



# FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



VOLUME 20 ISSUE 11 [www.fdlhams.com](http://www.fdlhams.com) November, 2019

Join Us On Sunday Evenings For Our Weekly Net — 1930 hrs. 145.430 MHz — Tone 97.4 Hz

### Club Officers

President: Buddy Larson KC9UVJ  
Vice-President: Tom Karmann KC9VZY  
Secretary: Lloyd Vandervort N9RPU  
Treasurer: Doug Schultz N9EZF  
Sgt-at-Arms: Paul Bleuel KC9NAA

Board Member: Ron Keller KC9YVL  
Board Member: Dick Finn KC9ZVW  
Board Member: Larry Mielke KC9RUE

### Committee Chairs

Brat Fry: Doug Schultz N9EZF  
Contesting/  
Education/  
Scholarship: Jack Heil KG9IN  
Field Day: Jack Heil KG9IN  
Fund Raising: Open  
Net Manager: Doug Schultz N9EZF  
Newsletter: Dick Finn KC9ZVW  
Public Service: Ed Beltz N9PJQ  
Publicity/Program: Joe Scheibinger K9VY  
Repeater: Lloyd Vandervort N9RPU  
Testing: Doug Schultz N9EZF  
Truck: Brad Freund KC9QYP  
TVI: Lloyd Vandervort N9RPU  
Web Site: Tim Braun W9AAV

Each committee has several members. If you are interested in serving on a committee, please contact the chairperson and volunteer your services.

### Mailing Address

Fond du Lac Amateur Radio Club, Inc.  
PO Box 53  
Fond du Lac, WI 54936-0053  
E-mail: [fdlhams@fdlhams.org](mailto:fdlhams@fdlhams.org)

**Newsletter  
Submissions:**  
Please email to  
[rfinn5@hotmail.com](mailto:rfinn5@hotmail.com)

### Help for the FDL Holiday Parade



The following is from Peter Fox:

Hello All:

The Fond du Lac ARES group is currently looking for at least 12 volunteers for the 2019 Fond du Lac holiday parade.

The parade will be on Saturday December 7th with a parade start time of 4:15 PM. We are looking for volunteers from about 1:45 PM for a quick briefing before we start the parade line up and typically are finished by or before 5:00 PM. the location will be the same as previous years with the majority of the parade line up occurring in the large G&L (FIVES) parking lot at Johnson St. (HWY 23) and Macy St. in Fond du Lac.

The recommended equipment for helping is: a 2 meter handheld, a reflective vest, and a clipboard. Also warm clothing appropriate for whatever weather we are expecting. We will be operating on a 2 meter simplex channel for coordinating the line up, using the same channel we have used for the last several years 147.480 MHz with a 173.8 Hz CTCSS (PL) tone. If you need help with any of the equipment I will have plenty of spares available.

More information will be available at the November club meeting, with final details and lists/maps provided in an email to volunteers a few days before the parade.

IF YOU ARE EVEN REMOTELY INTERESTED OR MAY BE AVAILABLE PLEASE LET ME KNOW I NEED ALL THE HELP I CAN GET.

Anyone who is interested please contact either Buddy Larson, KC9UVJ at [kc9uvj@gmail.com](mailto:kc9uvj@gmail.com) or Peter Fox, KB9WZD either via email at [kb9wzd@yahoo.com](mailto:kb9wzd@yahoo.com) or via phone at 920-960-3818

### Next Meeting

**When:** Nov. 11, 2019 at 7:00 pm

**Where:** Moraine Park Technical College, Room A-112  
235 N National Ave, Fond du Lac, WI 54935

**Program:** TBD, Elections



# FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



VOLUME 20 ISSUE 11 [www.fdlhams.com](http://www.fdlhams.com) November, 2019

Join Us On Sunday Evenings For Our Weekly Net — 1930 hrs. 145.430 MHz — Tone 97.4 Hz

### October 12, 2019 HAM Testing

Doug Schultz N9EZF coordinated our third HAM Testing session of 2019. He received a helping hand from Kyle RRuesch AB9AX and Dick Finn KC9ZVW. For those of you who are looking to get your Technician ticket or to upgrade to General or Extra Class there is still one more chance in 2019. Our final testing session will be on December 14, 2019 from 9:00 am-Noon at the regular location, Moraine Park Technical College in Room O-108, 235 N National Ave, Fond du Lac, WI 54935.



The October session was in a different room than normal but that didn't seem to cause much confusion as we had our best turnout in several years. Five candidates showed up and all passed their test. In fact, one passed the Technician and General Class while a second passed all three tests. Doug pointed out that this was the only the second time in his memory where a candidate passed all three tests.

The only downside to this session was that there was no one from our club taking a test. If you have an opportunity for an upgrade, give it a shot at the next session. Remember, if you upgrade your ticket you can claim a justification for an upgrade to your shack.

The following HAMS passed tests at the session:

Robert Dumat Technician  
Gregory Steiner Technician and General  
Oliver Renier Extra  
Michael Moran Technician, General Extra  
Michael Gawne Technician



*Gregory Steiner receives his Technician and General ticket from Kyle Ruesch AB9AX after passing both tests.*



*Kyle Ruesch AB9AX awarded Oliver Renier his Extra Class Ticket.*



**FOND DU LAC AMATEUR RADIO CLUB**

# — FDL 73 —



**VOLUME 20 ISSUE 11**    [www.fdlhams.com](http://www.fdlhams.com) November, 2019

**Join Us On Sunday Evenings For Our Weekly Net — 1930 hrs. 145.430 MHz — Tone 97.4 Hz**

## **October 12, 2019 HAM Testing**



*Robert Dumat receives his Technician ticket from Doug Schultz N9EZ after passing his test.*



*Michael Gawne receives his Technician ticket from Kyle Ruesch AB9AX after passing his test.*



*Michael Moran receives his Extra Class ticket from Kyle Ruesch AB9AX after passing all three tests at one sitting. Quite a feat!*





### Vintage Amateur Radio de Bill Shadid, W9MXQ



I am going to jump out of order within the history of a manufacturer this month – beginning in the middle of the company's time in the ham radio business. We are going to cover one of the most successful pair of transceivers in ham radio history – made at the pinnacle of operations for Swan Electronics of Oceanside, California. Any ham around in the 1960's and 1970's knows and remembers Swan, one of the dominant ham radio manufacturers. They remain with us to this day as the current and successful, Cubic Corporation.

As a young ham in the 1960's, I had a keen interest in the Swan 350 and 500 series transceivers. This month we will look at the genealogy of these two very related transceivers. Let's move back to the times when main stream ham radio technology was just beginning to incorporate some solid-state circuitry. Swan's engineering department was moving along, like Drake and Hallicrafters, to take sections of established tube designs (VFO's, carrier oscillators, i-f stages) and moving them to solid-state circuitry. Here are the last versions of the original design 350 and 500 transceivers that are part of the W9MXQ collection of vintage ham radio equipment:



**Swan 350c HF Transceiver with 117xc Speaker/PS  
(Shown with Turner 454C Microphone)**



**Swan 500cx HF Transceiver with 117xc Speaker/PS and 508 VFO  
(Shown with Turner 254C Microphone and Johnson Speed-X Key)**



### Vintage Amateur Radio de Bill Shadid, W9MXQ



The Swan 350 Transceiver was introduced in 1964 as a deluxe HF Transceiver to replace Swan's previous lines of single band transceivers (SW-175, SW-140, SW-120, and SW-115 – 75, 40, 20 and 15 meters, respectively) and single tri-band transceiver (SW-240 with 80, 40 and 20 meters). The single band units were essentially SSB Transceivers – with no way to even switch sidebands. The tri-band SW-240 did offer both CW and AM to their SSB focused design. Swan never made radios that did not include single sideband.

As originally released – here is the Swan 350 Transceiver:



**Swan 350 as Originally Released in 1964**

Looking at the 350 Transceiver you can see a nice looking anodized and screen panel (the same paint system used by Drake and a few others) to give a nice appearance in keeping with design at the time. Swan, who had based their marketing on performance with few thrills, did not offer extra features on the radio. Note that there was no standard selectable sideband (an add-on kit was marketed for that) and no crystal calibrator (another add-on kit). The radio offered SSB and CW modes. It also offered AM but only as a carrier inserted into the SSB signal. Unlike the Drake TR-4, there was no AM detector so the SSB receiver section was also used for AM. CW was possible but as in the Drake TR-3 and TR-4, there was no separate receiver tuning (RIT) to make listening more comfortable. Like Drake and Collins – CW was an afterthought. Swan did not even offer a CW sidetone in the 350.

In 1967, Swan added the more feature rich, model 500 Transceiver to their lineup. Here is the Swan 500:



**Swan 500 as Originally Released in 1967**



### Vintage Amateur Radio de Bill Shadid, W9MXQ



Apparently sales of the options to add selectable sideband and a crystal calibrator on the 350 were strong. Or, perhaps customer feedback was telling Swan that a more complete transceiver was desired. Thus the 500 came to the market.

Apparently sales of the options to add selectable sideband and a crystal calibrator on the 350 were strong. Or, perhaps customer feedback was telling Swan that a more complete transceiver was desired. Thus the 500 came to the market.

Both the 350 and 500 used 6HF5 final amplifier sweep tubes in matched pairs. In fact, the 350 and 500 shared many, if not most, circuitry and mechanical components. The 500 added such niceties as an Automatic Noise Limiter (ANL), Selectable Sideband, a 100kHz Calibrator, and CW sidetone to the standard features offered to the buyer of the 350 model.

It is interesting to note that while the power amplifier circuitry and power supply were the same for the Swan 350 and Swan 500, they had different power specifications. Remember that in those days, radios were shown with power input specifications. They did not show power output specifications. For comparisons I have added expected power output information to the chart, below:

Swan Model	Mode	Power Input (Watts)	Power Output (Watts)
350	SSB	400	200
	CW	320	160
	AM	125 (Carrier)	60 (Carrier)
500	SSB	480	240
	CW	360	180
	AM	125 (Carrier)	60 (Carrier)

In 1968, Swan made some significant upgrades to the two flagship models. Conversion schemes were changed to correct older issues with VFO stability. To designate this change, most post-update models of Swan radios added a suffix of "c" to the models. So, the Swan 350 became the Swan 350c and the Swan 500 became the Swan 500c. In addition to the incorporation of improved stability, Swan upgraded the power amplifier tubes in the 350c and the 500c and changed to the more robust 6LQ6 final amplifier sweep tubes in matched pairs. Later versions of both of the "c" version transceivers moved to a solid-state carrier oscillator for even more stability.

The net result – in power amplifier power – of the upgrade to the 6LQ6 final amplifier can be seen in the chart below that shows the increased input and output but also that Swan abandoned the idea of making the 500c look more powerful than the identical amplifier in the lower cost 350c.





### Vintage Amateur Radio de Bill Shadid, W9MXQ



The Model 350c retained the spartan offering of the 350 with no selectable sideband, no crystal calibrator, no noise limiter, and no sidetone for CW. It did, however, provide the most power for the lowest cost in the industry.

As we talk about powerful transceivers of the day, it must be remembered that average talk power from these radios may not have equaled what we see today with fully equalized and compressed transmit audio for today's sophisticated 100-watt radios. The Drake TR-3 and TR-4, the Swan radios in this article, the Galaxy Transceivers, the British KW Transceivers, and the National NCX-500 lacked the overhead in their power amplifiers to use relatively high levels of compression and other means to increase talk power.

Another change came in 1970 when Swan responded to Incentive Licensing and license privileges tied to license class. Now the HF bands were divided into separate areas for Novice, General, Advanced, and Extra Class licensees. Before that, the bands were divided into Novice and then identical frequency privileges for General, Advanced, and Extra Class licensees. These involved some divisions requiring a crystal calibrator on multiples of 25 kHz, rather than the long traditional 100 kHz. Swan used that change to be part of the justification of the newer Model 500cx HF Transceiver. The 500cx looks nearly identical to the 500c but includes a selectable 100 or 25 kHz calibrator, general stability improvements at the component level, and a very much improved CW monitor.

At the time of the release of the 500cx, Swan had seen fit to squeeze another 30 watts input on SSB out of the hard working 6LQ6 final amplifier tubes as you can see here:

Swan Model	Mode	Power Input (Watts)	Power Output (Watts)
500cx	SSB	550	275
	CW	360	180
	AM	125 (Carrier)	60 (Carrier)

By this time, the place for the economical 350c had run its course on the premium market for Swan – and it was discontinued. Not to be left out, however, because about that time along came the Swan 260 and deluxe version Swan 270 Cygnet Transceivers. They were 260-watt input SSB Transceivers using a single 6LQ6 final amplifier – and came with an internal AC Power Supply that offered a truly cost reduced product to attract entry level ham radio operators.

Swan offered many accessories for the 350, 500, 350c, 500c, and 500cx models. While not a subject for this article, Swan was also very successful in the VHF market with two SSB/CW/AM transceivers for 6-meters and even 2-meter FM Transceivers.

The accessories for the transceivers in this article include two linear amplifiers for which I have little information. They were the Swan Mark I and the Swan Mark II, as shown here in these pictures:



### Vintage Amateur Radio de Bill Shadid, W9MXQ



The Mark I used a pair of Eimac 3-400z triodes. The Mark II changed to using Eimac 3-500z triodes in the final amplifier. You can see that the two amplifiers were configured differently and represented a complete re-design. Unlike some amplifiers of the time, the design of the Mark I allowed for installation to replace the now impossible to replace 3-400z tubes. Both amplifiers lacked a tuned input circuit so are somewhat difficult to use with today's solid-state excitors.

Swan offered a variety of External VFO units for the 350 and 500 transceivers and separate offerings for the 350c and 500c. The later units had to be changed due to Swan's change of conversion frequencies in the "c" model radios. You can see the last of these VFO's in the picture on the first page of this article – pictured next to the W9MXQ Swan 500cx station. This is the model 508 that includes all necessary switching for using the transceiver's internal VFO, or the 508 external VFO, or a split between the two.

The 508 External VFO was a great improvement in implementation because the previous units did not include any way to switch the VFO into the circuit. That was accomplished by a plug-in accessory (Swan Model 22 Adapter) that was installed using the rear panel External VFO socket. The Model 22 cabinet extended to be just above the radio and the user would reach to the back side of the transceiver to access a switch to allow operation from the Transceiver VFO, the External VFO, or a Split between the two.

Many hams at the time would build their own switching for the External VFO. Below is my own 1970 vintage station, in Quincy, Illinois, when I was WA9MXQ:



Here is a 1970 Vintage Swan Station at W9MXQ (then WA9MXQ)





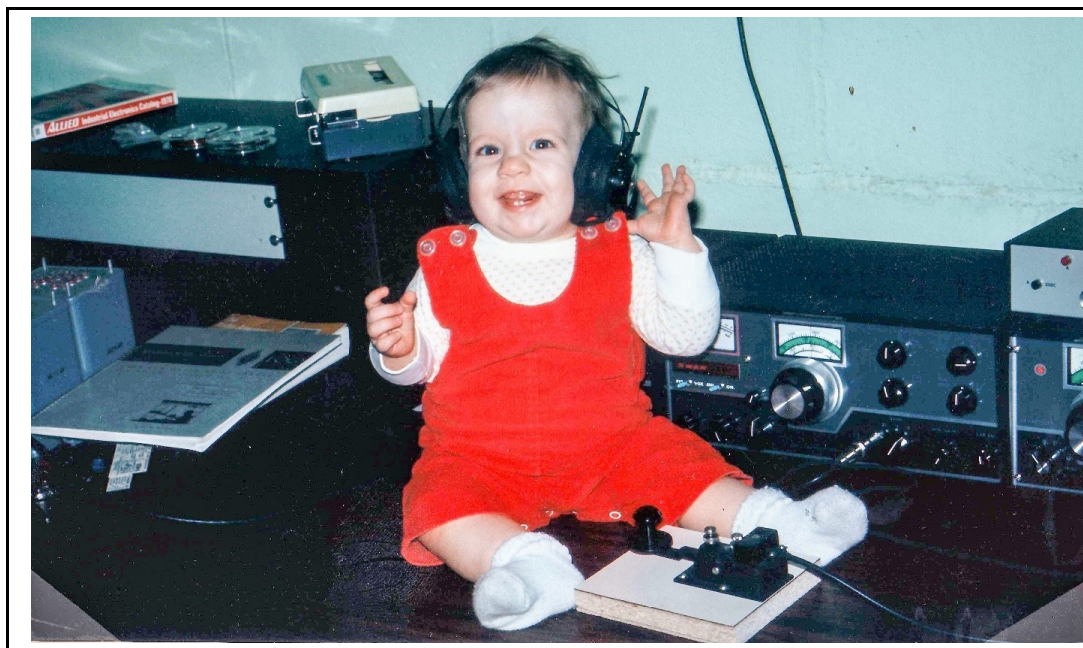
### Vintage Amateur Radio de Bill Shadid, W9MXQ



You can see, left to right, the Swan 117xc Power Supply/Speaker Console, the Swan 350c Transceiver, and the Swan 410c External VFO. Sitting on top of the VFO is the homebrew switch box that allowed VFO A (Transceiver), split with VFO A on Receive and VFO B on Transmit, or VFO B (External VFO). Also, in that picture – to the right, bottom to top, are a home brew 500-watt antenna tuner, a home brew SWR Bridge/Power Meter, and a home brew Audio Speech Processor. Also shown are a US Navy surplus Morse key and a Turner 254C Microphone. The key and microphone are still with me. I can only wish the home brew items were still part of my station. Incidentally, look carefully at the Swan 350c, above, and compare it to the one on the first page of this article. In the picture from 1970, notice just under the “Swan 350c” nameplate (below the meter) that I had added switches for VOX/PTT selection and an on off switch for ANL (Automatic Noise Limiter). I copied the circuitry from the Swan 500c and added that to my radio. Also, I added a 100kHz Crystal Calibrator to my Swan 350c.

The Model 410c External VFO was a modification of the original Model 410 External VFO that worked with the original 350 and 500 (not “c”) radios. They looked very much like the Model 508 VFO that I use now except that the Model 508 includes the features of the Model 22 Adapter – no more need to home brew that feature!

As a proud father I would be remiss in not showing you the other picture that I snapped the same day as the one above. This is our daughter, Bonnie, as she was making a visit to the basement shack, back in 1970. She is now a lawyer plying the floors of the Illinois General Assembly and is the former N9OIE . . .



This is Bonnie, sitting at that same Vintage Swan Station. See the home brew VFO Adapter on top of the 410c VFO and check out the Trimm Headphones on that ham radio debutant's head. Also, in view are the vintage Sony Reel Tape Player/Recorder, an ARRL Log Book (sitting on top of a 1969 ARRL Handbook), an Allied Radio Catalog, and a pair of HV Transformers soon to be included in a home brew linear amplifier using a pair of 833A Triodes. The Sony Tape Recorder is sitting on an Ampex Reel to Reel Console (absent the Ampex machine!!). The Log Book and the Handbook are still here at W9MXQ, the key remains here, and ex-N9OIE is here several times a year. The 833A Linear Amplifier, at last report, is still in operation and still says, “Contempora Seventy” (my home brew equipment “brand”) on its front panel.








### Vintage Amateur Radio de Bill Shadid, W9MXQ

Okay, so I drifted off a bit – but these articles are about nostalgia, are they not?

Swan marketed a lot of other accessories with Phone Patches, Antenna Tuners, Antennas (mobile and fixed station), AC and DX Power Supplies, Noise Limiters, Noise Blankers, and other transceivers in the mix. Swan even made a line of separate receivers and a transmitter. Other Swan products will be the subject of a future article or maybe a few articles.



At the time of these products, the ham radio industry was in a power race that ran to the point where Swan had a version of the 500cx, called the 700cx, with 700 watts PEP SSB input power. It is interesting to check the competition at the time. Swan always led the pack in maximum power. But, the others played in the game as well with Drake, Galaxy, Hallicrafters, KW Electronics, and National in the game along with Swan to see who could get the most power out of a table top, single box (plus power supply) cabinet. For a look at the contenders, check this group of pictures from the time of the Swan transceivers in this month's article:

		
<b>Swan 500cx *</b> <b>(550 Watts PEP)</b>	<b>Drake TR-4 *</b> <b>(300 Watts PEP)</b>	<b>Galaxy GT-550</b> <b>(550 Watts PEP)</b>
		
<b>Hallicrafters SR-400 *</b> <b>(400 Watts PEP)</b>	<b>National NCX-500 **</b> <b>(500 Watts PEP)</b>	<b>KW Atlanta</b> <b>(500 Watts PEP)</b>

Three of the above are in the W9MXQ collection right now (\*). One of them (\*\*) lives here in an earlier version (the NCX-200). But, all of them have been here at one time or another. How many of these do you remember? These were fine radios. I add these comments about them (strictly from personal experience, mind you):

- Best and most robust construction – the Hallicrafters SR-400.
- Best receiver – the Hallicrafters SR-400. (Also, most expensive.)
- Best able to run at high power for long periods of time – the Swan 500cx.
- Best mechanical/tactile “feel” to operate – the Swan 500cx.
- Most exotic – the KW Atlanta.
- Most nostalgic – the National NCX-500.
- Most successful – the Drake TR-4.
- Most design generations – the Galaxy GT-550.

Swan enjoyed a wide following and once dominated the ham radio marketplace.

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](mailto:W9MXQ@TWC.com).

**W9MXQ**



# FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



VOLUME 20 ISSUE 11 [www.fdlhams.com](http://www.fdlhams.com) November, 2019

Join Us On Sunday Evenings For Our Weekly Net — 1930 hrs. 145.430 MHz — Tone 97.4 Hz

### MEETING MINUTES

#### FOND DU LAC AMATEUR RADIO CLUB

#### Minutes of FDLARC Monthly Meeting

Monday, October 14, 2019

Meeting  
Minutes

#### Call to Order

The meeting was called to order at 7:00 pm with vice president Tom Karrmann KC9VZY presiding.

**Program:** None.

#### Introductions:

All attendees introduced themselves.

#### Approval of Meeting Minutes:

A motion to approve the August minutes was made by Tom Karrmann KC9VZY and seconded by Cully Kowal KS0D. The motion carried unanimously via a voice vote.

#### Treasurer's report

The Treasurers Report was presented by Doug Schultz N9EZF. A motion to approve the Treasurers Report was made by Jack Heil KG9IN and seconded by Cully Kowal KS0D. The motion carried unanimously via a voice vote.

Truck Fund	0.0
Emerg. Services Fund	1,488.49
General Use Fund	6,101.58
Savings Account	25.00
Petty Cash Fund	19.12
Total	7,634.19
Repeater Fund	232.66

#### Old Business:

Our application for 501 c3 was returned as we sent in the wrong form. The correct form is the E-Z form. There was a discussion on who was going to pay for the fee. Jack Heil KG9IN made A motion that the club should pay the fee. This was seconded by Cully Kowal KS0D. The motion carried unanimously via a voice vote. We will re-do the application at the Nov meeting.

#### New Business:

With the new plans for Hwy 23 expansion it looks like we will not have to move the repeater.

Our annual officer elections will occur at next month's meeting. The suggested nominations for so far are:

President: Buddy Larson KC9UNJ, Tom Karrmann KC9VZY

Vice President:

Treasurer: Doug Schultz N9EZF

Secretary:

Sgt at Arms: Paul Bleuel KC9NAA

Board member: Cully Kowal KS0D

The FDL Christmas Parade will be held on Dec 7, 2019. We need lots of help. All you need is a handheld radio. See the article on page one of this newsletter for more details.

Our final Testing Session for 2019 will be held on Dec 14, 2019. The session will be from 9:00 am-Noon at Moraine Park Technical College in Room O-104 (235 N National Ave, Fond du Lac, WI 54935)  
Contact: Doug Schultz N9EZF with any questions.

Buddy Larson KC9UVJ is working on the Christmas Party it should be on December 8, 2019.

#### Adjournment

A motion was made to adjourn by Tom Karrmann KC9VZY The motion was seconded by Cully Kowal KS0D. The motion carried unanimously via a voice vote and the meeting was adjourned at 7:30 pm





**FOND DU LAC AMATEUR RADIO CLUB**

# **— FDL 73 —**



**VOLUME 20 ISSUE 11    www.fdlhams.com November, 2019**

**Join Us On Sunday Evenings For Our Weekly Net — 1930 hrs. 145.430 MHz — Tone 97.4 Hz**

## **NOTICES/ANNOUNCEMENTS**

### **FDLARC On YouTube**



Many of you may not be aware, but Lloyd Vandervoort N9RPU, our Club Secretary, has been making videos of the presentations at our meetings. There is now a pretty large collection of them on You Tube. Do yourself a favor and take a few minutes to scan the list and play some of them. Enjoy!

FARC - W3AO Field Day Presentation <https://youtu.be/UK1A47pNKyo>

FARC - Bob Heil Ham Radio Presentation [https://youtu.be/t3Ueh9IN5\\_U](https://youtu.be/t3Ueh9IN5_U)

FARC - WWV Presentation [https://youtu.be/w3-DP9DEv\\_U](https://youtu.be/w3-DP9DEv_U)

FARC - Pacific Antenna Talks Kit Building <https://youtu.be/SBReL2YIsn0>

FARC - Scanner Master Presentation <https://youtu.be/dlSIAufGkv8>

FARC - WBAY Field Trip TV Nov 17 2015 <https://youtu.be/sfQvJ1fV6eo>

FARC - WBAY transmitter tour [https://youtu.be/NnZ21O\\_6HvA](https://youtu.be/NnZ21O_6HvA)

FARC - NooElec [https://youtu.be/s\\_pxYkH4xds](https://youtu.be/s_pxYkH4xds)

FARC - Elecraft Radio <https://youtu.be/3Ou1Qpx9Vg8>

FARC - Ed Tobias & Morse Code <https://youtu.be/9uu4PFMrH2U>

FARC - Salvation Army Emergency Communications <https://youtu.be/oxXoZjuTTNE>

FARC - KFIZ Interview <https://youtu.be/UVFMCvRGEJE>

FARC - HAARP Presentation <https://youtu.be/cdeNXLMuyEE>

FARC - The DZKit Ham Radio Kits [https://youtu.be/giZcfQW\\_tpA](https://youtu.be/giZcfQW_tpA)

FARC - The DZKit Ham Radio Kits [https://youtu.be/giZcfQW\\_tpA](https://youtu.be/giZcfQW_tpA)

FARC - The Christmas Island DXpedition with Bill Kendall (4/9/18) <https://youtu.be/XgjYL0vAhlw>

FARC - Restoring Old Antique and Classic Radios (5/17/19) <https://youtu.be/3l352v4gYdw>

FARC - Dave Sumner K1ZZ, Secretary of the IARU (1/14/19) <https://youtu.be/fVzhzhUpYlw>

### **Newsletter Back Issues**

When I took over as the newsletter editor I simply continued the volume numbering that existed then. Unfortunately, I don't have copies of those old newsletters. I would appreciate it if you have any newsletters earlier than October, 2014 you would send them to me. Electronic copies are ideal but I would also be pleased to accept hard copy. I'll scan them and return the originals to you.

Many Thanks, Dick Finn KC9ZVW



# FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



VOLUME 20 ISSUE 11    [www.fdlhams.com](http://www.fdlhams.com) November, 2019

Join Us On Sunday Evenings For Our Weekly Net — 1930 hrs. 145.430 MHz — Tone 97.4 Hz

### NOTICES/ANNOUNCEMENTS

#### HAM Testing Session

We have a busy December this year with the Holiday Parade and the Christmas Party but lets not forget the December testing date. You a month to prepare to upgrade (or get) your ticket. If you have questions or want to reserve a spot (note: reservations are not required but do help us to be aware of how many may be coming) please contact Doug Schultz at 920-922-3088 or via email at [schultz74@charter.net](mailto:schultz74@charter.net). There's still a little time to crack the books and prepare to upgrade your ticket.



#### Annual Dues Are Due

As a reminder, our annual dues are now up for renewal. The cost is still a low \$15.00. You can pay your dues at the monthly meeting or mail them to:

Fond du Lac Amateur Radio Club, Inc.  
PO Box 53  
Fond du Lac, WI 54936-0053



Generally speaking, I will be publishing the newsletter each month (except December (when we do not have a meeting) on the Monday before our monthly meeting. I start assembling it during the preceding two weeks. Obviously I would like to have the material as early as possible but the deadline will have to be on the Wednesday preceding the publish date.

Following are the pertinent dates I'll update this table and print it in each month's newsletter):

	Publish Date	Deadline Date
Dec, 2019	No Newsletter	
Jan. 2020	1/6/20	12/30/20
Feb. 2020	2/10/20	2/3/20



**FOND DU LAC AMATEUR RADIO CLUB**

# — FDL 73 —



VOLUME 20 ISSUE 11    [www.fdlhams.com](http://www.fdlhams.com) November, 2019

Join Us On Sunday Evenings For Our Weekly Net — 1930 hrs. 145.430 MHz — Tone 97.4 Hz

## Free, For Sale or Wanted

**Upcoming HAMFESTS and Conventions  
From ARRL**

## Hamfests



### **01/04/2020 | 47th Annual Midwinter Swapfest**

**Location:** Waukesha, WI

**Type:** ARRL Hamfest

**Sponsor:** West Allis Radio Amateur Club

**Website:** <http://www.warac.org>

**Learn More**







# FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



VOLUME 20 ISSUE 11 [www.fdlhams.com](http://www.fdlhams.com) November, 2019

Join Us On Sunday Evenings For Our Weekly Net — 1930 hrs. 145.430 MHz — Tone 97.4 Hz

### 2019 CALENDAR

#### Jan. 14, 2019

FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.  
235 N National Ave, Fond du Lac, WI 54935

#### Feb. 11, 2019

FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.

#### Feb. 16, 2019

License Exams, 9:00 am-Noon, Moraine  
Park Technical College in Room O-104  
Contact: Doug Schultz N9EZF



#### Mar. 9 & 10, 2019

Wisconsin QSO Party



#### Mar. 11, 2019

FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.  
Annual Membership Drive-Contact Joe Scheibinger  
235 N National Ave, Fond du Lac, WI 54935

#### Apr. 8, 2019

FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.  
235 N National Ave, Fond du Lac, WI 54935



#### Apr. 13, 2019

License Exams, 9:00 am-Noon,  
Moraine Park Technical College in Room O-104  
235 N National Ave, Fond du Lac, WI 54935  
Contact: Doug Schultz N9EZF

#### May 13, 2019

FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.  
235 N National Ave, Fond du Lac, WI 54935

#### May 17—19, 2019

Dayton HAMFEST



#### May 31, 2019—June 1, 2019

Brat Fry Country Corners Exxon Station,  
Hwy 67 and Hwy 41 in Lomira. 8:00am to  
5:00pm—Contact: Doug Schultz N9EZF



#### June 10, 2019

FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.  
235 N National Ave, Fond du Lac, WI 54935

#### June 7—9, 2019

Walleye Weekend. Contact Joe Scheibinger K8VY

#### June 22 & 23, 2019

ARRL Field Day, 1800 UTC Saturday and  
running through 2059 UTC Sunday



#### July 8, 2019

FDLARC Monthly Meeting, 7:00 pm, MPTC O-102.

#### July 21, 2019

RMC Triathlon



#### Aug. 12, 2019

FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.  
235 N National Ave, Fond du Lac, WI 54935

#### Aug. 25, 2019

Race the Lake

#### August 23-24, 2019

Brat Fry Country Corners Exxon Station,  
Hwy 67 and Hwy 41 in Lomira. 8:00am to  
5:00pm—Contact: Doug Schultz N9EZF



#### Sept. 9, 2019

FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.  
235 N National Ave, Fond du Lac, WI 54935

#### Sept. 20—22, 2019

Fox Cities Marathon



#### Oct. 14, 2019

FDLARC Monthly Meeting, 7:00 pm, MPTC A-112  
235 N National Ave, Fond du Lac, WI 54935

#### Oct. 12, 2019

License Exams, 9:00 am-Noon, Moraine  
Park Technical College in Room O-108.  
235 N National Ave, Fond du Lac, WI 54935  
Contact: Doug Schultz N9EZF



#### Nov., 11 2019

FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.  
235 N National Ave, Fond du Lac, WI 54935  
Election of 2019 Officers

#### Dec. 7, 2019

FdL Parade of Lights, 4:00, Downtown



#### Dec. 8, 2019

FDLARC Holiday Party: Jim and Linda's  
Contact Buddy Larson KC9UVJ



#### Dec. 14, 2019

License Exams, 9:00 am-Noon, Moraine  
Park Technical College in Room O-104  
235 N National Ave, Fond du Lac, WI 54935  
Contact: Doug Schultz N9EZF





# FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



VOLUME 20 ISSUE 11 [www.fdlhams.com](http://www.fdlhams.com) November, 2019

Join Us On Sunday Evenings For Our Weekly Net — 1930 hrs. 145.430 MHz — Tone 97.4 Hz

First	Last	Call Sign
Annika	Kreis	
Barbara	Simon	W9MER
Ben	Haack	KD9LVQ
Blend	Bowen	KC9VXV
Brad	Freund	KC9QYP
Brian	Turkiewicz	KC9LFR
Buddy	Larson	KC9UVJ
Chuck	Mahnke	K9HXI
Cully	Kowal	KS0D
Danny	Vandekolk	KC9IGD
Dave	Witt	WD9W
David	McCumber	N9WQ
David	Zittlow	K9DUI
Dawn	Krause	KD9CAW
Dean	Choate	KC9TGM
Debra	Florian	
Dennis	Paulin	KB9OFM
Derek	Giese	KD9IAN
Dick	Finn	KC9ZVW
Don	Chapman	KC9KZQ
Donald	Bakke	KD0HCW
Donna	Blend	KC9TFN
Dot	Olig	K9FDL
Doug	Murray	KC9ZVT
Doug	Wagner	KC0RNS
Doug	Schultz	N9EZF
Ed	Beltz	N9PJQ
Ed	Sipple	W9VYO
Ed	Steinfeld	KB1ZJK
Fernando	Salazar	KC9ZVX
Gene	Olig	KD9ZP
Gene	Peterson	KD9IAG
Gerry	Radtke	WA9GON
Gregory	Schmude	KD9EHB
Isaac	Lundberg	KD9FPG
Jack	Heil	KG9IN
James	Scovronski	N9WAM
Jeremiah	Alderden	KC9SGL
Jim	Balthazor	K9AIX
Jim	Cole	N9WAP
Joe	Lauber	KC9MDY
Joe	Scheibinger	K9VY
Joyce	Keyes	KC9KIJ
Justin	Buell	KB9YET
Kirk	Everson	KC9FZE
Kyle	Ruesch	AB9AX
Larry	Lamont	KB9POP
Larry	Mielke	KC9RUE
Laura	Yates	
Laurie	Winchell-Beltz	KC9YQS
Lloyd	Vandervort	N9RPU
Lorelei	Kreis	
Louis	Simon	KB9VQM
Marjean	Buck	KC9LFI
Marjorie	Heil	KC9BEN
Mark	Forss	WD9CYM
Mathew	Yates	KD9CSD
Matt	Nett	KD9BBN
Matthew	Zimmerman *	KD9KTY
Michelle	Lawrence	N9RQL
Mike	Keyes	KE7ES
Mike	Lawrence	N9UA
Nancy	Myers	K9ANA
Neal	Buck	KC9LFN
Paul	Bleuel	KC9NAA

## CLUB ROOSTER



Paul	Tvrdy	N9KLK
Peter	Fox	KB9WZD
Randy	Nelson	KC9MYG
Ray	Grenier	K9KHW
Reinholt	Aschmotat	N8VDH
Richard	Jarzynka	KD9EMX
Rick	Robinson	NI9Z
Ron	Keller	KC9YVL
Scott	Kreis	
Stan	Cram	AI0M
Steve	Smith	W9GPI
Ted	Gustavus	KD9IAH
Ted	Neuburg	W9LUQ
Ted	Willett	W9NHE
Timothy	Braun	W9AAV
Todd	Beay	AC9EX
Tom	Karrmann	KC9VZY
Tom	Murray	N0HOR
Tom	Powell	KC9VXR
Tony	Pass	KC9QYR
Walter	Rueger	KC9WQ
Walter	Drees	KD9JAD

Paul	Tvrdy	N9KLK
Ed	Beltz	N9PJQ
Lloyd	Vandervort	N9RPU
Michelle	Lawrence	N9RQL
Mike	Lawrence	N9UA
James	Scovronski	N9WAM
Jim	Cole	N9WAP
David	McCumber	N9WQ
Rick	Robinson	NI9Z
Timothy	Braun	W9AAV
Steve	Smith	W9GPI
Ted	Neuburg	W9LUQ
Barbara	Simon	W9MER
Ted	Willett	W9NHE
Ed	Sipple	W9VYO
Gerry	Radtke	WA9GON
Mark	Forss	WD9CYM
Dave	Witt	WD9W
Annika	Kreis	
Debra	Florian	
Laura	Yates	
Lorelei	Kreis	
Scott	Kreis	

First	Last	Call Sign
Kyle	Ruesch	AB9AX
Todd	Beay	AC9EX
Stan	Cram	AI0M
Jim	Balthazor	K9AIX
Nancy	Myers	K9ANA
David	Zittlow	K9DUI
Dot	Olig	K9FDL
Chuck	Mahnke	K9HXI
Ray	Grenier	K9KHW
Joe	Scheibinger	K9VY
Ed	Steinfeld	KB1ZJK
Dennis	Paulin	KB9OFM
Larry	Lamont	KB9POP
Louis	Simon	KB9VQM
Peter	Fox	KB9WZD
Justin	Buell	KB9YET
Doug	Wagner	KC0RNS
Marjorie	Heil	KC9BEN
Kirk	Everson	KC9FZE
Danny	Vandekolk	KC9IGD
Joyce	Keyes	KC9KIJ
Don	Chapman	KC9KZQ
Marjean	Buck	KC9LFI
Neal	Buck	KC9LFN
Brian	Turkiewicz	KC9LFR
Joe	Lauber	KC9MDY
Randy	Nelson	KC9MYG
Paul	Bleuel	KC9NAA
Brad	Freund	KC9QYP
Tony	Pass	KC9QYR
Larry	Mielke	KC9RUE
Jeremiah	Alderden	KC9SGL
Donna	Blend	KC9TFN
Dean	Choate	KC9TGM
Buddy	Larson	KC9UVJ
Tom	Powell	KC9VXR
Blend	Bowen	KC9VXV
Tom	Karrmann	KC9VZY
Walter	Rueger	KC9WQ
Laurie	Winchell-Beltz	KC9YQS
Ron	Keller	KC9YVL
Doug	Murray	KC9ZVT
Dick	Finn	KC9ZVW
Fernando	Salazar	KC9ZVX
Donald	Bakke	KD0HCW
Matt	Nett	KD9BBN
Dawn	Krause	KD9CAW
Mathew	Yates	KD9CSD
Gregory	Schmude	KD9EHB
Richard	Jarzynka	KD9EMX
Isaac	Lundberg	KD9FPG
Gene	Peterson	KD9IAG
Ted	Gustavus	KD9IAH
Derek	Giese	KD9IAN
Walter	Drees	KD9JAD
Matthew	Zimmerman *	KD9KTY
Ben	Haack	KD9LVQ
Gene	Olig	KD9ZP
Mike	Keyes	KE7ES
Jack	Heil	KG9IN
Cully	Kowal	KS0D
Tom	Murray	N0HOR
Reinholt	Aschmotat	N8VDH
Doug	Schultz	N9EZF
Paul	Tvrdy	N9KLK

NAME  
SORT

CALL  
SORT