Program: Microcomputers in the Shack – Collin, KEØIYN

There was a time when computers took up whole rooms, when radios required thousands volts to operate, and your communications gear doubled as boat anchors.

That time is behind us. Now we have computers small enough to fit on your watch, all-mode all-band radios that fit into fanny packs, and digital communication modes that let us talk the world on only five watts of power. With that, has come cheaper and even newer innovations not just in the ham shack, but in the technological world in general.

These improvements include computers becoming ever smaller - some, even the

Continued on next page

Join us at the next SARA meeting, where Collin O’Connor, KEØIYN, will help to cut through the confusion and help explain the different kinds of new computers, and ways you can use them in ham radio. With things from small, cheap computers for digital modes, simple to put together projects like digipeaters and scanners, to do-it-yourself projects, there should be something for every ham in the family to learn about and enjoy.

Collin first became licensed in the spring of 2016, and has already become a licensed Extra. Working by day as a software and firmware programmer, he lives and breathes the modern technical world that exists today. The first introduction he had to a computer was Apple II’s and old DOS computers in the late 80’s and early 90’s as a young child, and his fascination with the technology has only grown since then. Collin has lately been investigating ways to integrate the equipment he spends so much time on every day into his newfound hobby of ham radio.

**NEW Time: SARA-Sponsored Monday Morning 75m Round-Robin Rag Chew**

It’s fall and time to alter the start time for our Monday morning gatherings! (Low frequency propagation is not affected as much by absorption as in the spring and summer.)

Each Monday:
:: 9:00 am Central Time
:: 3.856 MHz +/- QRM (Remember to use that "big knob" on your radio to tune around and find us!)

*This is a facilitated, informal gathering; it is not a net! (Yes, OXB Dave is gone for October but others will show up.)
*All are welcome to join us (SARA membership is not required).
Greetings from my shack, de Joe KCØOIO.

I was saddened to learn of the sudden passing of Linda Engstrom KEØIYG. Linda became active in SARA a little over a year ago when she earned her Technician License in May 2016 and then upgraded to General this past May. She quickly became a fixture at SARA functions. Often at the Thursday Eyeball QSO Parties and our monthly meetings as well as Field Day, Radios in the Park, Remembering the Edmund Fitzgerald, and Ice Station Special Events, Linda came to enjoy Amateur Radio and the friends she found in SARA. I’m pleased that SARA and Amateur Radio brought some much-needed light into Linda’s life in the short time she was with us. A Memorial Service for Linda is scheduled for Saturday Oct 14 10:30 am at Crossroads Church, 4100 Lexington Way, in Eagan.

The General License class is about halfway through the schedule and attendance remains steady. Four students have been attending the sessions regularly. Good luck to them and hats off to all the instructors as well as Bob WØGAF, SARA’s Training and Education Chair.

The Remembering the Edmund Fitzgerald Special Event weekend is coming together nicely. Most participants have already booked a room at the Mariner Motel in Silver Bay. I have reserved my tent campsite at the park. Here’s hoping for another nice WX (weather) weekend like we had last year.

The equipment trailer is being prepped for its shakedown trip to Split Rock next month. Thanks to Dave WØOXB and Jim KDØIPI, we’ve gotten shelving installed, work surface built, floors sealed, and some of the lighting installed. We are looking forward to utilizing the trailer for all of our events and activities in the future.

You can still get in on the SARA Builders Group project of building of the BITX40 40m 7-watt SSB transceiver. Several members already have their kit, and all are welcome. This will be a great project to work during these long fall and winter evenings ahead. The kit can be ordered from www.hfsigs.com for $59 shipped via regular post, which averages about 10 days to 2 weeks to arrive; or $69 via DHL air service. We’re planning a show-n-tell program for April 2018. A number of hacks are well documented at
various outlets on the internet that allow you increase and tailor the functionality of the radio to your needs. This will be a challenging and interesting group project as we progress.

The Saturday, Oct. 14 meeting will feature Collin O’Connor KEØIYN enlightening us on Micro and Single-board Computers (Arduino, Teensy, Raspberry Pi, BeagleBone…) for Ham Radio. Don’t forget the pre-meeting Breakfast will be at Perkins Restaurant 2050 W Frontage Rd (Hwy 36 & Washington) in Stillwater at 7:30 am. I have a family wedding that day, so I will be there this month, but the rest of the breakfast gang hopes to see you there!

73 es CUL,
de Joe (KCØOIO)

VE Session - November 9

To coincide with the conclusion of the current General license classes that SARA is offering, we will have a VE session at Boutwells Landing on Thursday, Nov. 9.

We anticipate being set up to begin accepting examinee check-ins by 5:30 pm, with exams scheduled to begin at 6 pm.

As of October 2, I already had a list 9 VEs to work this exam session, so we are well covered. Certainly a long way from when we began our VE program with only 3 Extra class members in SARA. At that time we crossed our fingers and prayed that no one got sick on exam day! KCØOIO, KØGW, N9JNQ, NØUHR, WØOXB, N5JLZ, KEØGOM, NØDXH and myself are on the list for this session.

73,
Shel NØDRX
Greetings all!

Welcome to “ON THE WATERFALL.”

FT8 ... if you haven’t heard of it, where have you been? You’ve been missing hearing about one of the hottest digital modes to hit the airwaves, ever! It’s been called the “latest bright shiny object in the Amateur Radio digital world.” It’s still in beta testing!

FT8 (Franke-Taylor design, 8FSK modulation) is a new fast mode comparable to JT-65, but 4 times faster. Developed by Steven Franke, K9AN and Joe Taylor, K1JT, FT-8 is one of the modes available in the WSJT-X program from Joe Taylor. Its big advantage and biggest attraction is the shorter transmit-receive cycle, meaning quicker contacts. FT8 offers “sensitivity down to –20 dB on the AWGN channel.” An entire FT8 contact can take place in about 1 minute.

Tones are spaced at 6.25 Hz, and an FT8 signal occupies just 50 Hz. Unlike JT65 or JT9, transmit and receive cycles in FT8 each last about 15 seconds. Like JT65, FT8 requires accurate time synchronization. An auto-sequencing feature offers the option to respond automatically to the first decoded reply to your CQ.

The current release candidate version, as of this writing, wsjtx-1.8.0-rc2. The program is available in formats for Windows, Mac, and several flavors of Linux. The source code is also available. It can be found at the WSJT website at https://physics.princeton.edu/pulsar/k1jt/wsjtx.html. Scroll down the page to find the link to download Version 1.8.0-rc2.

I have tried FT8 a couple of times now. It really is an exciting mode to experience, and it adds some challenge in that you have to be quick on the mouse to answer a CQ. I’ve found that it may take two attempts to make the connection with someone calling CQ as I am just not quick enough to click on the call. Once in a QSO, the auto-sequence feature, when enabled, takes over the response cycles for you, right up until you log the QSO. Calling CQ is even easier, as you can enable the “1st call” feature and the software automatically answers the first reply sequence decoded. In the two times to date that I have run FT8, I very quickly logged 10 or more contacts in about 15 minutes time.

Give FT8 a try and you'll find that the bands aren't as dead as you thought they were.
SARA HF DIGI NET - is Back

The Digi Net is set to return on Sunday, Oct 15 at 7:00 pm Central. The net usually runs in about 30-45 minutes and wraps up in time for the gang to move to 160m for the SARA 160m Round Robin Rag Chew. Join us for this enjoyable digital modes net on 3.584.15, centered between 500-1000 Hz up on the waterfall. I usually send a reminder out via e-mail sometime Sunday that includes the mode and frequency for that evening’s session. The SARA HF Digital Net will meet every Sunday at 7:00 pm Central, unless otherwise noted, into April.

There will NOT be a Digi Net on Sunday, Nov. 5 since many of us will have just returned from Split Rock at about the scheduled start time.

Until next time, 73 and I hope to see you on the waterfall! de KC0OIO.

SARA Needs YOU!
Get involved ...
Make a difference ...
Have fun!
www.radioham.org
SARA Equipment Trailer Build-out

Last fall, SARA acquired a single axle 6’ x 12’ x 6’6” interior height V-Nose, 3 door trailer for storage and transport of our equipment and supplies. The trailer has a 2990 lb. load rating. There are dual swing out rear doors and the 3rd door is located on the curbside of the trailer. Our intention is to have nearly everything in one location, rather than scattered about at various members’ QTHs (homes), along with providing space for operating. Planning progressed slowly over the summer and work on the build-out of the trailer began in earnest in September.

Jim KDØIPI, Dave WØOXB, and Joe KCØOIO worked Sept 15 and 16 to install all the commercial-grade shelving and build a work surface/desktop and additional storage shelf in the nose of the trailer. 8 feet of 24-inch deep x 72” tall wire rack shelving was installed on road-side of the trailer. 6 feet of 18-inch deep x 72” tall board shelving has also been installed on the curbside of the trailer. The shelving is made by Edsal and has load capacity well beyond what the trailer can carry. 2x4s were lag-bolted to the trailer metal studs and the shelving was then lag-bolted to the 2x4s. The 1½” gap created by the 2x4s allows for some vertical storage for tables, signs, and other thin items.

The work surface/desk area is constructed of ¾” plywood on a 1x4 and 2x4 frame, and is topped with a ½” MDF surface. The front of the desk is faced with a pine board. The desk surface has been sealed with several coats of polyurethane. The floor has received a couple of heavy coats of polyurethane. The work surface is illuminated by a 12-volt RGB multicolor LED ribbon light that will allow setting of lighting color and brightness for day or night operations and operator preferences. The interior is brightly
lit with a set of 20 12-volt LED lights (they’re quite bright) and we’ll be adding some red lights on the ceiling for nighttime operation. 12-volt LED work lighting will be added above the side and rear doors to provide illumination for loading and unloading at night.

A 120-volt shore power receptacle has been added in the nose of the trailer to facilitate “mains power” to provide energy for a power supply for operating and charging batteries, as well powering any 120-volt devices like monitors or coffee pot. A Power-Pole Rigrunner 4008 is installed for power distribution for radios. An additional fuse panel and switch has been added for additional 12-volt circuits for interior and exterior lighting.

We will be taking the trailer to Split Rock and look forward to getting it set up as an operating station for one of our stations up there. For those who can’t make to Split
Rock this year, we’ll try to have it at the November meeting for viewing by the members.

Left: Joe’s garage is the pre-assembly area. Dave says, “It’s important to stay hydrated.”

Right: Initial interior prep.

Above: The desk takes shape at the front of the trailer.
SARA’s big, annual special event is coming soon!

About 20 from the club will be operating as WØJH Special Event Station. This is the thirteenth consecutive year for our popular, transnational event. And, it marks 42 years since the fateful night of the infamous iron-ore carrier the Edmund Fitzgerald.

**Come to learn and to have fun!**

Besides a phone station at the trail center, we’ll be operating from the parking lot and have a portable station at the adjacent campground. Many operating opportunities, learning experiences and quality, after-hours networking sessions are guaranteed for all who attend.

**If you’re interested in attending for all or part of this event, don’t wait; contact Dave (WØOXB).**
SARA History – Elections & Club Officers

As we continue to recognize our SARA 25th Anniversary and looking forward to election of officers to lead the club into our 26th year, I am looking back at history of our elections and officers. I have been able to extract office holders for most of the years in office in the accompanying list from old newsletter data, but make no claim for 100% accuracy and would welcome seeing any documentation with corrections. For this article I am listing only the 4 primary elected offices of President, Vice-President, Secretary and Treasurer, but not the Trustee or Director positions.

<table>
<thead>
<tr>
<th>Year</th>
<th>President</th>
<th>Vice President</th>
<th>Secretary</th>
<th>Treasurer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Joe KCØOIO</td>
<td>Keith AGØH</td>
<td>Steve KAØOBI</td>
<td>John N5JLZ</td>
</tr>
<tr>
<td>2016</td>
<td>Joe KCØOIO</td>
<td>Keith AGØH</td>
<td>Steve KAØOBI</td>
<td>John N5JLZ</td>
</tr>
<tr>
<td>2015</td>
<td>Joe KCØOIO</td>
<td>Keith AGØH</td>
<td>Steve KAØOBI</td>
<td>John N5JLZ</td>
</tr>
<tr>
<td>2014</td>
<td>Peter NOGRM</td>
<td>Joe KCØOIO</td>
<td>Dan ADØDV/KAØOBI</td>
<td>John N5JLZ</td>
</tr>
<tr>
<td>2013</td>
<td>Peter NOGRM</td>
<td>Joe KCØOIO</td>
<td>Jim WØELC</td>
<td>Shel NØDRX</td>
</tr>
<tr>
<td>2012</td>
<td>Keith AGØH</td>
<td>Joe KCØOIO</td>
<td>Stan AEØSL</td>
<td>Shel NØDRX</td>
</tr>
<tr>
<td>2011</td>
<td>Keith AGØH</td>
<td>Joe KCØOIO</td>
<td>Stan AEØSL</td>
<td>Shel NØDRX</td>
</tr>
<tr>
<td>2010 George KCØWOA</td>
<td>Greg KØOEAP r:12/17/10 Gary WBØMOA r:11/18/10</td>
<td>KCØNMX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009 Rich KØBR</td>
<td>Denis KDOEJJ</td>
<td>George KCØWOA</td>
<td>Chuckie KCØNMX</td>
<td></td>
</tr>
<tr>
<td>2008 Rich KØBR</td>
<td>Mike NOODK</td>
<td>Jill KÇOUPC</td>
<td>Chuckie KCØNMX</td>
<td></td>
</tr>
<tr>
<td>2007 Dave WØOXB</td>
<td>Greg KØGW</td>
<td>John W3FAF</td>
<td>John W9LHG</td>
<td></td>
</tr>
<tr>
<td>2006 Dave WØOXB</td>
<td>Greg KØGW</td>
<td>John W3FAF</td>
<td>John W9LHG</td>
<td></td>
</tr>
<tr>
<td>2005 Dave WØOXB</td>
<td>Greg KØGW</td>
<td>Tom (TT) WØMOT</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>2004 Dave WØOXB</td>
<td>Greg KØGW</td>
<td>Tom (TT) WØMOT</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>2003 Dave WØOXB</td>
<td>Greg KØGW</td>
<td>Tom (TT) WØMOT</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>2002 Dave WØOXB</td>
<td>Greg KØGW</td>
<td>Tom (TT) WØMOT</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>2001 Dave WØOXB</td>
<td>Greg KØGW</td>
<td>Tom (TT) WØMOT</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>2000 Dave WØOXB</td>
<td>Dave KBØSED</td>
<td>John KBØWRM</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>1999 Dave WØOXB</td>
<td>Dave KBØSED</td>
<td>John KBØWRM</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>1998 Art KAOZH/ WØOXB</td>
<td>WØOXB/KBØSED</td>
<td>KBØWRM</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>1997 Ed WØDIR/Art KAOZHZ</td>
<td>Art KAOZH/ WØOXB</td>
<td>Joe W3QLC</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>1996 Jack KBØLSA/Ed WØDIR</td>
<td>Ed WØDIR</td>
<td>W3QLC</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>1995 WAØKKE/Jack KBØLSA</td>
<td>Shel NØDRX/Ed WØDIR</td>
<td>Dan NØEDC/Joe</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>1994 Mike WAØKKE</td>
<td>NØDRX</td>
<td>NØHQB/Dan NØEDC</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>1993 WAØKKE</td>
<td>Mike WAØKKE/Paul</td>
<td>Claudine NØHQB</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
<tr>
<td>1992 Jim WØTP</td>
<td>NØRIK</td>
<td>Claudine NØHQB</td>
<td>Joe W0TBC</td>
<td></td>
</tr>
</tbody>
</table>

Above: Officer History 1992-2017

I have been unable to find a listing of VP for 1992 and is possible that there was none. If there was, it would likely have been either WAØKKE or NØRIK. Initially election of officers was usually in May, as when SARA began there was no official structure to guide the election process and the club did not suspend monthly meetings during the summer as has become our custom. Elections were moved to June in 1997 and even-
ually to January in 2000 or 2001. You will see several instances where two people are listed for the same office for some of the early years. Obviously they did not hold that office simultaneously, but the 1st person listed held that office prior to the mid-year election and the 2nd person listed held the office until the next election.

In our 25yrs, we have had 3 elected officers resign prior to expiration of their terms and 2 of those positions were temporarily filled by the 2nd person listed for that office. The VP office that was open due to resignation in December 2010 remained vacant until the normal election in January.

73,
Shel NØDRX
SARA Trustee
Part 5: Radio Clubs

It seems like the most natural thing in the world to seek out others who share the same interests that you do. That’s what clubs are all about – coming together to share ideas and promote a common purpose. Although it’s hard to remember a time when ham radio wasn’t part of my life, there were a couple of other interests that motivated pre-adult me enough to join a couple of them. One was a rock hound club – collecting and curating rocks and minerals. Another was photography, and I joined camera club in junior high. Amateur Radio was just on the horizon, but not until I was almost ready to graduate from high school did I really start to think about getting a license. I’d been short-wave listening for some time by then, but never knew about any local clubs. It was sometime in 1966 that I started looking into ham radio, and one of my high school friends, Steve, mentioned that his dad was a ham and could tell me more about it. A visit to the KØKLY ham shack changed my life. Doc Zwisler showed me his Collins station and we even made some on the air contacts. He told me about the Mankato Area Radio Club, and pointed me toward ARRL study materials. It was a busy year with graduation, but I did start my studies and eventually Doc gave me the Novice exam, 5 WPM Morse code sending and receiving, and a written exam. I was issued WNØTDA in 1967, and that’s when being part of the Mankato club turned out to be a really good idea. I met a fellow Novice club member, Karl, WN0TFC, and we decided to make schedules on the air to practice our code and get up to that magic 13 WPM that we needed for General.

The thing about radio clubs is that you meet people. These are people who know things – things that you don’t necessarily know yourself. Individual members have their own areas of expertise, and almost invariably are passionate about sharing those aspects of radio and operating with others. Sure, the club has formal programs, and these are also good learning opportunities, but there is nothing quite like sharing a project like building a receiver or designing and building an antenna with your friends.

The MARC, like other clubs, participated in ARRL Field Day. To this day, I recall the heat, noise, antenna-raisings, locations, and operating fun.

When I settled into my routine at Mankato State College (Minnesota State University
Mankato), I also joined the College Radio Club so I could use the HF station, WØCIV. I met some lifelong friends there, and had a chance to learn about antenna installations and station management. I even served a term as president of the club. I remember an old Johnson transmitter that wouldn’t work. When the rest of us gave up and shoved it into the corner, only John, KØYQX, had the patience to do some really deep troubleshooting. The problem? A wire in the wiring harness had parted inside the insulation layer, making the break invisible. I found that I learned quite a bit from my fellow club members like John. It takes patience to troubleshoot!

After college I moved to Nassau and applied for a license there. I was issued VP7DT, and the ticket was issued on the basis of my USA license. I had dinner with a nice fellow named Allen and his family. He was the guy who was the Bahamas equivalent of our FCC chief. This was quite a bit less formal than dealing with the FCC! I also found that there was a Bahamas Radio Club and joined it. What this club offered was an opportunity to meet some really diverse folks, and in doing so I learned more about myself and my place in the world. Later, when the Bahamas gained independence from Great Britain, I was issued C6ATD. For a short while, I lived in a British colony!

One of the volunteer activities I did in the Bahamas was to fly for BASRA, the Bahamas Air-Sea Rescue. This was taken at Oakes Field in Nassau. One year we had a hurricane and that was the end of my quad antenna!, but I still stayed on the air with wire antennas.

Back in Minnesota a few years later, I rejoined the Mankato club, co-founded Butternut Electronics with Don, WØDN, and finished a second degree in Law Enforcement and an MA in geography - an interest I gained through ham radio!

Continued on next page
Before completing my police skills training, I joined the Marshall Club in Lyon County, where I worked for the Marshall PD. The Marshall ARC was a small, friendly group that provided fellowship.

Then I got even busier. Dad got sick, so I moved back to Mankato to help him, and briefly to Minneapolis to complete my law enforcement skills training and pick up an FCC First Phone ticket. With that out of the way and dad in better shape, I moved to SE Minnesota to take a job in Houston County. The nearest radio club was in La-Crosse, WI. It’s called the Riverland ARC and operates the wide-area 146.97 repeater system. What this club offered was a great wide-area repeater, and an opportunity to meet others who were interested in electronics as well as regular meetings and events. If you are new to an area (as I was) and want to know what’s going on in ham radio, you really need to join an active club. I particularly liked the 146.97 repeater because of its ability to penetrate the hilly terrain of that part of Minnesota, Wisconsin, and Iowa. If you are going to use a club’s assets, you should be a member!

SKYWARN isn’t really a club, but it was in Houston County that I trained to the instructor level. SKYWARN participation made sense back then, since I was often in the squad car while on duty and was in a good position to observe weather conditions. In my second job as a broadcast engineer, I was often traveling between translator stations and the main station. The 146.97 repeater was my go-to place to report on WX conditions while on the road.

In 1987 I made a break and moved to Texas to help my old friend and business associate Don Newcomb, WØDN (SK) at Butternut Electronics. During my year in Texas I could have joined the Austin ARC. This was (because of logistics), the one I didn’t join. Anyway, it was a short-term commitment, and on moving back to Minnesota, XYL Susie took a job in Stillwater, and I joined the nearby St. Paul ARC. At that time it met in a relatively spacious church basement, and I remember it especially for the high quality level of the club programs and the fairly large membership.

When I got wind of the new and more convenient Stillwater Amateur Radio Association, I changed clubs and that was that. Lucky Duck me - I ended up in the best club of them all – the one with a robust membership, great programs selected to provide information on a broad variety of topics, a dedication to special events and other on the air activities, a solid mentoring program, and a collegial atmosphere. SARA suited me well as I started my career with Courage Center’s Handiham Program, and continues to impress me with what it has to offer now that I’m retired.

I also have to mention the Handiham Radio Club, which has occasional virtual meetings and runs a daily Echolink net. There are no dues and it’s mainly a social club, but it’s still a nice way to stay connected.

All of these clubs have had something to give, and I have been happy to be able to give back to each of them in some way.
I’ve never had a problem finding a local club, and if there is one single piece of advice I’d offer to our new hams, it would be to join a local radio club. You will make friends and become part of a community, which will contribute to your well-being and overall health. If you take advantage of learning new things at your club’s programs and training sessions, you will stay sharp. And if you can help others to advance in ham radio, whether it is helping them to upgrade a license or to get on the air, you will not only feel great about helping others, but you will actually learn new things.

Membership is a two-way street. You’ll enjoy the benefits of club membership if you participate regularly. You don’t have to go to every event or meeting, but you do have to do something to the best of your ability. It may be participating as a volunteer examiner at your club’s test sessions, or teaching one of the licensing classes. You could run for a club office, or help to organize an event. If getting out of the house is hard, you could volunteer to run a net. Clubs are always looking for programs – if you can prepare and present one, your help will be much appreciated. If your club has a member assistance program, perhaps you can help as part of a crew. Public service is a core mission for many clubs. If you can train and participate, you can help your club and your community. And your club’s newsletter editor or webmaster is always happy to get new articles. You don’t have to do all of these things, but I know you can do a few of them.

Next time: Ham radio challenges. 73 – Pat wa0tda@arrl.net

Radio clubs in California sure helped us out over the years, including the Palo Alto ARC and CARA (rhymes with SARA) Catalina Amateur Radio Association. The Greater Los Angeles VEC held many VE sessions in Malibu for us when we had camp in Ventura County.

In Minnesota, many VE sessions at Courage North were staffed by the Paul Bunyan ARC.

Our club, SARA, sent volunteers to camps and held the VE sessions at Camp Courage. Now SARA maintains the Handiham HF remote base stations WØZSW and WØEQO.
HF remote base stations WØEQO, located at Wilderness Scout Camp near Park Rapids, and WØZSW, located at the WAØTDA QTH in Woodbury, are both online and ready for use by users.

The TS-480SAT is still in place at WØEQO after almost nine years of continuous service, much of which was in the unheated attic above the Courage North dining hall. Unfortunately the TS-480 HX at WØZSW did not last as long and has been replaced (upgraded?) to an Icom IC-7200, which was donated through the Handiham Equipment Program. This is working out well and allows users to use the “Tune” button on both the RCForb Android app and the Windows software.

Now that we are leaving the thunderstorm season behind us, both stations are usually available 24/7. Host computer updates are generally made during low usage times. We keep everything updated to protect our host networks at the Scout Camp and WAØTDA from security vulnerabilities.

You can use a Windows computer with free RCForb software from Remotehams.com to access the remotes. You need to request TX privileges by clicking on TX in the RCForb software. (You can also email me at wa0tda@arrl.net.) I can also give you access to my own IC-7200 if you have at least a General license.

For video tutorials on how to use the RCForb software, check out my web page at http://tice.us/wa0tda. You will find a video on the Windows software and a new HD video on the RCForb Android app for your smartphone.
ARES Nets:

A. ARES Nets: Oct. 10th; 7 PM, 146.985; No PL Tone
   Oct 15th: 146.985, No PL Tone at 7 PM
B. SEMARC ARES Check-ins: Oct.4,11,18,25; 8 PM; 146.985
C. ARES Nets: Nov 5; 7 PM, 146,985; No PL Tone (Daylight Savings Ends)
   Nov 15th: 146.985, No PL Tone at 7 PM
D. SEMARC ARES Check-ins: Nov1,8,15,22, 29; 8 PM; 146,985
E. ARES Nets: Dec. 3rd ; 7 PM, 146,985; No PL Tone
   Dec. 15th: NO NET
F. SEMARC ARES Check-ins: Dec.6,13,20,27; 8 PM; 146.985
G. ARES Nets: Jan 15 only, 7 PM, 146.985

Please post this by your radio and/or kitchen table and try to check in once or twice per month and enjoy the topic. John (KAØHYR) has the schedule for NCS and topics laid out for the year; he has left several open for “any available NCS”, so contact John (jeregan@mnmicro.net ) and get some practice as a Net Control Station. This is the most valuable ham position at a real disaster activation, so get your skills up now while practice time is available; The script for the NCS is also available. You will be surprised at how quickly your skills rise to the top or are renewed and it becomes second nature.

HF Nets in MN (some ARES, some Section nets, some club nets):
H. SARA FL Digi Net: 7 PM Sunday; 3.581.15 MHz
I. ARRL MN Phone Net; 12 noon, 5:30 PM Daily; 3.860 MHz
J. ARRL MN Section (CW) Net; 6:30 PM, 9:50 PM Daily; 3.568 MHz
K. MN ARES FL digi Net: Thursday, 8 PM, 3.583,5 MHz USB, Olivia 8-500

HF Nets with Neighboring States:
L. North Dakota: 6:30 PM Daily; 3.937 MHz
M. South Dakota: 6 PM Daily; 3.870 MHz
N. Wisconsin: 5:30 PM Daily, 3.985 MHz
O. Iowa: 12:30 PM, 5:30 PM Daily, 3.970 MHz
P. Michigan Digital Traffic Net (MIDTN), Thur. 7 PM, 3,583.50 KHz, USB, uses Olivia 8-500.

VHF Digital Nets:
Q. SEMARC FL Digi Net: Every Wed. Sept.-May; Voice check In 146.985;
   digital check-in 144.950
R. Scott County ARES Net, Monday, 7 PM; 147.165R; also 146.535 S.
Membership

Even though SARA monthly meetings have as usual, been suspended from June-August, the club has been very active during this period. We have gained several new members over the summer months and I attribute that to a large degree to the activity and visibility of the club during the summer. Radios in the Park events have been an excellent activity for member participation as well as an attraction for non-members. Several of our newest members have Tech licenses and are potential candidates for our upcoming General classes this fall.

While we will not be beating the drum for 2018 renewals for a couple of months, keep in mind that memberships are on a calendar year basis and end on December 31. Paying 2018 dues after the beginning of the new year, will not extend membership beyond December 31, so nothing is gained by being late. As of 8/24/2017, we have 94 members and thanks to all for your continued support.

For privacy reasons, only current club officers have access to the complete roster. However I am including a list of current members, sorted by call signs and year through which dues are paid. If you are on this list showing 2018 or beyond, we thank you for keeping ahead of the game and no need to pay dues until late next year. If you have a 2017 date, you are paid until the end of this year.

Please send any changes in license status, address, or phone numbers directly to me, so we can maintain current info on the roster.

73,
Shel NØDRX
SARA Trustee
Trustee@radioham.org

SARA Needs YOU!
Get involved ...
Make a difference ...
Have fun!
ww.radioham.org
Upcoming Meetings & Events

- October 14: Monthly meeting, Boutwells Landing, Oak Park Heights North (Gables) entrance, downstairs (or elevator to meeting rooms on the left at bottom of stairs)
- Nov. 3-5: Split Rock Lighthouse Special Event; Split Rock, MN
- Nov. 9: VE Testing; Boutwells Landing, Oak Park Heights
- Nov. 11: Monthly meeting; Boutwells Landing, Oak Park Heights
- Dec. 9: Monthly meeting; Boutwells Landing, Oak Park Heights
- Jan. 13: Monthly meeting; Boutwells Landing, Oak Park Heights
- Feb. 10: Monthly meeting; Boutwells Landing, Oak Park Heights
- Mar. 10: Monthly meeting; Boutwells Landing, Oak Park Heights