



A New (well, new to us) Tower for Starved Rock Radio Club

The Starved Rock Radio Club (SRRRC) meets on the first Monday of every month, unless otherwise scheduled, at 7:00 p. m. at the SRRRC clubhouse in Leonore, Illinois. Club nets are held on the SRRRC repeater (W9MKS) every Wednesday evening at 7:00 p.m. The W9MKS repeater is located at the SRRRC clubhouse in Leonore, Illinois, and it operates on a frequency of 147.120 MHz (+103.5 PL). The Starved Rock Radio Club was organized in September of 1933, and has remained an ARRL affiliated club since 1934.

The mission of the Starved Rock Radio Club has continually been to give faithful, co-operative service and assistance for the betterment of amateur radio, in the promotion of interest in amateur radio communications, for the advancement of the radio art, for the use of amateur radio for public service and welfare, and for the maintenance of fraternalism and the promotion of good fellowship along with a high standard of conduct. Visit us on the web at www.qsl.net/w9mks

“Congratulations, Starved Rock Radio Club members, you now own a 100' tower”, KB9UPS wrote in an e-mail to the SRRRC reflector on June 10th. The Otter Creek Township Board has voted to donate their tower to the club. This tower is nominally 100 feet tall, and each section is approximately 20 feet in length. There is one catch: because of liability issues, it will be necessary for the club to hire someone who is bonded to lower the tower to ground level. It is believed that this can be done in one section by using a crane. Jesse Risley is in negotiation with a local firm to get this done at the least possible expense to the club. Once on the ground, club members can separate the sections. Transport to the

clubhouse should be possible with a pickup truck and/or trailer. It appears that the tower may be set in gravel rather than concrete, and we may want to do some digging once the crane is hooked up so that a majority of the base can be salvaged.

All of this will require that we have a work party available at the time the tower is taken down. Because obtaining the best rate on the crane will probably entail working around the company's schedule, not

our own, we may get fairly short notice of the date the work party will be needed. Having a large contingent of club members on hand when the time comes will help to reduce equipment time, and therefore, expense to the club. Stay tuned to the reflector for updates.



Tower at Otter Creek Twp Garage

Putting the tower up at the clubhouse? Well, that's another story.

Officers

President:	
Jesse L. Risley	KB9TMA
Vice President:	
Rich Grimshaw	N9OUW
Secretary:	
Frank Carraro	KF9NZ
Treasurer:	
Francis Kmetz	WB9VLW
Directors:	
Steve Michalski	KB9UPS
Mark Gebhardt	K9ZQ
Kurt Clausen	KB9RKU
Static Editor:	
Dirk Wolgast	W9QA

New 60-Meter Band to Become Available July 3! Reprinted with permission from the ARRL Web

NEWINGTON, CT, Jun 3, 2003--The new five-channel 60-meter amateur allocation becomes available to US Amateur Radio operators at midnight (12:00 AM) local time on July 3. The FCC Report and Order (R&O) granting the allocation was published in the Federal Register, which announced

the effective date today. The local time designation means that amateurs in the US territory of Guam likely will be the first to get a crack at the new band.

The new band will be a secondary allocation--federal government users are primary--and the first on which

the only permitted mode will be upper-sideband (USB) phone (emission type 2K8J3E). The FCC last month announced it would grant hams access five discrete 2.8-kHz-wide channels in the vicinity of 5 MHz instead of the 150 kHz-wide band ARRL had requested--



The Editor's Shack

Did you folks miss something last month? I thought about printing a blank newsletter to make a point, but that would be a waste of a good tree. I didn't receive any submissions for Static until the last week of May. During that week we had a couple of severe weather outbreaks and I had some longer than usual work hours, which left me no time to get a newsletter together. Sorry about that.

We should be OK this month, with a couple of club events to chronicle, and some news items. I have received permission to reprint items from several sources, and SGC (transceivers, antenna tuners) indicates that they will be coming out with a newsletter for newsletter editors, which will include articles for reprint on various topics. It still would be nice to get some local material to print, as long as it won't get me sued for libel. While I can obtain filler material, I need to wait for club submissions to come in before I can determine what and how much I need to fill. It doesn't make much sense to create an

entire newsletter edition with articles reprinted from other sources. KF9NZ and KB9TMA have been regular contributors, and I have a promise from KA9HRO for an article in the next month or so. How about something, anything, from the rest of you?

<whine mode off>

BPL – no, it doesn't stand for Brass Pounder's League in this case. This BPL is short for Broadband over Power Line, an emerging technology that FCC commissioners are very interested in fostering, as it helps them with one of their mandates, that being bringing high speed Internet access to the masses. BPL, or carrier-current communications has been around for many years, and is currently authorized under Part 15 rules. For a detailed technical description of this service, I refer you to the ARRL web, which has several excellent articles and links on the subject. This technology presents the very real possibility of severe interference with amateur HF communications.

Briefly, data is permitted to be transmitted over commercial power lines, on amateur frequency allocations in a similar manner as cable TV uses amateur frequencies to broadcast programs. The difference is that in most cases, cable TV is a closed system, and poses little interference risk to the amateur service. Remember all those pictures of antique transmitting stations and their long wire antennas strung on wooden support poles? Kind of reminds you of electric poles and lines. Therein lies the rub. Electric transmission lines are not closed systems, and radiate signals very well.

The FCC has published a Notice of Inquiry, to determine how to best accommodate BPL. Please read up on this technology, and the harm it poses to amateur communication. Then file your comments. You can access the FCC's electronic comment filing system at: <http://www.fcc.gov/cgb/ecfs/>.

73, W9QA

From the President's Desk

Jesse L. Risley, SRRS President

I would like to extend my greetings once again to everyone who is reading our newsletter. It has been several months since I have taken the opportunity to write a column regarding my perspective on club happenings. I have several important announcements to make regarding business matters for the club. The summer is moving very fast as we approach the month of July. It appears to be an exciting summer for the Starved Rock Radio Club.

The most important reminder I have for each of you is that the ARRL sanctioned Field Day exercises will be held this coming weekend, June 28th-29th.



Jesse L. Risley W9DON photo
a great time. Don't forget to bring a

Our club will be setting up operations Saturday morning at Chief Shabbona Park near Harding. I hope to see everyone there operating a station or two and having

dish to pass for our Saturday evening cookout! In other matters, the deal is nearly sealed regarding the acquisition of a 100 foot steel tower from the Otter Creek Township offices in Streator. We have obtained the necessary paperwork and are awaiting a final estimate from a local contractor so that we may bring the matter before the general membership at the July business meeting. We look forward to having a better tower for the club's use. This was truly a blessing for our club.

There will continue to be numerous operating activities throughout the

May Meeting Notes

Frank Carraro, KF9NZ - SRRS Secretary

KB9TMA presided, and started off by telling us about a recent visit to KB9UIU. He is not in good health, and visitors are appreciated. We also NEED an Activities Chairperson!!!

We agreed to buy a lawnmower and do it ourselves! After all, we have paid out enough in the last two or three years to buy a good one!!

Food for Field Day was discussed, but we will have a meeting between the hamfest and FD, so we can finish that business later.

Everything is all set for the hamfest. This years fest – not next years. We need help on Saturday getting set up folks. We really need a hamfest Chairperson for next year - and we need him/her NOW. Come on gang!

We discussed the recent storm operations. We did pretty well.

The matter of the reverse autopatch came up. It was voted NOT to delete the feature.

DONT FORGET - We postponed the

meeting to June 9th - the SECOND Monday since everybody will have had enough ham radio on Sunday.

We are still looking at the 100' tower in Streator. Jesse has talked to a Construction Co. who has cranes, and we MAY make it yet. Stay tuned (to W9MKS)

KB9UPS told us that St. Mary's Hospital in Streator seems to be serious about setting up ham communications. We will need volunteers to train with the hospital staff and be available when needed.

June Meeting Notes

Frank Carraro, KF9NZ - SRRS Secretary

27 members and four guests attended. There was lots of talk about Field Day - and I'm sure you will find info elsewhere in this issue. The Club will provide hamburgers and hot dogs, buns and condiments, and more lemonade and iced tea. What more could anyone want?? Well, if you think of anything, bring some for all to share!

We have not yet acquired a lawnmower as voted last month, but maybe we'll have one by the end of this month. The proposal to establish a "lifetime" mem-

bership was discussed - somewhere in the \$200-\$300 range it looks like.

We talked about recent weather nets and related problems. It looks like an independent organization may be organized. An organizational meeting will probably be scheduled.

The hamfest figures are not final, but the preliminary figures look good. We did have an increase in attendance - a reversal of the recent trend.

The repeater maintenance report talked about the relay which is causing the drop-outs and some other problems. I hope to have it replaced soon. The Otter Creek Twp tower deal is still looking good. If we can get the crane contractor to give us a firm bid, we will probably have a vote on this at next month's meeting.

We will appoint the new hamfest Chair next meeting, and set the date for the Board of Director's meeting to create the budget.

Repeater Status Report

By Frank Carraro KF9NZ



THE REPEATER IS NOW TRANSMITTING PL TONE AGAIN

We are required by the terms of our repeater coordination to transmit a 103.5 Hz PL tone. This is to enable the users of the K8IE repeater to use an "anti-pl" if they so desire. A few weeks ago, for some reason the PL tone disappeared. Last Saturday I re-

paired it, and we are again legal. We do not currently make use of the capability to remotely change the PL tone. At one time, we did use the feature to shift tones for emergency use, such as weather watches, warnings, or long one zero accesses. (What's that you say? You don't know what long tone zero access is? Ahem, ahem. Read the ARRL recommended practices on

LITZ) At any event, we do have the feature available, and we may decide to bend the IRA rule a bit in emergency cases. The alternate tone is 114.8 Hz. Sooo, you can set up your rigs for 103.5 tone squelch, and not hear the competing repeaters if you so desire. Again.

DE KF9NZ

New Band continued from page 1

and which the FCC initially proposed more than a year ago. The ARRL remains optimistic that Amateur Radio eventually may be able to enjoy a band segment with multiple mode privileges at 60 meters, but ARRL CEO David Sumner, K1ZZ, has said that in the meantime hams will have to be on their best behavior when taking advantage of the limited channelized allocation.

"In terms of Amateur Radio spectrum, we usually say, 'Use it or lose it,'" he said. "The watchword for 60-meter operators should be, 'Misuse it and lose it.'" Sumner has predicted that, over time, amateurs can and will "develop a record of disciplined, responsible use of the five channels in the public interest that will justify another look at these rather severe initial restrictions."

The FCC has granted amateurs 5332, 5348, 5368, 5373 and 5405 kHz--the last channel common to the amateur experimental operation under way in the United Kingdom. The channels will be available to General and higher class licensees. In terms of day-to-day operation, use of the new band is expected to resemble the sort of channel sharing typical on local repeaters.

A lengthy period of experimental operation on 5 MHz under ARRL's WA2XSY Part 5 license preceded the May R&O. Last-minute opposition last fall to the granting of a band segment at 5 MHz came from the National Telecommunications and Information Administration (NTIA), which cited the ongoing spectrum requirements of federal government licensees having homeland security responsibilities. The NTIA administers spectrum allocated to the federal government. A compromise between the FCC and the NTIA resulted in the limited allocation at 60 meters.

The NTIA selected the channels the FCC authorized to minimize the possibility of interference to federal government users. The NTIA also dictated the use of USB only as an interoperability convenience, so that federal govern-

ment users--who also use only USB--could readily identify amateur stations if necessary.

ARRL Laboratory Manager Ed Hare, W1RFI, says hams hoping to operate on the new allocation need to be very careful if they're considering modifying their current transceiver or transmitter. The ARRL recommends that members check with the manufacturer of their equipment regarding specific modification information. Some modifications not only might void the warranty on a piece of equipment but could affect or alter a transmitter's operation in unpredictable ways.

"Hams need to be sure that any modifications put them right on the desired channel," Hare said. The FCC, following the lead of the NTIA, has said that the channel frequencies in the R&O are all "channel-center frequencies."

"Most hams are used to just having to think about band edges, so on other bands, if a mod were a bit 'off,' all operators would need to ensure is that they are not transmitting outside the band." But, Hare recommended, on 5 MHz, amateurs must be within "a few tens of Hertz" of suppressed-carrier accuracy, and, he points out, amateurs have a mandate not to have any of signal occupy spectrum outside the assigned 2.8 kHz channels. Additionally, hams need to make sure before they go on the air on 60 meters that any mods they've made do not have unintended consequences, such as spurious emissions on non-amateur frequencies.

The NTIA advised in a letter to the FCC Office of Engineering and Technology (OET) that users of 60 meters should set their carrier frequency 1.5 kHz lower than the channel center frequency, according to this NTIA chart:

Channel Center	Amateur Tuning Frequency
5332 kHz	5330.5 kHz
5348 kHz	5346.5 kHz
5368 kHz	5366.5 kHz
5373 kHz	5371.5 kHz
5405 kHz (US/UK)	5403.5 kHz

Noting that high-frequency audio re-

sponse can vary considerably from radio to radio, Hare has suggested a more conservative approach. He suggests restricting audio bandwidth to 200 Hz on the low end, and 2800 Hz on the high end--for a total bandwidth of 2.6 kHz. Hare notes that some transmitters that the Lab has looked at are capable of bandwidths of 3.0 kHz or greater.

In its letter to the FCC, the NTIA also stipulated that radiated power should not exceed "the equivalent of 50 W PEP transmitter output power into an antenna with a gain of 0 dBd." The FCC R&O set the requirement at 50 W ERP and said it would consider a typical half-wave dipole to exhibit no gain.

Hare said that amateurs' willingness to adhere to the channel-bandwidth and power constraints imposed on 60 meters will be an important factor in ham radio's use of this band--now and in the future.

SRRC Hamfest a Success

June 1, 2003 -- a perfect day for a hamfest. The parking lot of the Bureau County Fairgrounds filled up rapidly, and was near capacity by 10:00 AM. It appears that attendance was up significantly, however official counts are not yet in. As usual, the 4H food was excellent. Division Director, George Isely, W9GIG, and Illinois Section Manager, Sharon Harlan, N9SH represented ARRL. And of course, our own Pat Ryan, KC6VVT, who moonlights as Illinois SEC, was in attendance.

Jim Schreiner, K9BIG, was the grand prize winner. He reports that he will use the money for antenna projects, and donated \$100 of the prize to the SRRC for our Field Day refreshments. Jim is also a member of the Kankakee Area Radio Society, and extended an invitation to KARSFEST on July 6th in Peotone. A big thanks you from the club, Jim.

President's Desk continued from page 1

summer and into the fall. I hope each and every one of you is able to allot some amount of spare time to "play radio" before the cooler weather arrives. Remember to keep your station and yourself up to snuff on emergency preparedness situations, especially the use of portable radio stations and emergency power. It has been a pleasure working with fellow hams and storm spotters during several active weather outbreaks earlier this spring. We are doing a fine job keeping abreast of weather emergencies in the county and

surrounding areas.

Finally, I have accepted a new employment position as a Social Studies teacher at Macomb Senior High School. I will be moving to Macomb, which is located south of Galesburg in McDonough County, Illinois, during the early part of August. However, I fully anticipate being able to continue to fulfill my term as president. I may be absent for a few meetings, but it is a close enough distance that commuting back for the meetings should not generally be an issue. Otherwise, I will likely be rather scarce come the latter

portion of the summer and for the remainder of the year thereafter. I will post updated contact information to both the reflector and this newsletter when I have that information available.

Remember to keep active and enjoy the summer while it lasts! I hope to see each of you at upcoming meetings, ham fests, and other social events.

73's,
Jesse L. Risley, KB9TMA
SRRC President
815.673.1023 (home); kb9tma@yahoo.com

Activities Calendar / Upcoming Events

By Jesse L. Risley KB9TMA



◆ Don't forget that Field Day 2K3 is this weekend! What is Field Day?

- 1) Competitive event where hams set up in the field to compete for score;
- 2) An event to test the readiness of Amateur Radio Emergency Communications;
- 3) A chance to meet new friends and test the limits of your favorite hobby.
- 4) The annual SRRC 24 hour family picnic and overnight camping adventure at Chief Shabbona County Park

Saturday June 28th-- Ops begin 1300. Break Camp at around 1300ish Sunday. Let's talk this up on the nets . Chief Shabbona County Park Take I-80 to IL 23 North to N 42nd Road (about 12 miles North of I-80). Turn left (West) on N 42nd Rd and in about 2 miles

you'll turn left to the Park.

Things to bring:

- Your favorite cold (iced) beverages. Remember, this is a county park.
 - Grill and charcoal (the park's grills have 'disappeared')
 - A dish to pass around
 - 12 V batteries, solar arrays and bike powered generators are needed.
- Please bring your favorite field day rig and antenna...12 VDC operation only.

The Illinois Valley Radio Association (IVRA) will also be holding their field day operations this weekend at the Putnam County Conservation Area south of De Pue on Route 29. For more information, e-mail buck.n9plj@juno.com.

◆ **The Illinois Valley Radio Association (IVRA) will hold their next monthly meeting on Tuesday, July 1st 2003 at 7:00 p.m. at the Hennepin, IL town hall.** Everyone is welcome and encouraged to attend the meeting.

◆ **The Kankakee Area Radio Society (KARS) will host their annual hamfest at the Will County Fairgrounds in Peotone, IL on Sunday, July 6th.** For more information, visit <http://www.w9az.com> or contact John "Chip"

Moore, K9IOC at 289 South Euclid Avenue in Bradley, IL 60915. Phone: 815-933-1323 or e-mail karsfest@yahoo.com

◆ **The next regular meeting of the Starved Rock Radio Club will be held on Monday, July 7th 2003 at 7:00 p.m. at the SRRC clubhouse in Leonore, Illinois.** Everyone is welcome and encourage to attend the meeting. There is a "pre-meeting" over dinner, held prior to the regular meeting, beginning at 5:00 p.m. at Schmitty's Grill. Come on over for some casual chat, and enjoy the evening steak dinner special!

◆ **There will be a SKYWARN organizational meeting at the Starved Rock Radio Club in Leonore, IL on Saturday, July 13th at 1:00 PM.** This meeting is open to anyone interested in forming a formal SKYWARN operations network in this area. The meeting will not be in affiliation with any public or private organization, as the goal is to create a better severe weather operations network capable of serving local citizens. Everyone is encouraged to attend and bring your ideas to share!

◆ **2003 IARU HF World Champion-**

CHAPTER 3 – The Old Radios

Excerpted from *Voices in the Air—The Fascination of Radio* © Robert Bonebrake

Reprinted with permission of the author, Robert Bonebrake, W9GCQ. This 174-page book is available at the Streatorland Historical Society Museum or from Francis Kmetz, WB9VLW, at \$12.95 each. The club has a copy at the clubhouse, which can be checked out. It is enjoyable reading.

During the next few days I was glued to my card table with the earphones stuck on my head. I learned exactly where to set the contact arm on the coil to hear the station I wanted, and where to position the cat's whisker on the crystal to obtain the loudest sound. I experimented with my aerial, making it higher and longer to improve my receptions. I even found a safer route for my ground wire, away from trampling feet.

I could pick up four stations from Chicago: WMAQ, WGN, WBBM, and WLS. Sometimes I could hear more than one of them at the same time. I thought that was good, but learned later that it was caused by one of the shortcomings of crystal sets, lack of "selectivity". WLS was known as the "Prairie Farmer Station" at the time, and broadcast farm news and market reports. It was my favorite station because it also broadcast the "WLS National Barn Dance" program on Saturday nights. Of course, I could hear the same programs on our Atwater Kent,

but it wasn't nearly as much fun.

In the excitement of listening to my crystal set I temporarily forgot the "shortwave" part of Bill Hill's radio. This was a concept that was not to surface again for some time.

News of my hobby spread around the neighborhood and eventually reached Cyril Girard, who worked at Duis Appliance Store. He said that they occasionally took in old radio on trade when a customer was buying a new one, and sometimes just junked them. He said he would try to bring me one that I could dismantle and perhaps use some of the parts from it. After a week or two, Cyril called my father and said he had a radio for me. Taking my old red wagon to bring it home in, I saw that it was a big one, full of mysterious looking parts. I had no idea what they were for, but I was sure I would need them someday. At the time I didn't know what to do with any of them, but I filled cigar boxes and cardboard cartons with parts and put them in a special storage area in our basement. Old radios in those days were also an excellent source of small nuts, bolts and other hardware.

Thus began my collection of radio parts. Cyril brought me several old radios during the following year or so, and sure enough, I did need and use the parts and in fact, still have some of them.

There were two things I still recall learning while dismantling that first radio. It had several of the things with aluminum plates like I saw in Bill Hill's radio, and I noticed that the plates moved as I turned the station selector knob. I reasoned that the radio waves from different radio stations must be different in some way, and those plates were somehow able to determine which ones would come out of the loudspeaker. My reasoning turned out to be correct for, as I learned later, the aluminum plate device (a variable capacitor) operates in conjunction with a coil of wire to form a resonant circuit. When adjusted by the station selector knob to the same frequency as the desired radio station, this resonant circuit rejects all other stations. Variable capacitors were called variable "condensers" in those days.

The other thing I learned concerned metal springs that I saw under the chassis of the radio. Obviously, they must be there to twist or compress the radio waves so they would fit through the radio. This time I was wrong. Looking at the top of the chassis I could see how the tubes fit into their sockets, and the purpose of the metal springs was only to hold the prongs of the tubes in place. Not all scientific theories turn out to be correct.

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ship

1. Eligibility: All licensed amateurs worldwide.

2. Object: To contact as many other amateurs, especially IARU member society HQ stations, around the world as possible using the 160, 80, 40, 20, 15 and 10

meter bands.

3. Date and Contest Period: The second full weekend of July, beginning 1200 UTC Saturday and ending 1200 UTC Sunday (July 12-13, 2003). Both Single and Multi operator stations may operate the entire 24-hour period.

For more information, visit <http://>

www.arrl.org/contests/rules/2003/iaru.html.

♦ **Special Event Station - Beecher, IL:** Hams of Monee, W9B. 1600Z-2300Z **Jul 4.** Third Annual Welcome Home Beecher Train Depot. 28.340 14.270 14.040 7.270. Certificate. Gene Backlin, 26811 Greenbriar Dr, Monee, IL 60449.

WANTED

A story to fill this space.

Operators standing by to take your feature article, news item, want ad, wanton ramblings, etc. As an added inducement, the editor of this humble rag will compensate you for your article at the same rate he is being paid to compile the entire newsletter!

(Wait a minute—on second thought that's not much of a deal, is it?)

Send your material to the editor via e-mail at: w9qa@arrl.net

THE STARVED ROCK RADIO CLUB

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K9JKW and KB9EZZ at the selling tickets at the gate

KB9RKU photo