# **DL** 73

VOLUME 19 ISSUE 7 www.fdlhams.com July, 2018

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





#### Club Officers

Dave McCumber N9WQ President: Vice-President: Tom Powell, KC9VXR, Secretary Lloyd Vandervort N9RPU Treasurer Doug Schultz N9EZF Dawn Krause KD9CAW Sat-at-Arms:

Board Member: Peter Fox KB9WZD Board Member Buddy Larson KC9UVJ Board Member Larry Mielke KC9RUE

#### Committee Chairs

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

Lloyd Vandervort N9RPU Repeater Testing Doug Schultz N9EZF Truck **Brad Freund KC9QYP** TVI Lloyd Vandervort N9RPU Web Site: Jim Balthazor K9AIX

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

#### Mailing Address

Fond du Lac Amateur Radio Club, Inc.

Fond du Lac, WI 54936-0053 E-mail: fdlhams@fdlhams.org

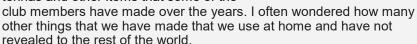
#### **Newsletter** Submissions:

Please email to rfinn5@hotmail.com

#### The Presidents Corner By: Dave McCumber N9WQ

Hello everyone from the desk of N9WQ.

Well, as I wandered thru the magnificent parallels that we call field day I couldn't help but notice all the "HOMEBREW" antennas and other items that some of the



I have built many things over the years such as Quad and YAGI antennas. The best of which was a TA33 tribander that I came across which was pretty much shot. I used a program (called Qy1) and turned it into a 5 element 6M antenna that I use to this day. Another thing was a loop small enough to take to the old Annual AES Superfest where I used to set up a vintage station. Here's some pics of the set ups and also the home brew projects that I have done!!

I hope this will lead you all into the fun of building stuff and finding that for the most part you can do a better job of making something then what can be mass produced in a factory!!!



Continued on the Next Page

### **Next Meeting**

When: July 9, 2018 at 7:00 pm

Where: Moraine Park Technical College, Room A-112

Program:

## **FDL 73**



VOLUME 19 ISSUE 7 www.fdlhams.com July, 2018



#### The Presidents Corner (Cont.) By: Dave McCumber N9WQ





Dave showing off his vintage collection and demonstrating this ower climbing skills.







# ON DATE OF THE STATE OF THE STA

#### FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —

RER

**VOLUME 19 ISSUE 7** 

www.fdlhams.com July, 2018

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

#### **ARRL Field Day 2018**

The annual ARRL Field Day was held on June 23/24, 2018 with a great showing from the Fond du Lac ARC. While Field Day officially kicked off at 1:00 pm Saturday the setup actually started Friday evening when the Yellow Banana was driven over and parked in the UW FDL parking lot. Dawn Krause and her husband also delivered their camper and their trailer which was used by the CW team.

AS with last year, the layout was toward the center of the parking lot with the CW trailer to the north, the food tent and digita; in the center and voice at the south end with the network control.



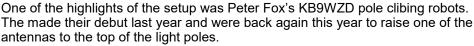
Marjorie Heil KC9BEN was again in charge of the refreshment tent. She got everything set up and Dennis Paulin arrived just before noon with the main course.



Jack Heil KG9IN reprised his role as the overall chairman for the event. Jack has been doing this for several years and his contribution is greatly appreciated.













Peter FoxKB9WZDworks the controls to run the robot up the pole. Once uop, they served as anchors to pull up the antenna.

# OU STAN

#### FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —

VOLUME 19 ISSUE 7 www.fdlhai

www.fdlhams.com July, 2018



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

#### **ARRL Field Day 2018**

Before the event kicked off, lunch was served. Thanks to Dennis Paulin KB9OFM we again were supplied with award winning pulled pork, smoked sloppy joes and smoked Brats. A great lunch!



Dennis Paulin KB9OFM sets up meats for lunch.



Fred Soop, Doug Schultz K9EZF and Lloyd Vandervort N9RPU set up one of the generators.



Buddy Larson KC9UVJ and Lloyd Vandervoort N8RPU in the Yellow Banana.



Derek Geise KD9IAN and Isaac Lundberg KD9FPG take a break during the set up.



Rick Robinson NI9Z mans the CW trailer assisted by Isaac Lundberg KD9FPG and Derek Geise KD9IAN



## FDL 73

VOLUME 19 ISSUE 7 www.fdlhams.com July, 2018

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

#### **ARRL Field Day 2018**



Peter Fox KB9WZD works on some cables for the CW team while everyone else works on lunch.



The team discussing the connections from the CW trailer to the antenna farm.



Buddy Larson KC9UVJ acts as the network manager in the camper



Dawn Krause KD9CAW and Fred Soop take a break. Thanks to Dawn and her husband for bringing their camper and the trailer for the CW team.



Ted Gustavus KD9IAH and Doug Schultz N8EZF admiring the fine setup work.

# ON LAC SHI SHOW

#### FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



**VOLUME 19 ISSUE 7** 

www.fdlhams.com July, 2018

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

Vintage Amateur Radios de: Bill Shadid (W9MXQ)

Collins Radio Company was certainly on a mission to reinvent the ham station back in the 1950's and 1960's. Previously, we talked about "The Day the Universe Changed" when Collins announced the game changing S-Line Station. Now we come to the next big step with the 1959 introduction of the KWM-2 Transceiver. This month we will also see the 30S-1 and the 30L-1 companion Linear Amplifiers. The 30L-1 Desktop Linear Amplifier is still often seen in a modern ham station. Recall the 30L-1 was also shown in ther article with the S-Line.

Here is the KWM-2A Station that is in operation at W9MXQ . . .





Collins KWM-2A Transceiver, 312B-5 External VFO, 30L-1 Linear Amplifier Also, Electro Voice 638 Microphone and Heathkit HD-1410 Keyer (Not shown is the Collins 516F-2 AC Power Supply – installed out of this view)

The KWM-2 (and its extended frequency range sister, the KWM-2A, pictured above), took the KWM-1 Triband Transceiver concept (20-15-10 meters) and added 80 and 40 meters. The design basis for the KWM-2 was changed to the recently introduced S-Line rather than the KWM-1's reliance on technology coming from the 75A-4 Receiver and KWS -1 Transmitter. Many consider the KWM-2 as a 75S-1 Receiver and 32S-1 Transmitter (the original S-Line units) in a single cabinet. That is a very nice thought, but it is not so. While many elements were part of the separate units, a true transceiver is the combination of shared components and circuits – not separates residing in a single box.

I would draw your attention to my previous installment on the S-Line separate receiver and transmitters for an explanation of the Standard and Expanded Coverage radio differences. In this case the KWM-2 was the Standard Coverage and the KWM-2A was the one with Expanded Coverage. (For this article, unless addressing a specific difference, I will refer simply to KWM-2.)

The KWM-2 lacked any sort of interference fighting tools other than the very selective Collins Mechanical Filter in the i -f section of the radio. The excellent -6 dB @ 2.1 kHz and -60 dB @ 4.2 kHz bandwidth (for a slope factor of 2:1) does a good job of keeping out of bandwidth interference away from the receive audio. This performance is in keeping with what we expect from i-f filter performance today.

# OUT AC JOHN SON OO

#### FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



**VOLUME 19 ISSUE 7** 

www.fdlhams.com July, 2018

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

### Vintage Amateur Radios de: Bill Shadid (W9MXQ)

Some operators felt they needed more interference rejection for their use of the transceiver. Waters Manufacturing, Inc. came to their assistance with a cleverly designed Q-Multiplier add-on that installed a circuit module with controls that were mounted piggyback to the Power/Function Switch. As if that was not enough, there is a factory wired phono jack on the chassis of the KWM-2 that is a direct input for a Heathkit (or another brand) Q-Multiplier. I have a Heathkit GD-125 Q-Multiplier that works perfectly with my KWM-2A and even matches the Collins radio in color, if not styling. A Bing™ or Google™ search on "Q-Multiplier" will provide more information on this remarkable device. Heathkit and National, and others made external Q-Multipliers in some form.



There were many accessories for the KWM-2 Transceivers. One is shown in the picture at the intro to this article – the 312B-5 External VFO. Those units together allowed:

Transceive with the KWM-2 VFO

Receive with the KWM-2 VFO and Transmit with the 312B-5 VFO.

Receive with the 312B-5 VFO and Transmit with the KWM-2 VFO.

The separation between receive and transmit was essential with the KWM-2 on CW. Due to a design flaw in the KWM -2, the offset to allow one to hear the other station was absent and was never fully corrected as long as the KWM-2 was manufactured.

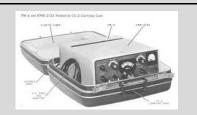
Collins offered a portable AC Power Supply – in compact format – for the KWM-2. Called the PM-2, it clamped to the back of the radio and provided for a self-contained unit that could merely be plugged into an AC outlet for operation. Even a CC-2 Carrying Case was marketed to make taking the KWM-2 on a road trip . . .



PM-2 Sliding into KWM-2



PM-2 (left) on KWM-2 (CCA)



PM-2 and KWM-2 in a Collins CC-2 Case (CCA)

The KWM-2 design focused on mobile operation with a 351D-2 Mobile Mount that allowed for "slide-in" connections to the radio – no hand connection of power, speaker, or antenna leads were required. The mobile mount folded away when not in use thus making for minimal intrusion onto the riding area of the front seat when the radio was not installed.

For power while driving, the KWM-2 used the MP-1 Mobile Power Supply – designed to be mounted on the engine side of the fire wall and provided a cable that went through the firewall and into the cockpit area of the car to the 351D-2 Mobile Mount.

Also for mobile use, Collins offered the 136B-2 Noise Blanker that mounted under the top cover of the radio using screws that came through the ventilation holes in the cover. It was a rather inglorious mounting. I have a 136B-2 that I have tried but have learned that its primary noise target was the ignition noise prevalent in automotive ignition systems of the day. I did not permanently mount the 136B-2 in my KWM-2A. One interesting design parameter of the 136B-2 was based on Collins' engineering research that showed noise to peak at approximately 40 Mhz. To the end, the 136B-2 had a connection to attach the automobile's broadcast radio to a noise sensor terminal connector on the Noise Blanker. That antenna was to "see" the noise signal and use it for a trigger for blanking operation.

# ON LAC SILL SANDO

#### FOND DU LAC AMATEUR RADIO CLUB

# — FDL 73 —







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

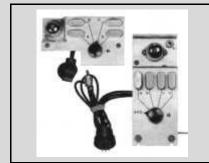
## Vintage Amateur Radios de: Bill Shadid (W9MXQ)

Another interesting accessory for the KWM-2 was the 399B Novice Adapter. Those of you in ham radio long enough will remember that Novices on HF were limited to 75 watts input power on CW only. Power was easy enough to set during the CW tune-up process, but another requirement was that the transmitter had to be crystal controlled. This device accommodated crystal control on up to four different crystals.

To compliment portable operations, Collins offered a Tape Reel Dipole Antenna, the model TD-1. It would extend a metal ribbon tape on both legs that were calibrated to show proper length for a resonant installation. The product included nylon rope for attaching each end to a support point as well as a length of RG-58 coaxial cable feedline.



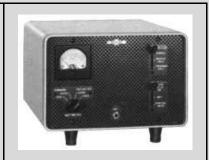
For an installation not requiring a separate VFO – as the 312B-5 shown above – there was a 312B-4 Station Console shared with the separate S-Line stations. Like the 312B-5 it includes a wattmeter, speaker, and phone patch – but not the External VFO function.



399B-2 Novice Adapter



TD-1 Portable
Dipole Antenna (CCA)



312B-4 Station Console (CCA)

Other accessories as diverse as Mounting Plates for aircraft use (351E) and Rack Mounting Adapters (351R). A wide range of microphones were available in the SM-1, SM-2, and AM-3 Desk Microphones as well as the MM-1 Mobile Microphone and the MM-2 Headset were ready for any installation reality. Also, there were several custom-made Samsonite™ Carrying Cases for KWM-2 and S-Line portable use (CC-1, CC-2, and CC-3). To permit complete 3.5 to 30 MHz spectrum coverage, a set of crystals for every 200 kHz range were included in the CP-1 Crystal Packet. That CP-1 Crystal Packet is a part of the of the W9MXQ station using the KWM-2A here.

Two major accessory items for the KWM-2 Transceiver (as well as the other S-Line Receiver-Transmitter Stations) were some excellent Linear Amplifiers. Those included the very popular 30L-1 Desktop Linear Amplifier and the somewhat less available 30S-1 Floor Mount Linear Amplifier as shown here . . .

## . .

TEUR RAD

#### FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —

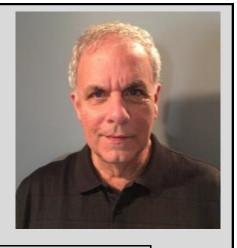


**VOLUME 19 ISSUE 7** 

www.fdlhams.com July, 2018

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

Vintage Amateur Radios (Cont.) de: Bill Shadid (W9MXQ)





(W9MXQ Shack Photo)

The Desktop 30L-1 Linear Amplifier had an input of 1,000 watts (DC and PEP) with a CW and SSB output of 500 to 600 watts output. It had a solid-state power supply rectifier system and used four 811A Triode final amplifier tubes.



The Floor Mounted 30S-1 Linear Amplifier had an official input of 1,000 watts (DX and PEP). At about the time of the introduction of this amplifier there began an understanding that PEP input was generally "twice average DC" so amplifiers of the time were tuned up at a lower plate voltage to allow for legal DC tuning at 1,000 watts. After the tuning procedure was done, the amplifier was switched to a higher voltage to run an actual peak input of 2,000 watts. (Therefore, older amplifiers, including the 30S-1, have a CW and SSB switch position.) The 30S-1 had a solid-state lower voltage system, highvacuum 3B28 high-voltage rectifiers, and an Eimac 4CX1000A Ceramic Power Tetrode in is amplifier circuit. What this amplifier lacked in desktop compactness it made up for in having a fantastic station presence!



## — FDL 73 —



**VOLUME 19 ISSUE 7** 

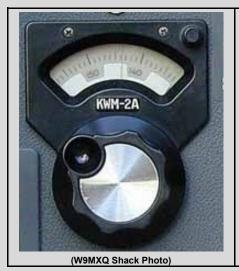
www.fdlhams.com July, 2018

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

## Vintage Amateur Radios (Cont.) de: Bill Shadid (W9MXQ)

There are a few more points about the KWM-2 Transceiver's history. One of these may be due to inventory supply issues tied to discrepant material received at the factory (or one of many other reasons). The front escutcheon of the radio could have some different model numbers other than the official KWM-2 or KWM-2A model names. Note below a picture of the escutcheon and some variations I have noted over the years.





Shown is he front panel escutcheon for the KWM-2A at W9MXQ. For a Standard Coverage unit this would be marked as KWM-2. However, over the years I have noted the following variations:

KWM2 KWM2A KWM2-A

No one has ever offered any good explanation for this but, the appearance of one of these deviations does not seem to impact value – up or down. I have never seen this kind of variation on other S-Line components.

The other change included a Dial Brake added to the radio near the end of production. This picture below shows the minimal appearance changes over time compared to the picture at the beginning of this article . . .



(CCA)

Very late production KWM-2A

# ON LAC SILL SING

#### FOND DU LAC AMATEUR RADIO CLUB

# — FDL 73 —



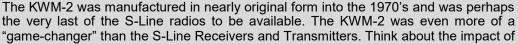
**VOLUME 19 ISSUE 7** 

www.fdlhams.com July, 2018

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

### Vintage Amateur Radios (Cont.) de: Bill Shadid (W9MXQ)

See the late version Rockwell Collins logo over the escutcheon. The Dial Brake is visible at the lower left side of the main tuning knob. The product remained all vacuum tube design right down to the accessory 312B-5 AC Power Supply that included tube rectifiers.





a single package with a complete station – the "Transceiver," as we like to call it. What one of us does not use this concept today? The sophisticated, ubiquitous SSB/CW station transceiver owes its existence to the KWM-2 – or at the very least, its predecessor Collins KWM-1 Tri-Band Transceiver. Suffice it to say this concept is tied to the Collins Radio Company.

I want to thank my long-time friend, Phil Rebensburg, KC9Cl, for helping find and add this gem of a radio and accessories to my collection.

## New Technician Class Element 2 Exams will take effect for exam sessions beginning Sunday July 1, 2018.

The newly revised pool, released in January 2018 (updated and re-released February 12, 2018) by the Question Pool Committee (QPC) of the National Conference of Volunteer Examiner Coordinators (NCVEC), must be in use starting July 1. There are three graphics required for this pool and 423 questions in this pool, down slightly from 426 in the previous pool.

With the Technician class exam questions changing July 1, new test designs must be used effective that day. Previous ARRL VEC supplied Technician class exam booklet versions (2014 series) and computer-generated Technician class exams created from the 2014 question pool are only valid until midnight June 30, 2018. At that time VE Team leaders should destroy or throw away the old versions of the Technician exams (do not return them to VEC).

# ON LAC SILL SAN TOUR RADIO

#### FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



**VOLUME 19 ISSUE 7** 

www.fdlhams.com July, 2018

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

## **Understanding Waterfall Displays By John Armstrong KG5LWD**

(Joe Scheibinger K9VY ran across this article in the recent newsletter from our friends at the Longview East Texas Amateur Radio Club in Texas. It is a great primer to understand the new displays on the front of today's SDR radios. It is written with permission for the author John Armstrong KG5LWD.)

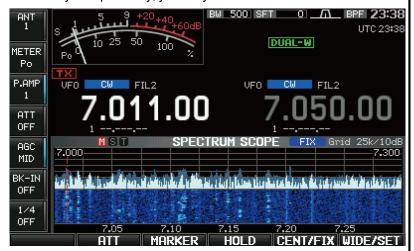
With personal computers and advanced transceivers being more widely used in our radio shacks, there is a tremendous amount of data available to use with the push of a few keys. The presentation of a waterfall on our computer screen of radio frequency use has certainly streamlined and quickened our ability to see where action is taking place on a specific radio band.

In the event that you've never observed a waterfall display on a computer screen, it's a real time event or almost a real time event of radio activity on various parts of the band. By leaving aside the complicated mechanics of how all of this happens, or the amount of activity you see, it is a snap shot of activity on the band that is continually changing by the second.

The waterfall display is a way of showing tons of data in a very compact way; just as you would view a movie.

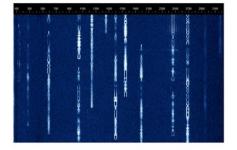
As you look at the horizontal axis on the display, it represents the frequency. And the vertical axis represents the time, the color indicates signal strength. So for an example, let's say you're looking at the 40 meter band from 7.0 MHz to 7.3 MHz. On the left side of the screen you'll see 7 MHz and on the right side 7.3 MHz. And inbetween and halfway across the display you'll see 7.150.

Now, in a similar manner, the zero seconds ago appear at the top of the waterfall display and they begin to cascade downward as time progresses. So on the chart example, the 1 minute ago would be at a lower point than zero seconds ago. And depending on how you have set up the whole screen updating on your computer screen,



this cascading effect can take place slowly or rapidly. Your display could represent 15 seconds, 10 minutes or 15 hours of data depending on how you have set things up on your computer. The setup is very flexible, entirely configurable and totally arbitrary. You can set things up to the way you want them.

To understand signal strength, envision the color black as having little or no signal strength and the color red being the maximum signal strength. The brightness or intensity of these colors indicates more signals being present.



A radio operator might be sending a CW signal in Morse code and the signal may show up on the waterfall as a series of dits and dahs cascading down the screen with the oldest part of the signal being found a the bottom and the newest found at the top of the waterfall.

Whereas, an AM signal may show up as a wide or thick line in a bright color indicating a high strength signal in the middle and lighter colors showing a low signal strength towards the edges.

Each mode of radio operation has its own visual characteristics displayed on the waterfall and some of the characteristics in some instances you can be read information about that signal on the computer screen.

# 

#### FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



www.fdlhams.com July, 2018





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

## **Understanding Waterfall Displays By John Armstrong KG5LWD**

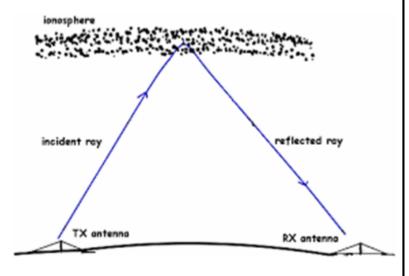
Then there are some strange things you may see on the waterfall display like diagonal lines.

A diagonal line would represent a radio signal that is strong and occurs as a particular time and frequency. Then a moment later it has changed frequency, only to change frequency again and again. It is the steepness of this diagonal line that is dependent on two things: the speed the frequency changes and the rate the waterfall display is updated on the computer.

Before waterfall displays came into existence, the way a radio operator would experience this type of signal that shows up as a low to high swoop or high to low swoop sound and is dependent on the listening mode and direction of the frequency change.

So what is that signal called?

It's called an lonospheric Sounder. The operator pings the ionosphere across several frequencies and is listening for a return echo to see of the ionosphere is reflective for a particular frequency(s) at that point in time. This information allows for the creation of a map on what the ionosphere is dong at the present moment and what frequency can be used to make a contact.



# ON PARTY ORDING

#### FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



**VOLUME 19 ISSUE 7** 

www.fdlhams.com July, 2018

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

#### For Sale — Ted Willett

Ted Willett has the following for sale.

#### #1)- Ameritron AL-82 Amplifier

This amp is about six years old, I just replaced the whole high voltage capacitor board, along with the Rectifier board, which to replace the cost is about \$195.00. The finials are 3-500z tubs and they are in very good shape and can have a output of 2000 watts, I loafed it at about 1000 to 1100 on the Bird meter. Cosmetically is very clean, no dents or screws missing, see photo

The opening bid start \$1,950.. If you pick it up \$1.850.00.

#2) I-Com 746 Pro with hand Mic. at \$1100.00, this rig is in very good condition. see photo.

#### #3)- Henry Temp 6 N 2 Amp.

For the VHF Ham who can work on high power amp's. This unit needs some work, switch need to be re-placed, the finials are 8874's that are in very good shape, to replace them now days would be about \$900.00 for the pair, also the Dow Key relays system with buffers and 2 and 6 attenuators, Asking \$500.00 Firm, see photo.

#4)- Very old, collector's item, Central Electronics MM2 RF scope, has a plugging in 455 IF, Works and excellent shape. \$90.00, see photo.

No shipping on all units unless the buyer pays the shipping cost.

All units have manuals.

Call Ted, W9NHE at 414-491-9738, or e-mail at w9nheted@wi.rr.com











# ATEUR RAD

### FOND DU LAC AMATEUR RADIO CLUB

# DL 73





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



#### **MEETING MINUTES**

#### Call to Order

The meeting was called to order at 7:03 pm. With Dave McCumber N9WQ (President) presid-

ing.



#### Introductions

All attendees introduced themselves.

**VOLUME 19 ISSUE 7** 

Program: none

#### **Approval of Meeting Minutes**

A motion was made by Tom Powell KC9VXR to approve the minutes of the last meeting as published in the newsletter. The motion was seconded by Dick Finn KC9ZVW 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 Peter Fox KB9WZD .The motion carried unanimously via a voice vote.

The truck battery that was thought to be bad just needed to be charged, bad spark wires were found and replaced, under warranty. The truck still runs poorly Dave will check it out. There was a bill for the truck \$43.18.

A motion to pay the bill was made by Jack Heil KG9IN and seconded by Justin Buell KC9YET. The motion carried unanimously via a voice vote.

Truck Fund	0.00
Emerg. Services Fund	1,479.42
General Use Fund Savings Account	3453.91 25.00
Petty Cash Fund	19.12
Total	4975.45
Repeater Fund	229.74

#### Old Business

Joe Scheibinger K9VY contacted Moraine Park to renew our availability

to use the room for next year. The next year will be no charge, but after that we may have to pay \$40 per meeting to use this room.



were used for the their field day positions.

A ballot was sent around to have a vote on the changes to our constitution and bylaws. The Vote with 5 yes absentee ballots and 25 yes present and 1 abstain equals 30 yes. We currently have 41 paid members, thus we have more than the 2/3 votes required, the changes to the constitution have passed.

#### **New Business**

Field day: Brad Freund KC9QYP has donated the use of his portable camper shack, Dawn Krause KD9CAW and her husband Dennis donated their trailer to use and the yellow truck



JUNE 23 8am will be setup Buddy Larson KC9UVJ has the data cables and

routers for data collection, Marge Heil KC9BEN and Dennis Paulin KB9OFM will be bringing food, bring something to

. Publicity : Joe Scheibinger K9VY will contact KFIZ and newspapers .Jack Heil KG9IN will send letters out to officials .

# MATEUR RAD

#### FOND DU LAC AMATEUR RADIO CLUB

# **DL 73**



VOLUME 19 ISSUE 7 www.fdlhams.com July, 2018

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, June 11, 2018



#### From the Floor

Next month's program will be with the CEO of Palomar Engineers , they make all kinds of antennas all over the world .

The August meeting will be on installing mobile HF antennas.

Joe Scheibinger K9VY mentioned that www.worldcat.com well send ham radio publications to your nearest library.

#### **Adjournment**

A motion was made to adjourn by Tom Powell KC9VXR. The motion was seconded by Peter Fox KB9WZD. The motion carried unanimously via a voice vote and the meeting was adjourned at 8:05 pm. Raffle # 554887





# ONO NATEUR RADIO

#### FOND DU LAC AMATEUR RADIO CLUB

# — FDL 73 —



**VOLUME 19 ISSUE 7** 

www.fdlhams.com July, 2018

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://yo utu.be/UK1A47pNKyo
- FARC Bob Heil Ham Radio Presentation https://youtu.be/t3Ueh9IN5 U
- FARC WWV Presentation https://youtu.be/w3-DP9DEv U
- FARC Pacific Antenna Talks Kit Building <a href="https://youtu.be/SBreL2Ylsn0">https://youtu.be/SBreL2Ylsn0</a>
- FARC Scanner Master Presentation https://youtu.be/dlSIAufGkv8
- FARC WBAY Field Trip TV Nov 17 2015 <a href="https://youtu.be/sfQvJ1fV6eo">https://youtu.be/sfQvJ1fV6eo</a>
- FARC WBAY transmitter tour <a href="https://youtu.be/NnZ2106HvA">https://youtu.be/NnZ2106HvA</a>
- FARC NooElec https://youtu.be/s pxYkH4xds
- FARC Elecraft Radio <a href="https://youtu.be/30u1Qpx9Vg8">https://youtu.be/30u1Qpx9Vg8</a>
- FARC Ed Tobias & Morse Code https://youtu.be/9uu4PFMrH2U
- FARC Salvation Army Emergency Communications <a href="https://youtu.be/oxXoZjuTTNE">https://youtu.be/oxXoZjuTTNE</a>
- FARC KFIZ Interview <a href="https://youtu.be/UVFMCvRGEJE">https://youtu.be/UVFMCvRGEJE</a>
- FARC HAARP Presentation <a href="https://youtu.be/cdeNXLMuyEE">https://youtu.be/cdeNXLMuyEE</a>
- FARC The DZKit Ham Radio Kits <a href="https://youtu.be/giZcfQW">https://youtu.be/giZcfQW</a> tpA
- FARC The DZKit Ham Radio Kits <a href="https://youtu.be/giZcfQW">https://youtu.be/giZcfQW</a> tpA
- FARC The Christmas Island DXpedition with Bill Kendall (4/9/18) <a href="https://youtu.be/XgjYL0vAhlw">https://youtu.be/XgjYL0vAhlw</a>
- FARC Restoring Old Antique and Classic Radios (5/17/19) https://youtu.be/3I352v4qYdw

#### Code Classes

Rick Robinson NI9Z is continuing to train our members in using code. I started working wiith him a month or so ago and after only a few lessons I've started to pick things up. Our schedules have not meshed well recently but we are still making progress.



There are a number of resources to help you learn on the web and through ARRL.

Give Rick a call and get started. I believe code contacts count for more points when contesting. Besides, it is fun!

# ON LAC SILL SAN TO LA SAN TEUR RADIO

#### FOND DU LAC AMATEUR RADIO CLUB

## — FDL 73 —



**VOLUME 19 ISSUE 7** 

www.fdlhams.com July, 2018

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

#### **NOTICES/ANNOUNCEMENTS**

#### Elmers:

It has come up several times recently that there is a need for our more experienced members to act as Elmers for the newer HAMs in the club. The first time this came up I got linked up with Jack Heil (KG9IN) and have spent many enjoyable hours with him. I've learned about hanging an antenna, contesting and a week or so ago got a super tour of my Yeasu FTDX1200. Most importantly, I finally got on the air.



ELMERS		
Lloyd Vandervort (N9RPU)	lloydv654@gmail.com	
Doug Schultz (N9EZF)	n9ezf@fdlhams.org	
David McCumber ((N9WQ)	n9wq@charter.net	
Marjorie & Jack Heil (KC9BEN, KG9IN)	heilmj@att.net 920-9221413	
Rick Robinson (N19Z)	920-924-9559 Code, DX'ing, Contesting	
Stan Cram (A10M	Contesting, general help	



#### Club Nets

Sunday Evenings - Open to all 6:15 pm Ten Meter SSB Net-28.450 MHz 7:30 pm Two Meter FM Net-145.430 MHz PL 97.4



#### **FDL County ARES Net**

Sunday Evenings
For ARES Team Members. Now combined
with the Club Net at 7:30 pm.
ARES Coordinator: Todd Beay (AC9EX)



# **FDL 73**



VOLUME 19 ISSUE 7 www.fdlhams.com July, 2018

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

#### 07/07/2018 | South Milwaukee ARC Hamfest

Location: Oak Creek, WI Type: ARRL Hamfest

Sponsor: South Milwaukee Amateur Radio Club

Website: http://www.qsl.net/wa9txe

**Learn More** 

#### 08/11/2018 | Racine Megacycle Freefest

Location: Racine, WI Type: ARRL Hamfest

Sponsor: Racine Megacycle Club Website: http://www.w9udu.org

**Learn More** 

#### 08/25/2018 | Circus City Swapfest

Location: Baraboo, WI Type: ARRL Hamfest

Sponsor: Yellow Thunder Amateur Radio Club

Website: http://yellowthunder.org

**Learn More** 

#### 09/08/2018 | Ozaukee RC's 13th Annual Regional Fall Swapfest

Location: Cedarburg, WI Type: ARRL Hamfest Sponsor: Ozaukee Radio Club

Website: http://www.ozaukeeradioclub.org

**Learn More** 

#### 09/28/2018 | Wisconsin State Convention (Ham Radio Outlet Superfest 2018)

Location: Milwaukee, WI **Type:** ARRL Convention Sponsor: Ham Radio Outlet Website: http://hamradio.com

**Learn More** 

#### 10/13/2018 | Wisconsin ARES/RACES Conference

Location: Wisconsin Rapids, WI Type: ARRL Convention Sponsor: WeComm, Ltd. Website: http://wi-aresraces.org

**Learn More** 











# DL 73

**VOLUME 19 ISSUE 7** 

www.fdlhams.com July, 2018

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



#### 2018 CALENDAR

Jan. 8. 2018

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

Feb. 12, 2018

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

Feb. 10. 2018

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

Mar. 11 & 12, 2018

Wisconsin QSO Party Mar. 12, 2018



FDLARC Monthly Meeting, 7:00 pm, MPTC A-112. Annual Membership Drive-Contact Joe Scheibinger

Apr. 9, 2018

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

Apr. 14, 2018

License Éxams, 9:00 am-Noon, Moraine Park Technical College in Room O-108 Contact: Doug Schultz N9EZF



May 14, 2018

FDLARC Monthly Meeting, 7:00 pm,

MPTC A-112.

May 18—20, 2018

Dayton HAMFEST



June 1—2, 2018

Brat Fry at the Country Corners Exxon Station, Hwy 67 and Hwy 41 in Lomira. 8;00am to 5:00pm—Contact:

Doug Schultz N9EZF

June 11. 2018

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



June 8—10, 2018

Walleye Weekend. Contact Joe Scheibinger K8VY

June 23 & 24, 2018

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



July 9, 2018

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

July 22, 2018 RMC Triathlon





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

Aug, 26 2018

Race the Lake

August 24-25, 2018

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





Sept. 8, 2018

FDLARC Annual Picnic. 6:30 pm. Heil's Home

Sept. 10. 2018

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

Sept. 21—23, 2018

Fox Cities Marathon



Oct. 8, 2018

FDLARC Monthly Meeting, 7:00 pm, MPTC A-112 HAARP Presentation, 501c3 Discussion and Voting

Oct. 13, 2018

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



#### Nov., 12 2018

FDLARC Monthly Meeting, 7:00 pm, MPTC A -112. Election of 2018 Officers

Dec. 1, 2017

FdL Parade of Lights, 4:00, Downtown

Dec. 9, 2017

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

Dec. 10, 2017

Christmas Party: Jim and Lind's Contact Buddy Larson KC9UVJ





## FDL 73

VOLUME 19 ISSUE 7 www.fdlhams.com July, 2018





Join 03 On 301	lady Eveni
Name	Callsign
Barbara Simon	W9MER
Bowen Blend	KC9VXV
Buddy Larson	KC9UVJ
Chuck Mahnke	К9НХІ
Cully Kowal	KS0D
Danny Vandekolk	KC9IGD
David Mc Cumber	N9WQ
David Zittlow	K9DUI
Dawn Krause	KD9CAW
Dean Choate	KC9TGM
Dennis Paulin	KB9OFM
Dick Finn	KC9ZVW
Don Chapman	KC9KZQ
Donna Blend	KC9TFN
Doug Murray	KC9ZVT
Doug Schultz	N9EZF
Doug Wagner	KCORNS
Ed Beltz	N9PJQ
Ed Steinfeld	KB1ZJK
Edward Frac	AA9WW
Fernando Salazar	KC9ZVX
Gerry Radtke	WA9GON
Jim Balthazor	KD9BTV
Jim Cole	N9WAP
Joe Lauber	KC9MDY
Joe Scheibinger	K9VY
Joyce Keyes	KC9KIJ
Kirk Everson	KC9FZE
Larry Mielke	KC9RUE
Lloyd Vandervort	N9RPU
Lori Winchel Beltz	KC9YQS
Louis Simon	KB9VQM
Marjean Buck	KC9LFI
Matt Nett	KD9BBN
Mike Keyes	KE7ES
Mike Miller	KC9DOA
Nancy Myers	K9ANA
Neal Buck	KC9LFN
•	

### **FDL ARC ROOSTER**

**Name Sort** 



### **Call Sort**

			<u> </u>
Randy Nelson	KC9MYG	Ed Beltz	N9PJQ
Rick Robinson	NI9Z	Lloyd Vandervort	N9RPU
Robert Weileder	W9TKS	Jim Cole	N9WAP
Ron Keller	KC9YVL	David Mc Cumber	N9WQ
Stan Cram	AI0M	Rick Robinson	NI9Z
Ted Neuburg	W9LUQ	Ted Neuburg	W9LUQ
Todd Beay	AC9EX	Barbara Simon	W9MER
Tom Powell	KC9VXR	Robert Weileder	W9TKS
Tony Pass	KC9QYR	Gerry Radtke	WA9GON
Walter Rueger	KC9WO		

Edward Frac	AA9WW
Todd Beay	AC9EX
Stan Cram	AIOM
Nancy Myers	K9ANA
David Zittlow	K9DUI
Chuck Mahnke	к9нхі
Joe Scheibinger	K9VY
Ed Steinfeld	KB1ZJK
Dennis Paulin	KB9OFM
Louis Simon	KB9VQM
Doug Wagner	KCORNS
Mike Miller	KC9DOA
Kirk Everson	KC9FZE
Danny Vandekolk	KC9IGD
Joyce Keyes	KC9KIJ
Don Chapman	KC9KZQ
Marjean Buck	KC9LFI
Neal Buck	KC9LFN
Joe Lauber	KC9MDY
Randy Nelson	KC9MYG
Paul Bleuel	KC9NAA
Tony Pass	KC9QYR
Larry Mielke	KC9RUE
Donna Blend	KC9TFN
Dean Choate	KC9TGM
Buddy Larson	KC9UVJ
Tom Powell	KC9VXR
Bowen Blend	KC9VXV
Walter Rueger	KC9WQ
Lori Winchel Beltz	KC9YQS
Ron Keller	KC9YVL
Doug Murray	KC9ZVT
Dick Finn	KC9ZVW
Fernando Salazar	KC9ZVX
Matt Nett	KD9BBN
Jim Balthazor	KD9BTV
Dawn Krause	KD9CAW
Mike Keyes	KE7ES
Cully Kowal	KS0D
Doug Schultz	N9EZF

Paul Bleuel

KC9NAA