, which is appreciated because it means quicker search results. Many Cinnamon utilities ("spices", such as widgets and themes) have been redone and are better. Also, you can now move files from Linux Mint to Android devices, or the reverse, on the same LAN.

Not bad, for about half an hour's time investment. Also, the Linux development team, after much soul searching, made the reminders to update a teeny bit more intrusive so that you are protected as needed when stuff is updated. I was impressed with how

much effort they made not to be “in your face” more than absolutely necessary in good conscience.

So there you have it. Do the update. And, Happy Computing!

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## On The Air!

de Gary Sutcliffe, W9XT



Fall is right around the corner, although as I write this near the end of August with temperatures in the 80s and 90s with humidity levels to match, it does not seem that way. Even if the heat and humidity are not bad enough, the mosquitos have been terrible. Too bad we can't harness them to lift antennas. There must be enough of them in my yard to put up a full size 80 Meter Yagi.

But the days are getting shorter. By the middle of the month, we will be losing just under three minutes a day. That is a half hour less daylight after just ten days! That leaves less time to get those fall antenna projects done. I certainly have a pile of antenna projects I hope to accomplish before the fall contest season.

But, putting up new antennas is only part of the fall work list. It is also time to inspect and perform maintenance on the antennas already up in the air. It is better to find you have a problem or are about to have a failure before there is three feet of snow and sub-zero temperatures. Checklists are an excellent way to ensure nothing is missed. The checklist here is a good starting point. Feel free to add extra ones that are relevant to your station.

Fall Antenna Inspection and Maintenance Checklist	
	Check the SWR of every antenna. Check all bands with multi-band antennas. Compare it to the readings when you put it up. Failures usually result in high SWR, but lower SWR can mean problems such as lossy coax.
	Check coax connectors. They should be tight and have proper weatherproofing.
	Inspect coax for wear, cracks, and rodent damage. Replace damaged coax.
	Check tower guy lines for proper tension, loose hardware, and corrosion.
	Prune branches that have grown around antennas and guy wires.
	Inspect wire antenna rope supports for wear or damage.
	Enter your inspections points here.
	Enter your inspections points here.

One of the most challenging accomplishments in ham radio is making contacts by bouncing signals off the moon, commonly called moon bounce or EME (Earth-Moon-Earth). As far as I know, the only ORC members who have accomplished it are Ken, W9GA, and myself. Ken has made EME contacts on 6 and 2 Meters and maybe 432. I have done it on 2 Meters.



A lot of the activity will be FT8 because of its weak signal performance but check CW and phone if you start seeing stations up around +05 dB or higher. You can make contacts so much faster. The June version was terrible because even when conditions were very good, few moved off FT8. There were so many signals on that frequency that it was hard to complete QSOs through the QRM. Furthermore, the band would frequently change before the contact could be completed. Those contacts would have been completed quickly with a non-digital mode. <http://www.arrl.org/september-vhf>

The CQ World Wide RTTY Contest is the last weekend of September, starting at 0000 UTC September 25 (7:00 local Friday night). It runs for 48 hours. This is similar to the more well known CW and Phone versions, with a few differences. First, there is no 160M activity allowed. More importantly, you can work your own country for QSO points. You can work them for multiplier value in the other modes, but they have zero QSO point values.

Besides DX countries and CQ zones, US states and Canadian provinces are multipliers. So, we will send signal reports, CQ zone, and state. That will be "599 04 WI" for us. DX stations only send signal reports and zone. <https://www.cqwwrtty.com/rules.htm>

A good one in early October is the California QSO Party, starting at 11:00 local Saturday, October 2 and running until 5:00 PM Sunday. I put in some time as a shake down to check out the station after a summer of limited contesting. Send a QSO number and state. Work only Californian stations. They will give a QSO number and a 4-letter county abbreviation. I suggest you become familiar with the CA counties and have a copy handy while you operate. Work CA stations both on CW (3 points) and phone (2 points). One cool thing about the CAQP is that if you have one of the top 20 out of state scores, you win a bottle of California wine. Rules, county listings, etc., from their website: [www.cqp.org/Rules.html](http://www.cqp.org/Rules.html)

Big DXpeditions are still uncommon, but it sounds like things will be picking up early next year. There are a few single op efforts in September. Tanzania seems to be a popular destination by a couple of different hams in the second half of September. A group of Czech hams will activate Sao Tome & Principe using the call S9OK October 2-16. They will be on 160-6M, CW, SSB, and digital.

This newsletter will be changing hands, starting with this issue. A big thanks to Ben, K9UZ, for handling the editing job for these past years. Good luck to Bill, W9MXQ, our new editor. Bill adds this task to a long list of obligations to area radio clubs. Help him out by writing up something radio related for the newsletter. I always believed that if you can't get up and talk or write a short article about something interesting you did in ham radio at least once a year, you are in the wrong hobby.

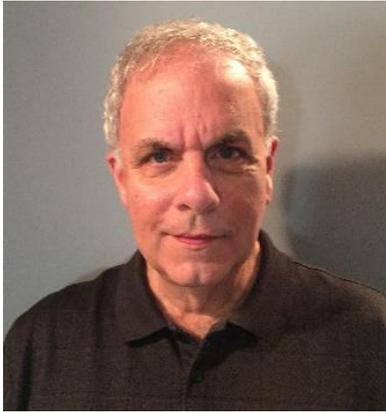
That wraps September. Print out the checklist and get busy on inspecting that antenna system!

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## Vintage Amateur Radio

de Bill Shadid, W9MXQ



Those that know me well and my history with ham radio and with Vintage Amateur Radio in particular, know that I am primarily a Hallicrafters fan. As Hallicrafters said in a 1972 advertisement<sup>1</sup>, “You should be talking on a Hallicrafters.” I bought into that philosophy from day one of being a ham radio operator and before that as well. My very first new commercial radio was a high school graduation gift from my parents. That was the popular, in 1963, Hallicrafters SX-110 General Coverage Receiver.

I am an appreciator of many, if not all, brands of vintage amateur radio equipment. I appreciate my Collins, National, Swan, Drake, and other brands of equipment – but Hallicrafters is, and always has been, my favorite brand.

This installment of Vintage Amateur Radio will discuss the very last amateur radio product Hallicrafters marketed<sup>2</sup>. Check this advertisement:

**Hallicrafters' Single Sideband/CW communications comes in many forms, backed by over 38 years of radio engineering experience and service to hams.**

The advertisement features a black and white photograph of several vintage Hallicrafters radio units stacked on a white surface. A red arrow points to the top unit. The Hallicrafters logo, a stylized 'h' inside a circle, is visible in the bottom right corner of the image.

Hallicrafters' communications equipment has a world-wide reputation for high quality and reliability with hundreds of thousands of sets in every-day use by ham operators on every continent.

This is from the April 1972, issue of *Ham Radio Magazine*. Note the arrow I added to the original scan of the advertisement pointing to an unidentified new product from Hallicrafters. Advertising from Hallicrafters introduced the radio the next month. That was the self-contained FPM-300 HF Transceiver. Self-contained meant that the box you see in the picture include both AC (117/234 VAC) and DC (12 V) Power Supplies and Speaker. All the amateur of the day needed was a microphone and/or a key (and an antenna!) to get on the air. So, here is the radio that was revolutionary in its day:



**Hallicrafters FPM-300 Mark II HF Transceiver**

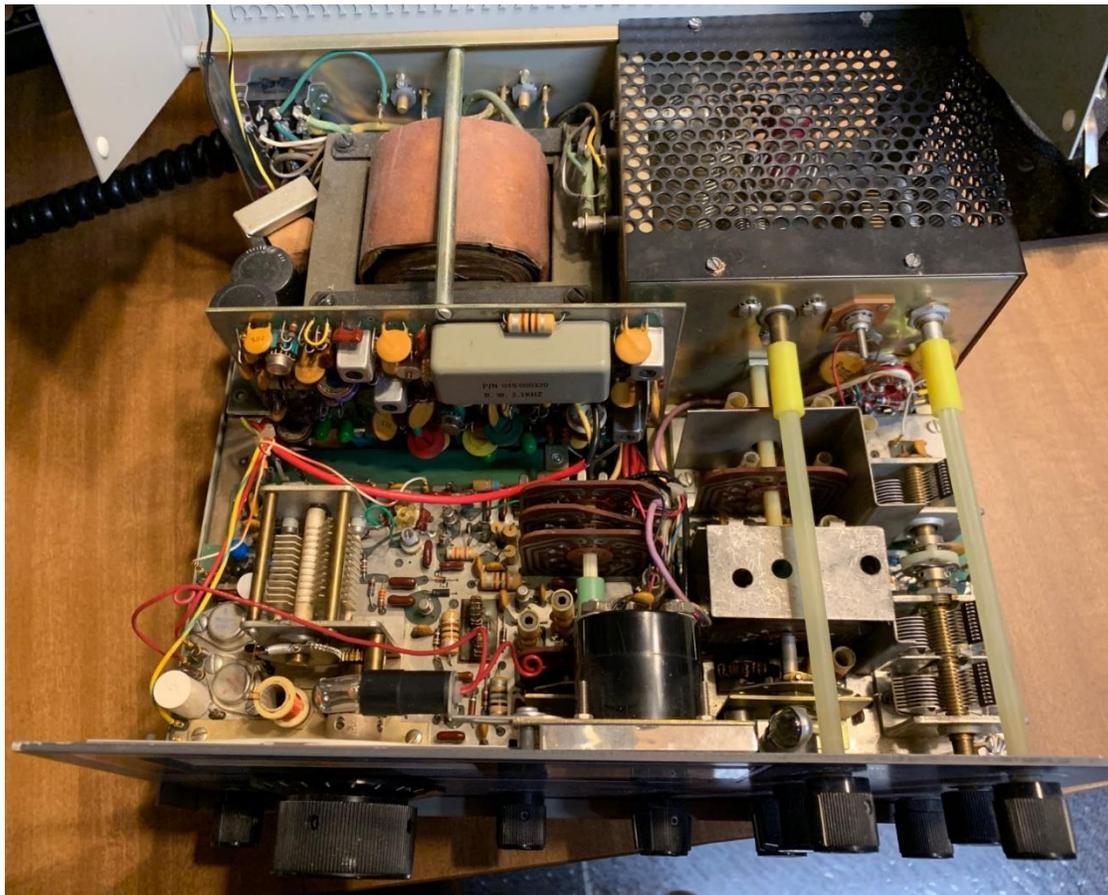
W9MXQ Collection

The advertisement on the previous page had received a lot of attention. While the American amateur radio equipment manufacturers were leaving the market for more lucrative, at the time, military work, they were respected by the amateur community. A call that I made to the Chicago factory, after seeing the advertisement, was interesting. It seems the advertisement had been set up without the pending FPM-300 announced to the market. That led to many calls to the factory. And, according to the person that I talked to, had shown much more interest than the marketing department expected.

Before going further, the collector in me makes me want to describe the other products in the advertising picture. Sitting on top of the FPM-300 was what I think was a "Hand Command" HT that operated on 2M FM. However, the Hand Command radios were for the commercial market. To the left of the FPM-300 was the HA-20 Remote VFO that worked with the SR-400A Cyclone III HF Transceiver and the SR-2000 Hurricane HF Transceiver. Below the FPM-300 is the PS-2000 AC Power Supply/Speaker Console for the SR-2000 HF Transceiver. To the left of the PS-2000 is the PS-500A AC Power Supply/Speaker Console for the SR-400A HF Transceiver. To the left of the PS-500A is the HA-1A Electronic Keyer for CW. Below the PS-2000 is the SR-400A HF Transceiver with the SX-133 General Coverage HF Receiver next to it. On the bottom row, below the SR-400A is the SX-122A General Coverage HF Receiver. Finally, next to the SX-122A is the SR-2000 HF Transceiver. The microphone on top of the HA-1A Keyer is a mystery. Hallicrafters most often marketed private labeled Turner microphones so some version of one of Turner's products may have been this mystery unit.

The FPM-300 had very desirable specifications. First it carried an input power of 250 Watts PEP on SSB for a rated output of 100-watts – on the lower bands it was a bit more and on the 15- and 10-meter bands it was closer to 90-watts. On CW the radio delivered 180-watts input for an output of at least 90-watts.

The radio was all solid state except for a 12BY7A Driver and a single 6KD6 sweep tube final amplifier. The solid-state portion of the radio was a really fine performing radio at a time when solid state radios in ham radio could leave a lot to be desired in the area of receiver performance – especially overloading of the front end. I have used the one shown here on Field Day with other radios present in a close together operation. There were no problems. Take a look at this interior view – front panel is at the bottom:



**Hallicrafters FPM-300 HF Transceiver – View from Top – Cover Open**

**W9MXQ Collection**

This top view shows the VFO/Pre-Mixer/Audio Amplifier board at the front left. The Function Board is mounted vertically on the back plane separating the Power Supply and Power Amplifier areas from the receiver and low-level transmitter circuitry. The Function board carries the 6-Pole Crystal Filter. The filter specifications are for 2.1 kHz at 6 dB down and 5 kHz at 60 dB down – for a shape factor of 2.4 – a bit broad for the technology available at that time but in keeping with the 6-pole design. A positive of the design is very easy listening audio response.

The remaining circuit board, the Pre-Selector/ALC Board, is at the right side of the chassis in the view on the previous page. It is mostly invisible in this view. Note that the Bandswitch Wafers are PC board mounted to the Pre-Selector/ALC Board.

This unit is a Mark II Model – meaning it is the second version of this transceiver. Take a look at this picture of the back panel:



**Hallicrafters FPM-300 HF Transceiver – Rear View**

**W9MXQ Collection**

Note the two power transistors used in DC operation. Those are 2N1522 – available readily, today. I do not use this radio on DC power as these are Germanium power transistors and unlikely to take the strain of operation at their age. I have never tried powering my FPM-300 on 12-VDC and will not be doing so. These devices are for display only!

The 12 Volt power transistors are not the only place where this transceiver is delicate, While the transceiver operates very well, it has two ticking time bombs inside in the form of two impossible to replace integrated circuits on the Function Board. Those are:

- MC-1496G – Product Detector and Audio
- LM-370 – Transmitter Audio Compressor/VOX Delay/Anti-Trip

The only thing possible here in the event of a failure is modification to use other forms of case configurations that may be available. If you notice a familiarity in the device callouts, you would be correct. But these particular devices are round and socketed – a case configuration no longer generally available. The once popular LM-370 is now hard to find in any kind of configuration.

The Mark II version of this radio corrected many early production problems with the radios. Lots of issues with the bandswitch and general manufacturing quality. One major

improvement in the Mark II was a much better design bandswitch wafer. The new wafers were still PC board mounted but the technology for that kind of switch was new at the time and was not in its best form in the original version. Also, at the time, Hallicrafters was moving amateur radio production to Kansas City, Kansas, to be a part of the electronics operations of Northrup Corporation – Hallicrafters' parent for many years by that time. Generally speaking, Mark II versions, which were all built in Kansas City, are fine little radios. The Mark II discussed in this article provides a lot of pleasure in operating – especially on SSB. The original units could be a quality nightmare and they eventually ruined the reputation of the model and caused its early demise. In the end, this radio was off the market by 1977.

A note of caution here. Some early Mark II radios were actually rebuilt early units that were modified with most (but not all) redesign features included. My advice, if you want one, is to look for radios with the white adhesive back serial label like you see in the rear panel picture in this article. It is my experience that only the Kansas City built units have that label.

On CW, the radio had the same limitations as the Collins KWM-2, the Drake TR-4, and others, in that there were limitations on CW offset and no ability to fine tune the receiver (as with Receiver Incremental Tuning). The offset was acceptable (unlike the terrible CW implementation on the Collins KWM-2), so the radio was fine for casual CW operation. Also good for contest events where the exchange is too fast to get involved in the minor drift that was common in radios of the time. Suffice it to say that like many radios of the day, CW was an afterthought. These were phone transceivers with, in the case of the FPM-300, no accommodation for much of anything other than SSB.

Hallicrafters, starting with the HT-44 Transmitter, in 1964, included a rudimentary speech compression circuit that upped the average modulation by increasing drive while providing for an ALC circuit that acted very quickly to prevent over modulation. It was effective with somewhere just less than 3 dB of compression – a small number by today's standards but a unique to Hallicrafters feature in the HT-44 and HT-46 Transmitters as well as the FPM-300 Transceivers (and all the transceivers listed, below). This very responsive ALC circuitry was named Amplified Automatic Level Control – "AALC." To quote the Theory of Operation in the FPM-300 Operating and Service Instructions book included with the radio, "The Amplified Automatic Level Control (AALC) circuits are utilized only in the transmit mode. To properly employ the capability of the linear power amplifier, the stage must operate up to and slightly into the control grid current region and yet not overdrive into unwanted distortion known as "flat topping"<sup>3</sup>."

Not shown on the rear view of the FPM-300 is the optional Hallicrafters HA-60 Cooling Fan. You can see the fan location in the previously shown rear view – on the left side of the back panel. There is a 117 VAC outlet toward the right, lower center for powering the fan – see connector marked "BLOWER." This outlet supplies 117 VAC when the radio is on 117 VAC or 234 VAC power. If the radio is running on 12 VDC, then this outlet provides square wave 117 VAC power – on transmit only. The square wave surely

makes for a noisy running fan! I have the HA-60 Fan assembly but do not have it installed.

Hallicrafters' transceivers were usually (but not always!!) named after storms. Some had no name at all. Those names include the following:

- SR-150 HF Transceiver – no name given (80-10 meters)
- SR-160 HF Transceiver – no name given (80-40-20 meters)
- SR-400 HF Transceiver – Cyclone (80-10 meters)
- SR-400 HF Transceiver – Cyclone II (80-10 meters)
- SR-400A HF Transceiver – Cyclone III (80-10 meters)
- SR-500 HF Transceiver – Tornado (80-40-20 meters)
- SR-540 HF Transceiver – The Eastwood (80-10 meters)
- SR-750 HF Transceiver – Cyclone (80-10 meters)
- SR-2000 HF Transceiver – Hurricane (80-10 meters)
- FPM-300 HF Transceiver – Safari (80-10 meters)

These were not the only SR and FPM prefix transceivers from Hallicrafters<sup>4</sup>.

Hallicrafters, perhaps to distance themselves from the early FPM-300's, never used the Safari name when advertising the Mark II version of the radio. The Safari name hinted at Hallicrafters having a long history of sponsoring or just supporting DX-Peditions. One example is one that I experienced. That was Hallicrafters' support of DX-Peditions to isolated Pitcairn Island. It was my pleasure to work a Hallicrafters equipped station, operated by Tom Christian, VP6TC, a descendant of Fletcher Christian of Mutiny on the Bounty fame. He was running a nice new, at the time, Hallicrafters SX-117 Receiver and HT-44 Transmitter. I did not work the DX-Pedition but do recall Tom mentioning that Hallicrafters allowed him to keep the Receiver and Transmitter when the DX-Pedition departed. (Tom, VP6TC/VR6TC, is now a Silent Key but his relatives on the island carry-on an amateur radio tradition begun by Tom.)

I have seen pictures of early FPM-300 Transceivers with the word, "SAFARI" screened on the front panel. But I have never seen a Safari printed radio up close and personal.

Hallicrafters in the 1950's was active in many partnership operations with ham radio and the military at bases in the Arctic and the Antarctic. They were also active in operations with National Geographic – and in particular, I can remember seeing such equipment used extensively during the International Geophysical Year (IGY) running from 1 July 1957 to 31 December 1958<sup>5</sup>.

There are rumors and stories about the FPM-300 that I have come across from other collectors over the years. They may not be worth the effort to discuss – but they are fun to contemplate, none the less. The first involved information about a model FPM-750 that is scarce on information. One picture, which I can no longer find, showed a design identical to the FPM-300. So, I suspect at most it was a planned, but never developed, higher power version of the FPM-300. Also, along the line of rumors and stories, there is

one about Hallicrafters at the time of their exit from amateur radio approaching R. L. Drake Company about continuing the little FPM-300 under the Drake name. Drake was a stickler for quality and the early quality reputation with the FPM-300 would give Drake a reason to step back from such a proposal – that is, if it ever happened.

A special thanks go to Bob, W9DYQ, for his proof reading and suggestions as to content. And I appreciate that you read my articles. Remember that I am open to questions and comments at my email address, [W9MXQ@TWC.com](mailto:W9MXQ@TWC.com).

### Notes and Comments:

<sup>1</sup> This is from a Hallicrafters advertisement in the April 1972 edition of *Ham Radio Magazine*.

<sup>2</sup> To be sure, Hallicrafters did market short wave receivers for a bit after their last dedicated amateur radio product – but not for long.

<sup>3</sup> Reference Section 6-5 of the Hallicrafters **FPM-300 Operating and Service Instructions**.

<sup>4</sup> Subject of a future article.

<sup>5</sup> Look up “International Geophysical Year” at <http://www.wikipedia.com>.

© **W9MXQ**

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### Meeting Note:

Until the club decides it's safe to hold in-person meetings again, we will be holding the meetings via the Zoom Videoconferencing platform on the same evening and time as we had the in-person meetings. President Pat Volkmann, W9JO, will email sign-in info via the ORC remailer usually about an hour before the start of the meeting.

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## Vintage Magazine Cover Art

de Pat Volkmann, W9JI



Our cover this month, “A ‘Ground’ For Complaint”, is from the September 1921 issue of *Radio News*. The cover art is by Howard V Brown, whose distinctively styled art appeared on the covers of *Scientific American*, *Astounding Science Fiction*, and several other magazines.

On the cover, we see two men on a camping trip. One of them is holding a fish and the other is operating a portable radio. In 1921 broadcasting was in it's infancy, so there probably wasn't too much to listen to, just hams and some commercial traffic. The radio has an interesting antenna overhead and the camp frying pan is used for the ground connection. No wonder that fellow has a complaint!

CIRCULATION LARGER THAN ALL OTHER RADIO MAGAZINES COMBINED

# RADIO NEWS

REG. U.S. PAT. OFF.

20 Cents  
September  
1921

Over 100 Illustrations  
Edited by H. GERNSBACK

"A 'GROUND' FOR COMPLAINT"



"THE 100% WIRELESS MAGAZINE"



## Minutes of the August Ozaukee Radio Club Meeting

Ozaukee Radio Club Secretary, Ken Boston, W9GA, reports that he is having some technical difficulties and the minutes will follow for later approval.

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# ORC Meeting Agenda

*September 8, 2021*

1. 7:15 – 7:30 PM – Check-In and Introductions
2. 7:30 PM Call to Order – President Pat Volkmann (W9JI)
3. Announcements, Bragging Rights, Show & Tell, Upcoming Events, etc.
4. Presentation: Morgan Bailey, NJ8M, “End Fed Half Wave Antennas”
5. President’s Update – Pat Volkmann (W9JI)
6. 1<sup>st</sup> VP Report – Ben Evans (K9UZ)
7. 2<sup>nd</sup> VP Report – Bill Church (KD9DRQ)
8. Repeater VP Report – Gregg Lengling (W9DHI)
9. Secretary’s Report – Ken Boston (W9GA)
10. Treasurer’s Report – Gary Bargholz (N9UUR)
11. Committee Reports
12. OLD BUSINESS
13. NEW BUSINESS
14. Adjournment

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## **The ORC Newsletter**

524 Alta Loma Drive  
Thiensville, WI 53092

## **First Class**

**Next ORC Meeting via Zoom**  
**September 8, 2021**

7:15-7:30 PM – Check-In

7:30 PM – Meeting Begins