HAMRAG

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ROCKFORD AMATEUR RADIO ASSOCIATION
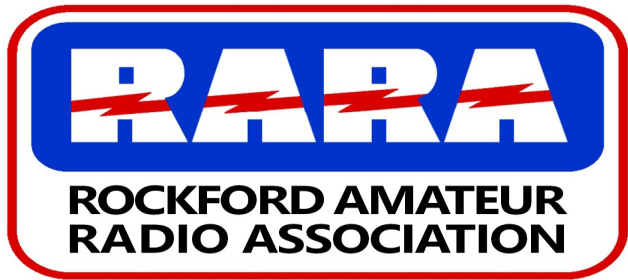
RARA Mission Statement
A member association with common interest of public service to the community through the use of amateur radio.

December 2019

INSIDE THIS ISSUE

Presidents Message

Hi Rockford Area Hams,

It's me, the new RARA president for 2020. OK hang on for dear life and fasten your seat belts. I have a lot that I want to do for the new year, and what we get accomplish is going to be up to all of us. I promise you that you will enjoy the journey, but a lot of what we do is going to depend on the club as a whole. What I would like to do is mostly in things that involve having fun with Ham radio. I want bring back the fox hunts. I want to participate in Winter and Summer field days. I want to set up a couple of tables at the Hamfest to build kits, and get the youth involved in our hobby. I want to get the schools involved by bringing the ARRL's educational Stem program to at least one area school. It would be nice if we could do more then one. I want to set up programs for the whole year in January with an emphasis on what you want to know about, and so that we can advertise what we offer for the year, but most of all I want to have programs that you want. Programs that are relevant to today's Ham. I want to bring back the breakfast in the park, so we can meet your families and put them on the air. These are just a few of the things I can think of off the top of my head, but I ask you to dream and dream big, so that we can have the best year ever. Have a Merry Christmas and a Happy New Year.
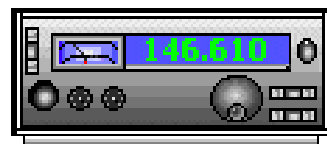
73 Larry
Larry.schubert@gmail.com

NEXT MEETING

FRIDAY
December 13, 2019
7:00 pm

Location:
OSF St. Anthony Medical Center
5666 East State Street
Rockford, IL 61108

Foundation Room

146.610

Greetings everyone,

Well, it's that time of year again and I'm here to remind you that your dues for 2020 are due at the end of December. Also please remember to also fill out the membership form, I know you already did that when you joined, but we need to make sure that we have your current address, email and phone number. The current form can be found at the end of the Ham Rag. Either bring it to the December meeting or just throw it in the mail along with your dues.

Sincerely,

Gordon Seaman kc9nex

2020 RARA Treasurer

AMATEUR RADIO EXAM NOTICE

Amateur Radio exams are held the 3rd Saturday of every month in Rockford IL. The next session is 9:00 am December 21, 2019 Walk-ins are welcome. Check-ins are from 9:00 am-10:00 am, no exams are started after 10:30. We require two signature ID's and one photo. If you are a licensed Amateur Radio operator bring your current license and a copy. If you are using a CSCE for exam credit, bring the original and a copy (We need to see the originals & keep a photocopy of each). No copier is on site. The test fee is $14.00. Bring a non-programmable calculator.

Location:
OSF St Anthony Medical Center
5666 E State St (Bus US20)
Rockford IL

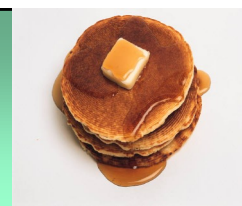Exams are held in the St Francis Room (Main Entrance then turn right).

FRIDAY MORNING BREAKFAST

Meets every Friday morning from 8 am until about 10:00 am.
An informal
gathering of ham folks, no affiliations necessary, good food
and good company.

Everyone is welcome to attend.

"The Spring Garden Family Restaurant"

2020 RARA Officers and Board

Officers:

President - Larry Schubert, AC9GO, 815-624-7772, larry.schubert@gmail.com

Vice President - Dan Hallstrom, 815-229-7526, hallstrom@gmx.com

Secretary - Jennifer Van Zieleghen, KD9FMJ, 815-222-4221, jenleek@usa.com

Treasurer - Gordon Seaman, KC9NEX, 815-262-0294, kc9nex@gmail.com

Repeater Chairman - open

Directors: Bill Callow, 815-298-1923, bill5002@comcast.net

James Curtis , 779-537-2233, jimhcurtis7818@yahoo.com

Jeffrey Metters, KD9MEC, 815-670-5506, jeffmetters@gmail.com

Mark Broman, 815-218-5514, markbromab@hotmail.com

Hamrag Editor - Jeffrey Metters, KD9MEC, 815-670-5506, jeffmetters@gmail.com

Webmaster - open

Repeater License Trustee - Robert Larson, KC9ICH, 815-540-0309, rlarson4@sbcglobal.net

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Local Events and Information

UPCOMING EVENTS

December 13, 2019- General RARA Meeting 7:00 pm at OSF

December 17, 2019 - RARA Board Meeting 7:00 pm at OSF

RARA Repeater Information

Both repeaters (146.610 and 147.000 (both have a pl 114.8)) will function with both digital and analog radio signals, but the repeaters require time to determine whether the signal is digital or analog. To operate the repeater properly you must first be sure the frequency is clear, then key and hold the microphone button down for **1-2 seconds**. Then begin speaking. If you fail to do this, the first part of your message will be lost.

Area Nets

Monday Night RARA Information Net - The purpose of the net is to disseminate RARA related information as well as other Amateur Radio related information. As a club sponsored activity, please check in with Jimmy, KC9GCR, (net control). **146.610 - offset (pl 114.8)** RARA repeater at 8:00 pm, every Monday, except on holidays.

Friday Night Fun Net - Every Friday night at 8:00 pm on the **146.610 - offset (pl 114.8)** RARA repeater with Jimmy,

What me President?
By Larry Schubert AC9GO

I must admit, I hadn't thought about being president (of RARA, not the USA)   In 27, almost 28 years on the Rockton Elementary School Board, I avoided the top office, but this was different. I didn't even think about the office until nobody stepped up to take the reigns. The exciting thing I found was that some of our newer hams stepped up to take some of the offices as well, and to me there is nothing like new blood to invigorate an older organization. Randy has told me that our by-laws require that officers have to have what basically is a year in before they take office. It's a little more complicated then that with so many months before the election, and then they take office at the beginning of the year. At any rate, you should know that I've asked him to ask the board to change that requirement, or at least eliminate it for this year, so that we can use this young blood to give the club an infusion. (OK, I'm watching a medical show while I write.)

Now, you might want to know what my plans are for next year. I have all kinds of ideas, but before I set anything in motion I want to find out what the club members want. That means I want to find out what you really want to get out of the club. What topics that you want at the meetings. Do you want Friday night meetings, or would another night be better. Do you want classes for the different license classes. Be thinking about anything that the cub can provide. Let me in on your dreams. I promise that I will do my best to make your wants a part of the club program.

Our current officers have done an outstanding job this past year, but between family matters and other personal things including some burnout, we need a club makeover this year, and you have the class clown here to guide you. That means I'm going to need some help.   I don't know what all we will accomplish this coming year, but I guarantee we will have some fun, cause that is what it is all about.

By the way, I finally got up a 20/40 meter dipole that had been sitting around forever, and though I didn't have a lot of time in the past couple of weeks, I picked up Portugal, Panama , a couple of west coast Canadians, and with he help of KE9N Kurt I also was able to talk to an Italian station. Thanks Kurt.   I also heard stations as far away as Japan. The bands are looking up!!!

Oh, by the way, If by some chance I scared the hell out of you and you want the job of President. Let me know. You can take the head and I'll help.

73 Larry AC9GO

Remember
by
Larry Schubert AC9GO

As I sit down to write this it is just a couple of days before Thanksgiving, which means Christmas can't be far behind. This is the time of year that I like to look back and think of the things that I'm thankful for, and among those things is our club. Yes RARA, the Rockford Amateur Radio Association, as well as the ARRL, and the fraternity of Ham radio. I've made some good friends through our hobby, and I've lost several over the years. Two of the guys that I got to know through RARA passed away just a short time ago

  Jim Hall was an amazing man. I got to know him walking out to the parking lot after the meetings. Jim had worked for the Voice Of America for several years. We had a presentation about the setup in the Cincinnati area one night and he told me after the meeting that the engineer on the video was a guy that he had trained. He told me about the antenna systems that they had. Among the antennas were a number of rombics as well as other directional arras.   I forget the number of foreign licenses that he held. He lived in several countries around the world while he worked for VOA , and because of the lack of agreements between countries at that time he said it was easier to pass the test in the different countries, then get permission to operate on his home call. I wish I could remember the number of licenses that he held, but I think it was close to 30, and it may have been more.

 I got to know John Goodman at the meetings. We would sit and chat before and after the meetings and in the breaks. John made a couple of magnetic loops, and was working on stealth antennas for his home. I bought a 1k amp from him and a 1.5k antenna tuner. He built his own solid state amp. It turned out that I had worked for his father at Barber Colman, and with his brother in law there as well.   I always enjoyed talking with John, and we worked one or two Field Days together. He was one of the first in the club to use a Magnetic Loop antenna, and he used a stepper motor to tune the capacitor. I remember him talking about putting it on his roof, and telling an inquisitive neighbor that it was an antenna for TV that he was trying out. The association that he lived in wasn't Ham friendly.

These are two of the guys that became silent keys this past year. I mention them because I got to know them, and I just heard this past month of their passing. I'm sure there are others that will be missed as well, and I wish I had known them as well so I could write about them as well. Jim and John I knew on a personal level. They were both friends and I will miss them.

73 de AC9GO Larry

Arduino Uno Keyer, by KD9MAP, Nov 19 2019

Here's a morse code keyer I wrote for the Arduino Uno. I suppose there are lots of these out there already, but I wanted to do one of my own. You can run the digital output to an Arduino relay break-out board like I do, or run it to the base of a transistor switch circuit. Currently I am using it to key a $3 Pixie QRP 40m CW transceiver. Even though I have a J-38 straight key, I choose to use a keyer because my "fist" is pretty bad.

This version is very rudimentary. The Arduino built-in Serial class has only a 64 character type-ahead buffer, so if you type much faster than the sending speed, you might lose some characters. I have a more advanced version that has a longer type-ahead buffer, support for common prosigns, and a Farnsworth-spacing option, but it's too long to post as an article. I'll be glad to send the advanced version to anybody who requests it, but meanwhile this simple version is easy for you to experiment with and adapt to fit your needs.

```
/* morse4.c, using ascii text into Arduino native serial input,
   sends morse code out of Arduino pin 10 digital output.  KD9MAP
191116. */

int pinOut = 10;
int quantum_ms = 80; /* lower --> faster */
int q_1 = quantum_ms;
int q_3 = quantum_ms * 3;
int q_7 = quantum_ms * 7;

const char *m /* 'a' is dot, 'b' is dash */
 = { "EaTbIaaAabNbaMbbSaaaUaabRabaDbaaKbabWabbGbbaObbbHaaaaVaaab"
     "FaabaLabaaBbaaaPabbaZbbaaXbaabCbabaYbabbJabbbQbbab"
     "0bbbbb1abbbb2aabbb3aaabb4aaaab5aaaaa6baaaa7bbaaa8bbbaa9bbbba"
     ",bbaabb.ababab?aabbaa;babab:bbbaaa/baaba-baaaab(babba)babbab"
     "!
bababb=baaab+ababa'abbbba\"abaaba@abbaba&abaaa$aaabaab_aabbab" };

void o(char c) /* debugging output to native serial monitor */
{
static int i = 0;
Serial.write(c);
i++;
if ( i > 75 )
   {
   Serial.write('\n');
   i = 0;
   }
}

void setup(void)
{
```

```
pinMode(10, OUTPUT);
digitalWrite(pinOut, LOW);
  // Open serial communications and wait for port to open:
  Serial.begin(115200);
  while (!Serial) {
    ; // wait for serial port to connect. Needed for Native USB only
  }
}

void send_then_delay(int level, int d) { digitalWrite(pinOut, level); de-
lay(d); }

void send_dot(void) { /* o('.'); */
                      send_then_delay(HIGH, q_1); send_then_delay(LOW,
q_1); }

void send_dash(void) { /* o('-'); */
                       send_then_delay(HIGH, q_3); send_then_delay(LOW,
q_1); }

void delay_intersymbol(void) { o(' '); delay(q_3); }

void delay_interword(void) { o(' '); o(' '); delay(q_7); }

void send_dot_dash_string( const char *p )
{


while ( 1 )
   {
   if ( *p == 'a' ) send_dot();
   else
     if ( *p == 'b' ) send_dash();
     else
       return;
   p++;
   }
}

char upchar(char c)
{
if ( isLowerCase(c) )
  return c - 32;
else
  return c;
}
```

```c
void send_symbol(char s)
{
const char *p = m;
char u;
if ( s == ' ' ) { delay_interword(); return; }
u = upchar(s);
while ( 1 )
   {
   if ( *p == '\0' ) { delay_intersymbol(); return; } /* didn't find u in
m; skip it */
   if ( *p == u ) { o(' '); o(s); o(' ');
                    send_dot_dash_string ( p+1 ); delay_intersymbol(); re-
turn; }
   p++;
   }
}

void send_string(const char *s) { while (*s++ != '\0' ) send_symbol(*s); }

void loop(void)
{
/*  send_string("KD9MAP THE QUICK BROWN FOX JUMPED OVER THE LAZY DOG
9876543210"); delay(5000);  */
if (Serial.available())
   send_symbol(Serial.read());
}
```

That's it!

73 DE KD9MAP

We have a new HamRag editor.   Jeffrey Metters, kd9mec
A new guy, with a lot to learn.   And Willing to help out.
If you need something in this publication, send it to Jeff.
jeffmetters@gmail.com or call him 815-670-5506

If you have an article for the Hamrag, please send to Jeff by the First
Thursday of the Month to be included in that months newsletter.

RARA Membership Form

If you would like to join the Rockford Amateur Radio Association, please fill out the form below and mail it (with the membership fee payment) to the address shown at the bottom of the form. If you would like to join at our next meeting (see cover for meeting details), fill out the form and bring the form with your payment to the meeting and see our treasurer. **Thank you for your support!**

RARA
ROCKFORD AMATEUR
RADIO ASSOCIATION

MEMBERSHIP APPLICATION
website: w9axd.org

Membership Type: ☐ New (New memberships after July 1st are 1/2 price)   ☐ Renewal
Annual Fees: ☐ $20 - Student (up to age 24)

☐ $35 - Adult (25-61 years old)   ☐ $25 - Senior (Starts the year you will turn 62)
Above rate includes the
RARA monthly newsletter, HamRag (website download)
HamRag via USPS: $12 extra

Name: _____

Call Sign: _____

Email Address: _____

Address: _____

Town: _____   State: _____ Zip: _____

Home Phone #: _____   Work #: _____

Cell #: _____   Ext: _____

Radio Interests: _____

_____

_____

_____

May we make your phone and e-mail available for other RARA members only?   ☐ Yes   ☐ No

Comments: _____

_____

RETURN THE COMPLETED FORM TO: All membership applications to become either a new member or to be
ROCKFORD AMATEUR RADIO ASSOCIATION   reinstated as a member of RARA must be approved by the RARA board.
P.O. BOX 8465
ROCKFORD, ILLINOIS 61126   Approved: _____   Membership Year _____/_____/_____ to _____/_____/_____

Form Updated: 01-2019