

The Starved Rock Radio Club (SRRC) meets on the first Monday of every month, unless otherwise scheduled, at 7:00 p. m. at the SRRC clubhouse in Leonore, Illinois. Club nets are held on the SRRC repeater (W9MKS) every Wednesday evening at 7:00 p.m. The W9MKS repeater is located at the SRRC 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

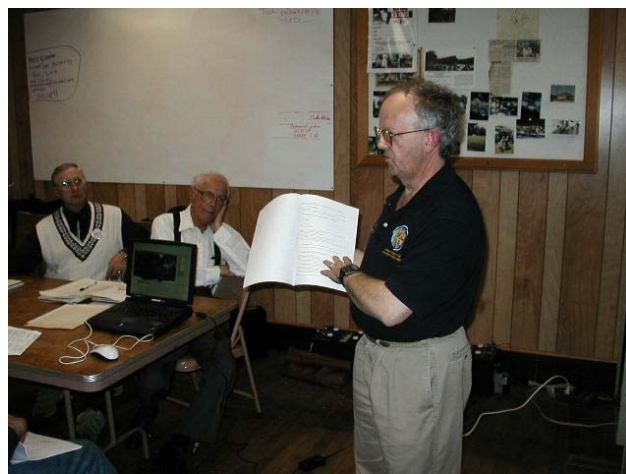
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- Vice President:
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ARISS Mentor Attends SRRC Meeting

April's special guest was none other than Charlie Sufana, AJ9N, our mentor for the Northlawn School ARISS contact. Also in attendance were Pam Riss, Northlawn School's liaison, and her husband. Charlie has the distinction of completing the first successful school contact with the International Space Station, at the Luther Burbank Elementary School on December 21, 2000. Since that time, Charlie has also organized a contact at the Adler Planetarium in Chicago.

Charlie explained the application and selection process for those present, and detailed the advance preparation that was needed. He provided recommendations



Charlie Sufana, AJ9N

W9DON photo

on the equipment needed for the contact, which includes two complete stations and a backup power source. Charlie advised that Northlawn's contact is probably still about a year away, but the schedule is subject to

change, and if a school is willing to schedule the contact over the summer break, the contact might occur sooner.

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Illinois Amateurs Support Tornado Relief, Recovery Efforts

Reprinted with permission from *The ARRL Web*

NEWINGTON, CT, Apr 23, 2004--UPDATED: Illinois ARRL Section Emergency Coordinator Pat Ryan, KC6VVT, reports Amateur Radio Emergency Service (ARES) team members and local radio amateurs in LaSalle County--nearly 100 miles southwest of Chicago--are supporting American Red

Cross relief and recovery efforts in the wake of tornados April 20 that left at least eight people dead. Illinois Gov Rod Blagojevich surveyed the damage and designated LaSalle, Putnam, Kankakee and Will counties as disaster areas. Especially hard hit was the LaSalle County town of Utica, where the

storms devastated the downtown area.

"There was an outstanding turnout by local and nearby hams," Ryan told ARRL. "Many local hams are assisting in recovery efforts and damage assessment." In addition, SKYWARN teams and severe weather

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From the President's Desk

Steve Michalski, KB9UPS, SRRC President

Hello again everyone. First up I want to thank Charlie Sufana AJ9N for his great presentation at our last meeting, everyone learned a lot about the ARISS program and our scheduled school contact with the ISS. I do plan to have more guest speakers in the future, so if anyone has a topic they would like to hear about let me know and I will do my best to bring someone in to speak.

Progress on our tower project is continuing as planned. I have contacted JULIE as to our dig site for the tower base and if all goes as planned we will be digging very soon. Watch for work schedules on the reflector, as there is much to do to. Kurt is our project manager and will be asking for times you can be available to help out.

Work is also continuing on our Hamfest 2004 and it promises to be a good year for us. Lets all get the word out and bring our ticket sales up this year. Questions you may have should be directed to Nick/kb9put. I have some flyers and tickets here if anyone needs them and can't find Nick. Drop me a note and I will get them to you. June 6th is our hamfest and there are still openings on the work schedule, so contact Nick/kb9put and pick a spot or two to help out. I am planning to be in Princeton all weekend and will be available for anywhere I'm needed. Also I hope to have an AMSAT booth this year and could use a little help with it as well. I'll see you there.

Storm season is here everyone! I want to remind our spotters and net controls that we are being watched and our performance needs to be as professional as we can make it. If your not a spotter or net control operator and would like to "get involved" contact Frank/kf9nz or Jim/n9plm for help.

I have noticed that more of our members are getting involved with activities and work schedules; this makes me



Steve Michalski KB9UPS

K9JKW photo

very proud to be a part of this great club. The growth, both personal and as a team is a wonderful thing to be a part of. "You all" should be proud of yourselves and "your" club, because after all, each one of you makes a difference. Thank you, Starved Rock Radio Club and all of its members.

Update: April 28, 2004

Hello again to all. In the shadow of what has been called "Black Tuesday", I would like to bring to light all those whom unselfishly and with great dedication, volunteered their time in helping handle not only communications, but also anywhere the need arose, to the citizens of the Granville and Utica areas. The response and participation of the Starved Rock Radio Club members is to be commended to the highest level. You should be as proud of yourselves as is the amateur radio community and the American Radio Relay League.

I would like to personally thank the members of the Starved Rock Radio

Club, the Tri County Amateur Radio Society, the Sterling Rock Falls Club, the Grundy County Amateur Radio Club, members of SATERN and the many other amateurs and non-amateurs for the continuing help, they so freely give, to the citizens in the affected areas. Thank you. Please remember the nine citizens "Black Tuesday" took from their families and friends.

The tower project is coming along as planned. Saturday the 25th members met and excavated the site and erected the form for the tower base. This week we are working on getting the re-bar and bolts prepared for pouring the concrete the first week of May. We will soon be discussing the other aspects of the project.

April Meeting Notes

Frank Carraro, KF9NZ - SRRS Secretary

The business part of the meeting was brief. We had Pam Riff, teacher at Northlawn School in Streator and her Husband, and Charlie Sufana AJ9N the ARISS Team Mentor present, as well as 28 members and two other guests.

It was voted to spend \$500.00 on the tower foundation. President Steve, KB9UPS agreed to mark the foundation location and call JULIE.

Our Field Day site was pinned down as the new shelter facing the highway at

Shabbona Park. Joe, KB9EZZ submitted a written report on the progress of Field Day. Joe also reported that the Ottawa Community Emergency Response Team training was complete, and there would be another training session this Fall.

Francis WB9VLW, our Treasurer was present and feeling much improved.

Jesse KB9TMA asked all members who wish to continue receiving weather warnings from him via e-mail

to insure they keep their e-mail addresses current with him.

The formal business meeting was then adjourned, and we listened to Charlie Sufana make his presentation. He showed some clips of school contacts, and explained a lot about the way in which the schools are selected. His guess about when Streator Northlawn School will be scheduled was not very optimistic.

DE KF9NZ

Repeater Status Report

By Frank Carraro KF9NZ



On April 17th I attended the IRA meeting at Bloomington Illinois. No, not the Irish Republican Army! It was the Illinois Repeater Association. In case you don't know, this is the body that "coordinates" the use of repeater frequency pairs (input and output). "Why do we need such a body?", you may ask. Even if you didn't ask, I will tell you. In short, it is to prevent chaos. Without coordination, any ham could activate a repeater on any frequencies in any amateur band at any time. Imagine the VHF and UHF bands sounding like a DX pileup on 20 meters, and you may get the idea. There are a lot more matters regarding repeater coordination that a fair percentage of hams who use repeaters are mostly ignorant about. I may write more about the subject to help fill up space in this fine publication, but for now....on to the report of what happened at the meeting!

The Officers and Directors of the IRA are elected for two-year terms. This year the terms of two Directors were ending, and an election was held. Jack Frank, KE9WS of Chillicothe and Rich Ranson N9YAY of Springfield were

reelected. It was announced by President Bob Hajek, W9QBH that he and the Secretary-Treasurer, Bob Koch KA9FCF of Elgin will not stand for reelection next year, and further, the Coordinator, Carl Bergstedt, K9VXW of Naperville has asked to be relieved of the job. Aaron Collins N9OZB of Arlington Heights will be tapped for the Coordinator's job. Aaron has been Chair of the Technical Committee.

The matter that was of more direct importance to Illinois hams was the vote on changes in the 70 CM band. A range of frequencies in the 432 to 435 MHz part of the band has now been opened up for repeater use, making a number of additional 70 CM repeater pairs available for assignment. I did not record the exact frequency limits concerned because I was tapped to count ballots in the Director election, and was busy doing that while the 70 CM matter was discussed. The full information should appear on the IRA Internet site soon.

ARRL Central Division Director, Dick Isley, W9GIG was present and he discussed the BPL matter for those pre-

sent. I can't believe that any active ham is not aware of the BPL matter, and generally what it entails, but I guess I am wrong. It seems MANY hams are blissfully ignorant of the threat to not only ham frequencies, but also the entire HF spectrum. Dick gave us some pretty much "inside" info, as well as touching on a lot of points that need to be brought to the attention of every ham. I will try to write this up and get some of this information elsewhere in this issue of "STATIC"

de KF9NZ

The BPL Threat

By Frank Carraro KF9NZ

The initials "BPL" stand for "broadband over power line". It is supposed to be a means of Internet access by transmitting high speed ("broadband") data over the regular a.c. power lines that bring electricity to the homes, schools, factories, hospitals, sewage pumps, and whatever else you can think of. Not only the incoming data, but also the mouse clicks back from your computer to the server is carried over these lines. Well, that is the idea anyhow.

So, what's the problem with this? Well, without getting too deep into the hows of the system, the problem is that it is intended to use the high frequency (HF) band as the carrier of the data. Many different frequencies from about 3000 KHz up to around 30 MHz will be modulated some how to carry the data. For anyone with even the barest knowledge of radio frequency wave propagation it is obvious that such a scheme has many problems. For example, why do most all radio frequency transmission systems use either coaxial cable or balanced transmission lines? One big reason is to minimize radiation of the RF energy from, or pick up of outside RF energy by the transmission line. Now go look at any power line, like the usual 3 kV line that runs near your house. Does it look anything like coaxial cable? Uh-uh. Does it look like a balanced line such as ladder line? Nope.

So, if this system is put in place near your house, you will have miles and miles of heavy wire carrying RF energy, loaded with harmonics of every degree from the modulation scheme, radiating most of it into space and carrying a little of what remains along to your house, where more of it is radiated in and around your house. The results to reception of HF signals from space - such as the ham in California you talked to every week for years and who runs 75 Watts into a dipole 20 feet off

the ground - would be catastrophic. But this is the system the FCC Commissioners are ramming down the throats of the unsuspecting U.S. public.

Is politics stronger than science? Are the laws of man more powerful than the laws of physics? Well, FCC Chairman Powell Jr. apparently thinks they are. The Technical staff at the FCC is trying vainly to tell the Commissioners the truth. The objections of FEMA to the thing were politically emasculated by executive order. Dubyah.

The NTIA, which is the agency that parcels out government frequencies to the various agencies and departments, is struggling right now to make public its strong objections against it. Every country in the world who has tried transmitting high-speed data over power lines has turned it off and prohibited any more such use. This includes Japan - a highly advanced technological society.

Who knows what "part 15" is? If you don't, you should. If you do, skip down through the rest of this paragraph. Part 15 of the FCC Rules and Regs is that part which governs the use of low power RF devices, and "unintentional radiators" The last are devices that use RF energy for other uses than to transmit them, but some of it gets transmitted (radiated) anyhow. Microwave ovens for example. Anything that transmits RF energy either has to be licensed or registered by the FCC or NTIA, or certified as a part 15 device. Part 15 devices cannot interfere with licensed services. If they do, they must stop transmitting. They must also accept interference from licensed services.

BPL is supposed to be operated under part 15. Now imagine if you can that thousands of miles of U.S. power lines are energized with this RF garbage, spewing it into space, and it interferes

with your QSO with that sked you have with your pal in California. Under the part 15 rules, it should be shut down. Surrre it will. Well, they say they can "notch out" the ham bands. That is, filter the carrier frequencies that fall into the ham bands. There are a couple of problems with that. First, it won't work, because all of the beats and harmonics created by the high harmonic content of the modulated signals, and second, because hams won't be the only HF service affected. ALL HF services will be affected. Worldwide!!!

Well, there's lots more, but I hope I have piqued your interest -if it wasn't before. Go to the ARRL Internet site and read up on it. Get mad. You should be.

de KF9NZ

CHAPTER 13 – A Great Discovery

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.

I was listening to WMAQ on my battery set one day during Easter vacation. My father was at work, and my mother was at my grandmother's house helping her wash clothes. It must have been a Monday, because women always washed clothes on Monday in those days. As I listened, I was studying the various parts of the radio, imagining I could see the radio waves going through them. I had noticed before, but had never thought much about it, that the variable condenser needed to be set to the middle of its range in order to tune in WMAQ. But on the radio that Cyril Girard gave me, WMAQ came in when the variable condenser was set near one end of its range with the plates almost completely meshed.

Pondering this, I wondered if I had

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spotters "helped greatly throughout the area to spread the word of the approaching tornado tracking across many counties.

Jim Stefkovich, KD5HLE, the meteorologist in charge at the National Weather Service (NWS) Chicago Forecast Office, expressed gratitude for Amateur Radio's assistance in providing storm information. "This was a true team effort, and I truly appreciate everything that was done from everyone in the Amateur Radio Community," he said. "I could not be more proud of everyone's efforts."

done something wrong when I built the radio. I checked my wiring against the instructions in the *First Radio Book for Boys*, and found nothing wrong. Then I re-read the descriptions given for the various parts of the radio, and as I studied the instructions for making the coil I discovered that I had wound too many turns of wire on it.

I disconnected my batteries and unwound some of the wire from the coil. When I re-connected the batteries I found that I could no longer hear WMAQ. Turning the shaft of the variable condenser, I could hear it when the plates were further meshed. I took more wire off of the coil, and then WMAQ came in when the condenser plates were almost completely meshed, just like on the big radio Cyril gave me.

I had put a dial on the shaft of the variable condenser that had numbers from 0 to 100 printed on it, representing the position of the condenser plates, and by changing the amount of wire on the coil I could make WMAQ and the other stations come in at any point on the dial that I wanted them to. This was all very exciting to me, and I ran over to my

LaSalle County ARES Emergency Coordinator Frank Carraro, KF9NZ, said he'd settled down to read a book when he began hearing weather-spotter reports of approaching tornados. He said it soon became obvious that Utica had been badly hit. "All the electric power was out, the roads were clogged with debris and panicked residents of the area--some trying to get in, and some trying to get out," he said. "Soon, every public safety agency for miles around was in or around Utica."

Ryan, who lives in LaSalle County, reports that after the N9OUW Tri-County repeater was knocked off the air, owner Rich Grimshaw, N9OUW, and Kurt Clausen, KB9RKU, installed

grandmother's house to tell her and my mother what I had discovered. They thought it was nice, but continued cutting up the bars of P&G soap to put into the old copper boiler full of hot water (this was before the days of powdered or liquid laundry detergents).

Neither my mother nor my grandmother seemed very interested in my discovery, so I came back home and continued listening to my radio. I knew I had discovered something important, but didn't know what it was at the time. Much later in my radio studies I learned that what I had discovered was "resonance" in radio frequency circuits. Simply put, if either the coil or the condenser in a resonant circuit is changed, the other must be changed also in order to keep the circuit tuned to the same frequency (670 kilocycles in the case of WMAQ).

Of course, Guglielmo Marconi and others who followed him had already learned about resonance many years earlier, but they couldn't have been more excited than I was when I discovered it.

a deep-cycle battery from the Starved Rock Radio Club to get the machine back up. "This essential ham repeater then provided ideal coverage to link the downtown Utica area below the Illinois River bluff for further operation by the many amateurs responding," he noted. "It was the critical link for this area."

The reactivated repeater has been supporting disaster recovery efforts coordinated by the Illinois Valley Red Cross chapter in Peru. Ryan says he has a back-up battery on charge at his home for use as needed. Simplex nets were activated in the Utica area on 2 meters to support shelter operations

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and disaster assessment and to minimize battery drain at the repeater. Grundy County amateurs also turned out to assist in LaSalle County.

LaSalle County Assistant EC Joe Tokarz, KB9EZZ, said some 30 amateurs responded in his county alone, providing some 8000 "ham hours" worth of assistance. He said April 23 that with telephone service now being restored, Amateur Radio's role has begun to wind down. He encouraged hams to take advantage of ARRL's Amateur Radio Emergency Communications on-line classes, weather-spotter classes as well as other available emergency preparedness training to be ready. In this situation, he noted, there wasn't much advance warning. "It was a rapidly developing storm. We went to a warning almost immediately," he said. "Because of that there wasn't a lot time to give warning to the citizens."

Ryan reports "outstanding assistance" from Community Emergency Response Teams throughout Northern Illinois. Twisters also hit the town of Granville in Putnam County, where Ryan's brother lives. "Unfortunately, my brother and sister-in-law lost the roof and the use of their house," he said, although no one was injured. Ryan says he's had to take time off from assisting in the local disaster net to help his family with salvage and cleanup efforts and get his relatives resettled.

Ryan said non-amateur community volunteers in the stricken communities have been turning out to help clear

streets and board up or cover damaged homes and businesses.

Salvation Army Team Emergency Network National Director Pat McPherson, WW9E, reports Salvation Army can-tees have been roving stricken neighborhoods providing food, beverages and respite. Salvation Army volunteers also have assisted with damage assessment and cleanup.

"We used SKYWARN and our SATERN folks to keep us abreast of reports as the weather conditions turned sour, and they turned out to be invaluable assets in determining the course of the tornados," said McPherson, who's headquartered in Chicago. "Amateurs also provided valuable information regarding the circumstances in Utica and pointed me to a state frequency that I could monitor regarding responders' efforts." McPherson said that channel offered accurate information he was able to relay to his own responders so they'd have a better idea of what they'd be facing in the stricken communities.

McPherson said he would personally serve as incident commander for Salvation Army relief operations in Utica this weekend and planned to use Amateur Radio to support operations if possible. He expected the Salvation Army's Utica operation to last at least two weeks.

Near Chicago, Will County ARES Emergency Coordinator Rob Sobkoviak, K9NYO, said tornados destroyed one house damaged dozens of other homes and businesses in Joliet. He said the Salvation Army--with support from SATERN--was called in to assist with damage assessment and

cleanup and to provide meals to affected residents and emergency personnel.

Sobkoviak cited the efforts of Bolingbrook AEC Toni Hamilton, WX9WRN, who coordinates her county's ARES Severe Weather Net, as well as those of numerous weather spotters. "All of those spotters who sat watching the skies, often in harm's way, are definitely the heroes," Sobkoviak said. "In particular, I would like to recognize the reports of Plainfield EMA Lt Dennis Hamilton, KC9DVI, whose spotter report of a tornado heading toward the City of Joliet directly resulted in the saving of lives in that community of 106,000," he said. Other Will County amateurs staffed ARES stations at a Bolingbrook fire station and at emergency operations centers in Plainfield and in Joliet, where the county's EOC is located.

"Hams at the Will County EOC can instantly get reports from the Will County ARES Net and NWS into the hands of county emergency management personnel to disseminate over the county-wide 'WILLWARN' system," Sobkoviak said. Other amateurs staffed the amateur station at the National Weather Service Chicago Forecast Office. "These guys are true heroes," Sobkoviak said of his ARES team members.

ARRL Illinois Section Manager Shari Harlan, N9SH, said radio amateurs in her section "are on top of things" in the affected communities. "We are on standby so that when and if they need additional help because of fatigue and so forth, we can move in," she added.

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AJ9N also described how a typical contact with the ISS would go, and played videotape showing the contacts made at Burbank School and the Adler Planetarium. Just one look at the kids' faces as they talked to a real astronaut in space shows that all the work that goes

into this type of venture is well worthwhile. With all the media coverage that typically occurs during an ARISS contact, there is quite an opportunity for some ham radio PR as well.

More Photos from April 20, 2004



F3 Tornado Which Ultimately Hit Utica, IL

W9DON photo



Structure Damaged by Tornado in Putnam County

W9DON photo

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Putnam County, April 20, 2004

W9DON photo