FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 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

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

Newsletter Submissions:
Please email to
rfinn5@hotmail.com

Upcoming events

The club is swiftly moving into the busier time of the year and leaving the winter doldrums behind. A lot of events are already scheduled and even more are being thought about.

This coming weekend (March 9 & 10, 2019) is the annual Wisconsin QSO Party. At one time our club was one of the leaders in the contest but over the years we have dropped down in the standings. Now is a chance to have some fun and help bring us back to our former glory.

On April 13, 2019 we will be hosting another exam session. This will be the second of four sessions the club holds each year. Its been some time since one of our members has taken advantage of the sessions to upgrade their ticket. Most of our test takers come from outside the area. There is still time for those of you with Technician or General Class licenses to prep for the tests.

May 17through19, 2019 is the annual Dayton Hamvention. Joe Scheibinger K9VY is arranging a caravan to Dayton for the event. See page 14 of the Newsletter for details.

Finally or the near term events, Doug Schultz N9EZF has scheduled the first of our two annual Brat Fries for May 31 NS June 1, 2019. The two Brat Fries are our main fund raising efforts for the year and a great chance for you to get out and socialize with your fellow HAMs.

Next Meeting

When: March 11, 2019 at 7:00 pm

Where: Moraine Park Technical College, Room A-112

Program: Jack Gerbs WB8SCT, Dayton Hamvention

FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 2019

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

Testing Session on Feb. 16, 2019

The club held its first testing session of the year on Feb. 16, 2019. We had a good turnout of VE's but only one person showed up to take a test. Allen Krelwitz had taken his Technician class exam only a few weeks before in Madison and was already set to upgrade his ticket to General Class. He passed the test with flying colors. He plans to join us at our April testing session to upgrade to Extra Class.

After Allen finished his test he stayed and we all enjoyed talking radio. For those of you who are Technician or General Class, you still have plenty of time to prepare for the next testing session to upgrade your ticket.

Allen Krelwitz KD9MHS (left) receives his General Class certificate from VE Kyle Rausch AB9AX.

Jack Heil KG9IN, Kyle Rausch AB9AX and Doug Schultz N9EZF (above) were joined by Dick Finn KC9ZVW (behind the camera) as VEs at the testing session.

FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 2019

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

Jack Gerbs WB8SCT General Chairman of the Dayton Hamvention Will Speak at March Meeting

By: Joe Scheibinger K9VY

Just as aircraft enthusiasts have EAA, automobile enthusiasts have SEMA, Ham Radio enthusiasts all over the world flock to the Greene County Fairgrounds and Expo Center in Ohio for Hamvention, the largest gatherings of Ham Radio enthusiasts in the world organizes by the DARA, the Dayton Amateur Radio Association.

DARA is the sponsor of the Dayton Hamvention® and earns its operating revenue from this event. The funds are used for scholarships, education, disasters and public service events, the 10 monthly editions of the award winning "RF Carrier" newsletter, upkeep of the various repeaters and membership activities and is an exempt organization under the Section 501(c)(3) of the Internal Revenue Code of 1986. It takes more than 700 volunteers who put in many hours to make Hamvention the success that it is. Hamvention 2019 will take place May 17 – 19 at the Greene County Fairgrounds and Expo Center in Xenia, Ohio.

This year, DARA has appointed Jack Gerbs, WB8SCT, of Springboro, Ohio, as the General Chairman for Hamvention® 2019. Gerbs, who served as Assistant General Chairman for the 2017 and 2018 Hamventions, succeeds Ron Cramer, KD8ENJ, who served in the post for the 2017 and 2018 shows. Jack will be our guest speaker for the March meeting.

Hamvention has been around since 1952. Around 1950, John Willig, W8ACE, had asked the Dayton Amateur Radio Association to sponsor a HAM Convention but was turned down. John wanted to have a quality affair. Speakers and prizes would be a drawing point. John finally found a champion in Frank Schwab, W8YCP (W8OK), the newly elected president of the club. A meeting was held and the DARA Board allocated $100 to get started. The first organizational meeting was held in January 1952.The Southwestern Ohio Ham-vention was born.

How far did $100 go? Not far! A 12″ TV was raffled off to help raise funds. The FCC agreed to give license exams and Phil Rand, W1BDM, a pioneer in TVI elimination was on the program. First prize, a Collins 75A2, was purchased locally. Hoping for 300 visitors, the committee was amazed that over 600 showed up! There were 7 exhibitors and 6 forums. The ladies program was successful with a luncheon at the Biltmore and a trip to a local TV station. In 1955 the Awards Program began with the "Amateur of the Year." The Flea Market has grown from 200 to more than 2000 spaces. In 1964 the Hamvention® moved to Hara Arena. Shuttle buses and handicapped parking were added in 1969. In 1973 it became a 2 day event with Sundays added in 1974. The growth of the Dayton Hamvention® can be attributed to caring, energetic people who enjoy being on a winning team.

Registration and getting acquainted begins on Wednesday evening. Seminars are most of the day Thursday, with "meet the speakers" and an open room for some casual show and tell and plenty of time to swap tales that evening. Most of Friday daytime is open to attend the Hamvention and visit the QRP-ARCI Toy Store. Friday evening activities usually include "show and tell", vendor displays and maybe a judged home brew contest. Most of Saturday is again open for the Hamvention, and we have a great social event, banquet, awards presentation and door prizes that evening. Sunday is the Hamvention, and check-out.

Each year Hamvention hosts dozens of forums covering a variety of topics ranging from antenna design to software-defined radio and everything in between. This year will be no exception as attendees will be able to choose from over two dozen forums scheduled throughout the event.

(Special thanks to the ARRL and the Hamvention website for information)

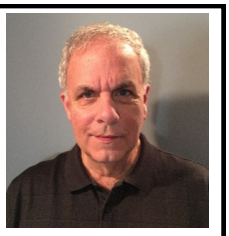
FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 2019

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

Vintage Amateur Radio
de Bill Shadid, W9MXQ



As you have heard me say, I find it interesting to watch how the manufacturers met the challenge put down by Collins with the S-Line separate receivers and transmitters in 1957. Collins introduced a separate receiver and transmitter first in the 75S-1 and 32S-1, respectively. Only later did they later introduce the KWM-2 Transceiver. The other manufacturers seemed to introduce those product lines in reverse – with the transceiver preceding the separate receiver and transmitter. Was that because the movement of the transceiver as the dominant ham radio tool was recognized? Or, was it just easier to get the transceiver through research and development? We will never know for certain. Hindsight is 20-20 from the perspective of the early 21st century making judgements on what was done in the mid-20th. Would you believe that these revolutionary changes are now passing sixty years ago? It gets a little disturbing when you personally remember the event.

In 1964, Drake entered the transceive capable separate receiver and transmitter market after the TR-3 and TR-4 Transceivers (reference two past articles on those fine radios). Drake introduced what became one of the most popular sets of separate radios of all time – the Drake R-4 Receiver and T-4X Transmitter – better known as the "Drake Twins" or the "Drake Separates." They extended with very similar design through the R-4, R-4A, and R-4B Receivers and the T-4X and T-4XB Transmitters. (There was no T-4XA Transmitter.) While similar in appearance, the R-4C Receiver and to some degree the T-4XC Transmitter were new designs and will be the subject of a future article. Below is a beautiful R-4B and T-4XB station owned and operated by my long-time friend, Roger, K9VSK, of Roanoke, in central Illinois:

Drake R-4B Receiver

Drake T-4X Transmitter

R-4B and T-4XB as in operation at K9VSK

While Collins set the tone of the market by the mid-1960's, they were pretty much alone in making a receiver with crystal or mechanical bandpass filters. Collins was also alone in making provisions for multiple, selectable bandwidth mechanical filters. The others – particularly the very popular and more economical Hallicrafters, Hammarlund, and National receivers (to name three) – had no such feature other than some rather broad "crystal filters" that had variable bandwidth with very broad ultimate attenuation. The popular receivers of the day used tuned circuit designs to determine bandwidth. Some of these radios had a selection of multiple tuned circuit bandwidths. These were economical and functional but only marginally effective alternatives to the Collins design. These tuned circuit designs gave relatively good performance at a -6dB bandwidth but had very wide "skirts" in their performance characteristics showing very broad bandwidth performance at -60dB down.

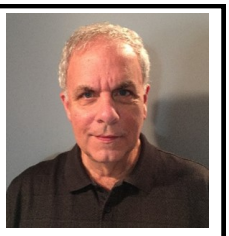
FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 2019

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

Vintage Amateur Radio
de Bill Shadid, W9MXQ



Drake introduced a different design concept that turned out to be the focus for designs in the coming years with most manufacturers. The original R-4 brought an early stage crystal lattice filter after the RF Amplifier stage, and the First Mixer stage, at 5645 kHz. While placed perhaps a bit differently, we know this today as a Roofing Filter. However, the R-4 through R-4B Receivers kept the tuned circuit method of determining final bandwidth with a broad "roofing filter." That said, this early circuit crystal filter assisted the front end of the radio in fighting strong signal overload before reaching the bandwidth determining circuits in the later 50 kHz i-f.

Any R-4 series receiver could transceive with any T-4X series transmitter – so, again, like in the TR-3 and TR-4 series transceivers, all options worked across all model lines within the different models of separates. But, unfortunately, the conversion scheme of the transceivers was not compatible with the R-4 series receivers and T-4X series transmitters. So, unlike Collins and Heathkit at the time, it was not possible to interconnect the TR-4, for instance, to an R-4 for transceive using the VFO in one of the radios. However, Drake and other brand receivers were easily connected to Drake transceivers for use as separately controlled units.

The Drake T-4X and T-4XB transmitters used the crystal filter method to generate SSB signals and operated CW by unbalancing the balanced modulator to generate a carrier. The transmitters provided for AM transmission as well with low level screen modulation. The transmitter had built-in VOX (voice operated transmit) and could utilize this circuitry to operate semi-break-in for CW. While the transmitters provided sidetone back through the receiver for CW, they were not designed to provide monitoring of transmitted AM or SSB signals.

Drake "4-Line" Accessories were used with the Drake Receivers, Transmitters. and the TR-3 and TR-4 series Transceivers . . . *(Small note – the TR-3 was unique in its "3" number. It fits in more precisely as an "early TR-4" than a unique radio model.)*

AC-4 AC Power Supply (Mounted in MS-4)

MS-4 Speaker Console

W-4 Wattmeter

L-4B Linear Amplifier (2x 3-500z Eimac Tubes)

MN-2000 Antenna Matching Network

(Pictures above are from W9MXQ collection items.)

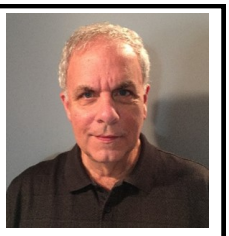
FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 2019

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

Vintage Amateur Radio
de Bill Shadid, W9MXQ



Other accessories were also used with the very popular Drake “4-Line” Receivers, Transmitters and Transceivers:

L-4 Linear Amplifier
(Predates the L-4B)
(2x 3-400z Eimac Tubes)

MN-4 Antenna Matching Network

(Pictures from other collectors preferring anonymity.)

The Drake L-4 and L-4B (along with the L7 and L75) Linear Amplifiers will be the subject of a future article. The MN-4 Antenna Matching Network (Drake’s terminology for “Antenna Tuner”) was like the MN-2000 except that it was rated for an input power of 300 watts as compared to the 2,000-watt capability of the MN-2000. Front panel design the same size and just lightly different in appearance. The MN-2000 was deeper and heavier.

The Drake T-4X series transmitters used the same 6JB6 final amplifier tube used in the TR-4 series transceivers (recall from earlier articles that the TR-3 used the similar 12JB6 final amplifier). Unlike the transceivers, the T-4X series transmitters used only two of the tubes as compared to three in the transceivers. Instead of 300 watts PEP SSB (260 watts CW) input from the transceivers, the input power of the transmitters was 200 watts PEP SSB and CW. While our less technical ham friends will point out that the T-4X transmitters can run much more input power, Drake always warned that over 200 watts was beyond the linear performance range of a pair of 6JB6 tubes. So, “let the owner beware.”

Drake also had a rather unique group of accessories to allow the “4-Line” equipment to access six and two meters using separate receiving and transmitting converters. Here for reference they are shown:

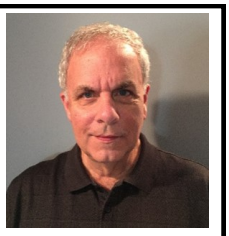
FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 2019

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

Vintage Amateur Radio
de Bill Shadid, W9MXQ



Drake CC-1 Converter Console (Holds Receiving Converters)

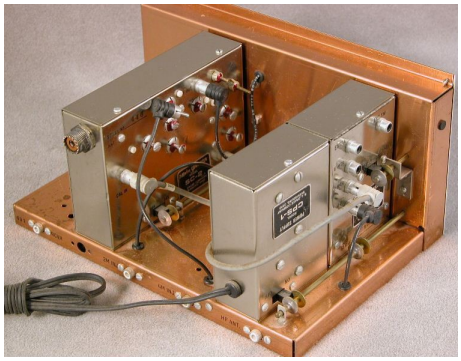
Drake TC-6 (Transmitting Converter

Drake TC-2 (Transmitting Converter

(Drake manufactured converters for 6 and 2 meters – but had provisions for others.)

Drake VHF Transmitting Converters (TC-6 and TC-2) used a modification of the T-4X Transmitter to produce very low HF output to drive the conversion scheme in the converter. The TC-6 used the same model 6JB6 final amplifier tubes as used in the transmitter. Input power was 180 watts. The TC-2 used a different tube – the dual tetrode 8643 for an input power also of 180 watts. In both cases these were PEP input power ratings for SSB and CW.

The above shown CC-1 Converter Console held the SC-6 and SC-2 Receiving Converters (the SC-2 is in place in the view here, at the left side of the chassis). The CPS-1 Power Supply is the rear unit to the right on the chassis picture. In front of the CPS-1 is the SCC-1 Crystal Calibrator. Note the excellent condition of the copper plated chassis in this Drake publicity photograph.



A Drake TC-6, TC-2, CC-1, CPS-1, SCC-1, SC-6, and SC-2 all graced the WA9MXQ shack (my previous call) in the days when I was using my Drake R-4B and Drake T-4XB. These devices were dedicated to SSB and CW use – with some people using them on AM as well.

Drake, Heathkit, and Collins used an inductively tuned VFO (more properly said as “PTO” for Permeably Tuned Oscillator) in both the receiver and transmitters. Like Collins, the Drake radios also lacked multi-stage variable capacitors for tuning individual stages in the radios. Again, inductive tuning was used with a rack assembly tuning all stages at once ganged to the PRESELECTOR control on the receiver and the RF TUNE control on the transmitter.

Drake R-4 series receivers continued the use of PASSBAND TUNING that was featured in their earlier 1A, 2A, and 2B (but not the 2C) Receivers. This was much more effective than the Q-Multiplier (REJECTION TUNING) used by Collins – and similarly superior to other competition that only included a NOTCH filter. (The Drake R-4 series also included a NOTCH filter in addition to their very effective PASSBAND TUNING.)

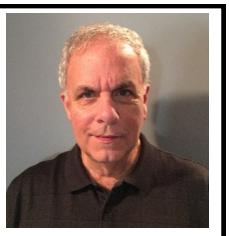
FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 2019

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

Vintage Amateur Radio
de Bill Shadid, W9MXQ



Drake enjoyed a wide customer base with these radios – all the way through the "C" series radios that are the subject of the next article in this series. Drake offered a radio in line with the Collins S-Line in performance for not only less money but, in my opinion, were more advanced in technology – especially with the introduction of the "C" series radios (R-4C and T-4XC). To satisfy this demand – which included non-ham radio commercial high frequency radio operations – Drake had some unique versions of the Transmitter.

Commercial customers had little use for a radio that had separate frequency control of the Transmitter. The transmitter could be a slave to the receiver with those customers. However, Drake's line of Transceivers at the time – the TR-4 series by then – lacked two major features necessary to commercial customers:

PASSBAND TUNING and NOTCH Filter features – Interference Control.
Ability to cover all frequencies from 1.5 to 30 MHz – General Coverage.

The Drake receiver and transmitter pair could cover the amateur and commercial frequencies used by its global customer base. At that time, Drake did not have a transceiver to do that in their product line. But, their prime competition, the Collins KWM-2A Transceiver and S-Line separate Receivers and Transmitters could do General Coverage - and had at least some interference control on the S-Line separates. (Collins equipment covered 3.5 to 30 MHz only.)

To counter the need for a lower cost transceive alternative for commercial customers, Drake had two transmitter models over time:

Drake T-4 Reciter
Matched the R-4 and R-4A Receiver

Drake T-4B Reciter
(Matched the R-4B Receiver)

"Reciter" would seem to imply – reciting what the receiver told it to say.
That is, what frequency to be tuned in on the band.

(Pictures from Universal Radio)

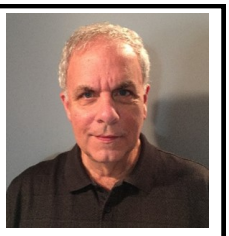
FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 2019

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

Vintage Amateur Radio
de Bill Shadid, W9MXQ



To make a more compact desktop concept in this market, Drake made a single cabinet unit using these components:

Drake apparently sold enough of these units into the time of the R-4B and T-4B series of separate units that they introduced a later version of the single cabinet pair as you see here:

To the right is the Drake TR-44B Transceiver. This unit was like the TR-44 but used the later R-4B Receiver and T-4B Reciter. Apparently, Drake decided with the later T-4B Reciter that additional ventilation was necessary. You can see here, and in the separate T-4B picture, above, that the panel space occupied by the VFO in the T-4X and T-4XB now had a screen mesh allowing more air flow into the transmitter. (Research so far shows that no TR-44C, using R-4C and a T-4C, ever existed.)

The receiver and transmitters in the TR-44 and TR-44B were still separate units without a common bandswitch control or early stage Preselector and RF Tune Controls.
For both the TR-44 and TR-44B the separate AC-4 Power Supply and MS-4 Speaker were necessary options for most users. The AC-4 did not fit into the open VFO area of the T-4 or the later T-4B. As with the stand-alone models, the R-4, R-4A, or R-4B used in these “transceivers” has their own internal power supplies.

The Drake R-4, R-4A, and R-4B – along with the T-4X and T-4XB were, as mentioned previously, able to receive and transmit from 1.5 to 30 MHz – extending across the HF spectrum (with some slight adjustments in the 5 MHz area to accommodate i-f frequencies). While the radios both had conventional fixed band positions for the 160-10 meters, it was possible to add optional range crystals to both for other coverages in 500 kHz portions of the HF spectrum. The receiver could hold ten 500 kHz range crystals while the transmitter could hold four. These ten and four, respectively, were in addition to the standard ham band range crystals. Unlike Collins equipment, the Drake receivers and transmitters did not require any re-alignment to cover bands other than the traditional ham bands.

I have used and later collected Drake equipment since acquiring a new Drake R-4B and T-4XB in the 1970’s. It is some of my favorite ham radio equipment. I have found Drake equipment that is been poorly cared for, rusty, scratched, and dented. But, after making sure it is connected to a good power supply and making sure it is free of defective electrolytic capacitors, it will immediately power up and make contacts. It is one of the three brands of radio that I collect that spring to life with little or no effort – those being Drake, Hallicrafters, and Swan (in alphabetical order).

Using Drake receivers is a joy with their circuit design yielding very low band noise. I am reminded of Roger, K9VSK, and me, back in the 1970’s when we worked together at Gates Radio Company, Quincy, Illinois. We would be comparing our respective Drake TR-4 and Swan 350c transceivers. I never failed to be impressed by the comfortable listening with the TR-4 in Roger’s shack. It was not that the two competitors could not hear the same signals – it was just more comfortable with the Drake. “Good work, Roger, in showing me that comparison back in those days – I never forgot it.”

Next month we cover the Drake R-4C Receiver and T-4XC Transmitter. To quote the famous Drake Collector and Restorer, Ron Baker, WB4HFN, right from the Home Page of his Drake Equipment Website - http://wb4hfn.com/DRAKE/DrakePageHome.htm - you can see his message:

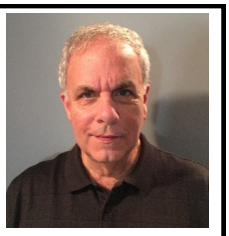
FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 2019

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

Vintage Amateur Radio
de Bill Shadid, W9MXQ



In many ways, Drake, raised the bar to a point that DX friends of mine use the Drake R-4C Receiver and the T-4XC Transmitter to this day in active DX Contesting and chasing DX. Starting as stripped to the bone at delivery – when full option set was added, the R-4C Receivers know few equals. We will discuss what Drake learned making the earlier R-4/A/B and T-4X/B line that culminated with this remarkable pair in next month's installment.

I appreciate that you read my articles. Remember that I am open to questions and comments at my email address, W9MXQ@TWC.com.

Thanks to K9VSK for his pictures and comments (and his friendship), to WB4HFN for the closing picture, and to friends like W9DYQ and K9DJT who proof my articles.

FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 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, Febuary 11, 2019

Call to Order:
The meeting was called to order at 7:00 pm with president Buddy Larson KC9UVJ presiding.

Introductions:
All attendees introduced themselves.

Program:
No program was scheduled.

Approval of Meeting Minutes:
As there is no quorum this was an informal meeting. We will hold approval of last month's minutes until the March meeting.

Treasurer's report:
The Treasurers Report was presented by Doug Schultz N9EZF. There is one $10.00 bill for the club corporation . President Buddy Larson KC9UVJ approved payment in the absence of a quorum.

Truck Fund	0.00
Emerg. Services Fund	1,482.79
General Use Fund	4,978.96
Savings Account	25.00
Petty Cash Fund	19.12
Total	6,505.87
Repeater Fund	230.81

Old & New Business:
The Wisconsin QSO party will be held on March 10, 2019 from 1:00 pm to 8:00 pm.

There was a discussion to locate a place where young people to come in and see what HAM radio is.

We have problems staffing the activities that we already have such as the brat fry bike races and the parade.

Joe Scheibinger K9VY mentioned that some new members said that they didn't have a radio yet and that it would be nice to have a central location that they could go to and use some of the clubs radios and operate. Joe Scheibinger K9VY said that he would be able to help out with this.

President Buddy Larson KC9UVJ mentioned that is very hard to have members volunteer their time.
We will have to get some commitment from our members to be able to do this. How do we attract members to donate their time?

There was a suggestion to talk to a church to take the truck there and demonstrate HAM radio. Jack Heil KG9IN suggested the Boys and Girls Club had a room that was opened a few hours a week and locked when closed that we might be able to use.

The library was mentioned as they have a location in the basement but they haven't contacted us yet .

We need exposure to the general population and the science classes in the schools.

There is room at the EOC center in the city county building but there is a problem obtaining access to the building.

FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 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, February 11, 2019

Doug Schultz N9EZF has access to the north Fond du Lac school science teachers.

President Buddy Larson KC9UVJ will be having a board meeting at the ARC Feb 21 5:30 pm, anyone is invited.

The Dayton ham swap will be held on May 17, 18 and 19, 2019.

The annual ARRL Field Day is scheduled for June 22-23, 2019. As this is at the same time as Countryfest in Oshkosh, we have already reserved the port-a-potty.

Jack Heil KG9IN recognized Joe Scheibinger K9VY for his work on the 501-c3 application .

Adjournment:
President Buddy Larson KC9UVJ declared the meeting to be adjourned 8:02 pm

Raffle # 555099 Joe Scheibinger K9VY

FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 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://yo utu.be/UK1A47pNKyo

FARC - Bob Heil Ham Radio Presentation https://youtu.be/t3Ueh9lN5_U

FARC - WWV Presentation https://youtu.be/w3-DP9DEv_U

FARC - Pacific Antenna Talks Kit Building https://youtu.be/SBreL2Ylsn0

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

FARC - NooElec 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

FARC - The DZKit Ham Radio Kits 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/3I352v4gYdw

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. Unfortuanately, I don't have copiues of those old newsletters. I would appreciate it if you have any newsletters earlier than October, 2014 you would send them to me. Electrocin copies are ideall 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 3 www.fdlhams.com March, 2019

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

NOTICES/ANNOUNCEMENTS

HAM Testing Session

The Volunteer Examiners of the Fond du Lac club will be holding Amateur License exams on April 13, 2019 from 9:00 am-Noon at Moraine Park Technical College in Room O-108. Please contact Doug Schultz N9EZFif you have any questions. There is plenty of time remaining to study for an upgrade to your ticket.

Caravan to the Dayton Hamvention

Hello Members,

At the end of last month's FARC meeting we asked if there were any members that would like to caravan to Dayton Ohio for the world's largest Ham Radio convention, Hamvention. I was surprised that more than a few members would like to take the trip.

I contacted Jack Gerbs WB8SCT who is the General Chairman for Hamvention. He has kindly accepted our invitation to speak at the March meeting. More about this will be posed in the newsletter.

The reason I am writing is that it's always hard to get rooms up to 100 miles away from the convention. So I did some digging and I found 4 rooms together at the Motel 6 which is 12 miles away from the convention! I was able to get a special rate of $52.99 per night plus tax. I can hold the rooms until the week after the March meeting and cancel them with no penalty. The rooms are reserved for May 17-19th and can be split with 2 or 3 people per room.

If you are interested in going to Hamvention this year, please let me know if you want these rooms first come first served. If we need more than 4 rooms I will do my best to secure them.

We still have a few weeks to the March meeting to think about it. If you want a room e-mail me at backstage-live@gmail.com or call 920-237-1450 and I will set it up.

Joe Scheibinger K9VY
2809 Scenic Drive
Oshkosh, WI 54904

backstagelive@gmail.com
920-237-1450

FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 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

03/09/2019 | Amateur Radio Equipment Auction

Location: Eau Claire, WI
Type: ARRL Hamfest
Sponsor: Eau Claire Amateur Radio Club
Website: http://www.ecarc.org/

03/17/2019 | Hamfest 2019

Location: Jefferson, WI
Type: ARRL Hamfest
Sponsor: TriCounty Amateur Radio Club, W9MQB
Website: http://www.w9mqb.com

03/23/2019 | MRAC, MAARS Swapfest

Location: Milwaukee, WI
Type: ARRL Hamfest
Sponsor: Milwaukee Radio Amateurs' Club, Milwaukee Area Amateur Radio Society
Website: https://www.w9rh.org/club-events/swapfest/

05/03/2019 | Ozaukee Radio Club 41st Annual Spring Swapfest

Location: Cedarburg, WI
Type: ARRL Hamfest
Sponsor: Ozaukee Radio Club
Website: http://www.ozaukeeradioclub.org/downloads/spring-swapfest/2019-ORCSpring.pdf

FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 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.

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

Apr. 8, 2019
FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.

Apr. 13, 2019
License Exams, 9:00 am-Noon, Moraine Park Technical College in Room O-108
Contact: Doug Schultz N9EZF

May 13, 2019
FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.

May 17—19, 2019
Dayton HAMFEST

May 31, 2019—June 1, 2019
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 10, 2019
FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.

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.

Aug, 25 2019
Race the Lake

August 23-24, 2019
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. 9, 2019
FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.

Sept. 20—22, 2019
Fox Cities Marathon

Oct. 8, 2019
FDLARC Monthly Meeting, 7:00 pm, MPTC A-112

Oct. 12, 2019
License Exams, 9:00 am-Noon, Moraine Park Technical College in Room O-108. Contact: Doug Schultz N9EZF

Nov,. 11 2019
FDLARC Monthly Meeting, 7:00 pm, MPTC A-112.
Election of 2019 Officers

Dec. TBD, 2019
FdL Parade of Lights, 4:00, Downtown

Dec. 8, 2019
FDLARC Holiday Party: Jim and Lind's Contact Buddy Larson KC9UVJ

Dec. 14, 2019
License Exams, 9:00 am-Noon, Moraine Park Technical College in Room O-104
Contact: Doug Schultz N9EZF

FOND DU LAC AMATEUR RADIO CLUB

— FDL 73 —

VOLUME 20 ISSUE 3 www.fdlhams.com March, 2019

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

CLUB ROOSTER

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	Steinfield	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
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
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
Jack	Heil	KG9IN
Cully	Kowal	KS0D
Tom	Murray	N0HOR
Reinholt	Aschmotat	N8VDH
Doug	Schultz	N9EZF
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	
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	Steinfield	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
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