Short CIRCuits

December 2017

SERVING CENTRAL ILLINOIS AMATEUR RADIO SINCE 1921

IN THIS ISSUE

From The President

by Jim Baker WB9EDL

Happy November to all

I would like to thank and congratulate Dhruv, Hari, Grant and all who helped for their fantastic efforts to make the ARISS Project a wonderful success.

Many of you may know that I take a fall, (Oct.) camping/fishing trip to south central Missouri. The state park is Montauk State Park near Salem Mo. It's located at the headwaters of the Current River along with a trout hatchery.

This may make the fishing easier Hi Hi. I have, for almost 40 years taken my ham radio along with me, beginning with my Heathkit SB 102. Many things I've learned and developed are things we use at our Field Day operations. It's much the same environment as field day. I have some pictures, the daily creel limit, the river at sunrise, the tip-up base for the antenna, operating station and the erected 80/40m inverted Vee antennas. I have worked several 75m nets and some DX from there too, always fun. November has some major operating contests. The CQ WW DX SSB contest and the ARRL Sweepstakes CW contest have already happened. Nov. 18-20 ARRL Sweepstakes Contest SSB. Nov. 25-26 CQ WW DX Contest CW. Please check Nov. QST p. 93 Contest Corral for more contesting details. I hope to see you at the C.I.R.C. Christmas dinner December 6, at Jim's Steakhouse.

73,

Jim Baker WB9EDL

ARISS Contact with CJHS

CIRC helps with making contact with the ISS

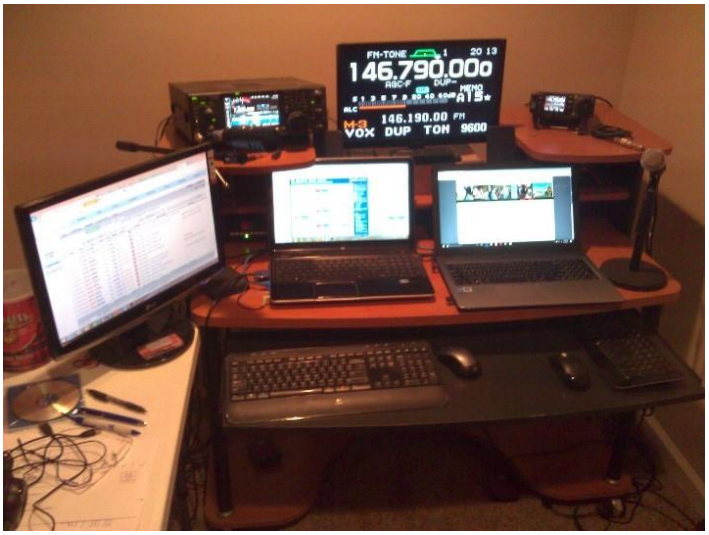
Shacks of HAM!

A peek at what some of our shacks look like!

A Shack of HAMS

by Jeff Lovell KC9QQM

While we see each other on somewhat a regular basis, most of us have not seen the shacks of our fellow CIRC members. Here are a few and hopefully more to follow!



Greg KC9WVR

Jeff KC9QQM

Dick W9XW

Rick N9CKL

ARTICLES AND EVENTS

We need your input, please send any articles, links, interests or upcoming events you want the club to know about to Jeff Lovell KC9QQM@gmail.com

ARISS Contact!

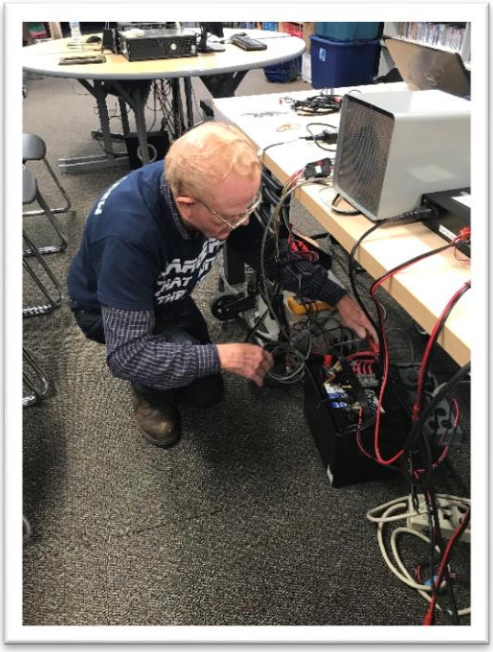
by Grant Zehr AA9LC

One curious thing about Amateur Radio is the lack of interest shown by non-amateurs to our many marvelous achievements. For those who are not fascinated by the 'magic' of radio most of what we do for fun seems, well, boring. Worked Rodrigues Island on 75 meters? Ho-hum. Broke through the pile-up to contact Heard Island on 30 meters? Yawn. Set up a digital repeater with links around the world? Bor-ing. But there is one Amateur Radio activity which gets everyone's attention, and that is when you tell them you've talked with an astronaut. A non-ham friend approached me a few years back and asked me who I'd talked to recently. He was surprised and impressed when I told him that I'd talked with Doug Wheelock on the ISS the week before. The whole community notices when you are talking to people in outer space. And its great fun!

Hari Rebba VU2SPZ from the CIRC had gotten the idea that Chiddix needed to have an ARISS contact while his son Dhruv KC9ZJX was still a student at Chiddix. CJHS was the primary sponsoring group with the Challenger Learning Center (CLC) in Normal and the Children's Discovery Museum (CDM) also in Normal being supporting organizations. The news of CJHS's selection came through in December of 2016, and our big project started.

An ARISS School Contact is arranged by the Amateur Radio on the International Space Station (ARISS) organization. That organization is made up of representatives from ARRL, AMSAT, and of course NASA, along with many international partners. Groups who are awarded a chance to talk with the ISS have the option of selecting either a Direct Contact or a Telebridge Contact. When we met with representatives from Chiddix, the CDM, and the CLC it was agreed that the Direct Contact was the best choice if we could make all the arrangements. We'd let the kids see what Amateur Radio was able to do! I enlisted Ralph Bellas K9ZO, Ed Deutsch KC9GF, and Dennis Mills KE9UA initially, and with the support of the CIRC the planning began

As an active satellite operator, I had a lot of the needed gear, but other CIRC members loaned us items which were critical to the success of our contact. Ralph K9ZO let us use his 2-meter 'brick' amplifier and a matching power supply. Ed KC9GF loaned his Yaesu FT-847 transceiver, which served as the backup station transceiver. Tom Planer KJ9P got interested in the backup antenna problem. After some research and some help from Dick DuBroff W9XW, Tom built an omnidirectional antenna modeled after the EZ-Lindenblad, a design by Anthony Monteiro AA2TX which was published in QST for August 2007. With Tom's changes, this antenna performed very well, and was another critical piece of our ARISS station.



Dhruv Rebba KC9ZJX, was assigned the role of Station Operator for W9AML for the School Contact. He completed his homework successfully, putting 100 QSO's in his log over the summer and completing several practice sessions with me using hand-held FRS radios. By Fall he was ready to go.

We learned in the early summer that we would have our contact during the week of October 23-28, 2017. By mid-October we knew we were getting close to our contact date, but we still did not have a final date from ARISS. We decided to go ahead with a practice session, so the students would be comfortable talking on the Yaesu FT-847, our primary transceiver. Most of our students were from CJHS, with a smaller number being students from other schools who had participated in activities at the CLC. Dee Hopper rounded up the students, and got us permission to use the CJHS library. For the practice session, Tom Planer KJ9P acted as our practice astronaut We used a 2-meter simplex link from the library at Chiddix to the Children's Discovery Museum. The Yaesu FT-847, our main station transceiver, and a simple ¼ wave Mag mount antenna outside the library window made up the station at CJHS. KJ9P was stationed at the CDM with his portable 2-meter station. His answers were great, and the practice gave us a chance to time ourselves and see whether we could hope to get all 16 of our students through during the short (10 minute) ISS pass. It seemed, with a little luck, we should be able to get each student a chance to speak to 'our' astronaut.

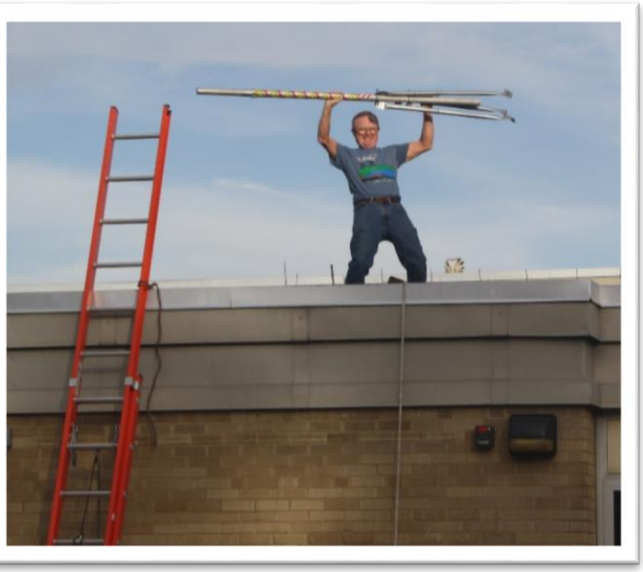
Our students remembered the lessons learned during our practice sessions, asking their questions clearly and promptly. Our Astronaut, Joe Acaba, did a great job of interacting with the students and answering their questions. We were able to move through the questions smoothly and all sixteen students got to ask their questions.

In addition, we had 4 of the students prepared with a second question in case we had extra time. We were able to get all these second-round questions asked as well. Mrs. Hopper was on standby to say "Thank-you" to our astronaut if time was available, and she did that following the last of the questions. Dhruv thanked Joe at NA1SS on behalf of the students at Chiddix, and signed off. Joe wished us well and signed off from NA1SS.

During our contact, Dhruv Rebba KC9ZJX operated the main station radio for W9AML. I controlled the radio and monitored the Doppler tuning. Ralph Bellas K9ZO operated the backup station. Ed Deutsch KC9GF monitored the audio recording computer. Tom Planer KJ9P monitored the emergency power, which he made available for both our main and backup stations. Dennis Mills KE9UA helped from his QTH by monitoring our uplink signal and reporting any problems. Hari Rebba VU2SPZ helped with general setup and with photography and video recording. He also coordinated our Contact with W5KUB and his Amateur Radio Roundtable, so the event could be webcast. Jim Baker WB9EDL helped with general setup and antenna monitoring. He was up on the roof 5 minutes before our contact making last minute adjustments! Mike Sallee KC9FWL helped with photography, Gregg Kellerman KC9WVR, and Rick Suhadolc N9CKL helped with antenna setup and there are doubt others whom I am no forgetting to credit.

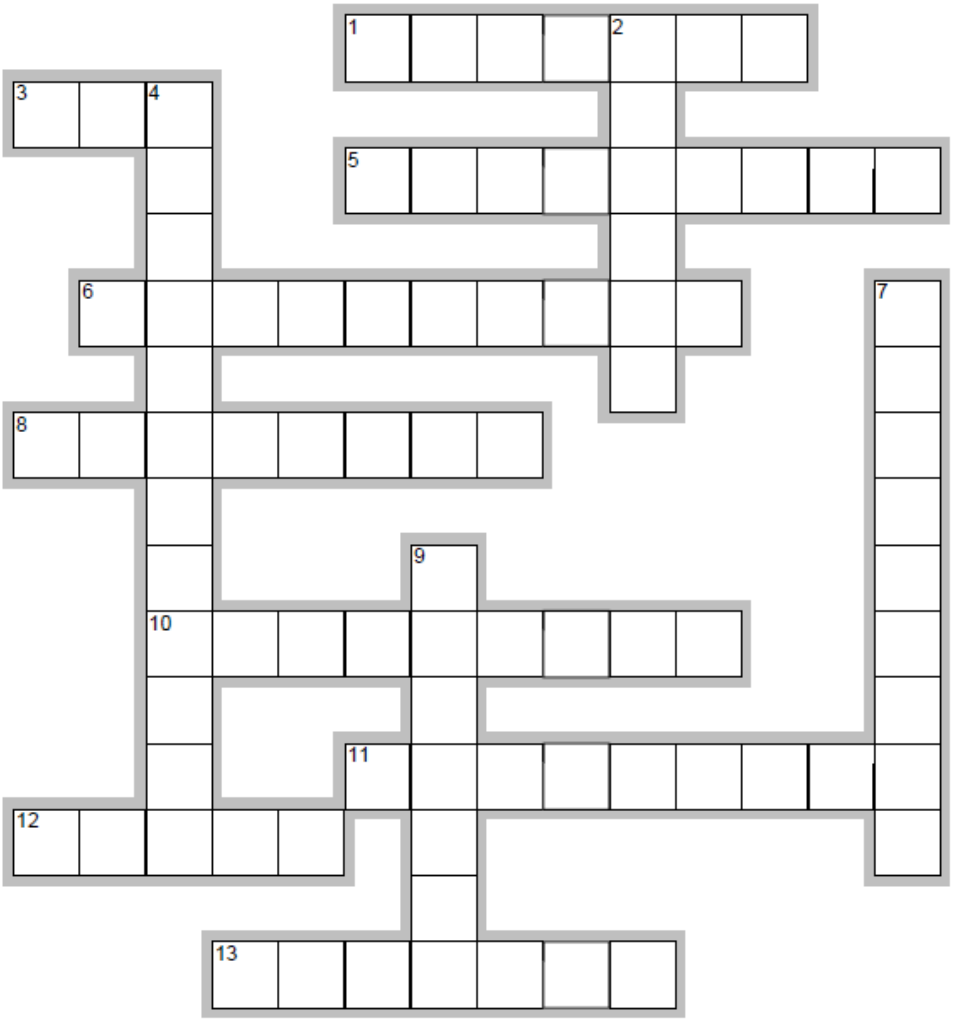
An ARISS school contact probably requires more preparation than any other type of QSO in amateur radio. The 'hours of preparation time per QSO' ratio is huge. But, I think our "over-preparation" contributed to the success of our School Contact. And the enthusiastic support for the operation by the CIRC and was also critically important for our success. So, I will use this opportunity to thank the many CIRC members who contributed time, talent, energy, and equipment to this operation. And special thanks to Jim Allen, the principal at CJHS for his support. And to Dee Hopper at CJHS, Stacey Shrewsbury at CLC, and Rachel

Carpenter at CDM for their work and support. Without their help this School Contact could not have taken place.



Put Your Thinking Caps On

by Duane Benjamin KC9PIM



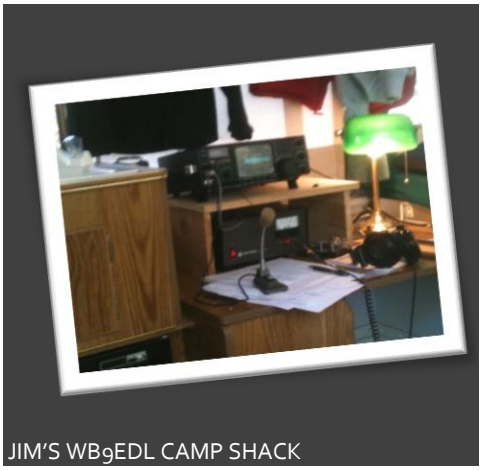
EclipseCrossword.com

Across

1. Class of semiconductors having three states
3. Abbreviation for Digital Signal Processor
5. Grey-white metalloid element used in optical and semiconductor material
6. Device for reducing the amplitude of an electrical signal
8. Graphic representation of the frequency and amplitude of a signal
10. Any of several semiconductor devices that act as switches, rectifiers or regulators
11. A high frequency electromagnetic wave
12. Battery constructed from cadmium and cadmium
13. Mathematical system represented by logical operators

Down

2. Data which is continuously variable within its continuum
4. Reaction that creates electrical energy from radiant energy
7. Device to change alternating current into direct current
9. Data in the form of binary digits



JIM'S WB9EDL CAMP SHACK

Jim's WB9EL camping antenna set up

FAST FACTS

3082

Number of amateur radio clubs in the United States.

6.24*10^18

Number of electrons in 1 coulomb (1 amp/1 volt)

FOR MORE INFORMATION

Have an upcoming event that the club might be interested in attending or supporting?

CONTACT JIM BAKER WB9EDL
Or bring it up at the next club meeting

AREA EXAM DATES

Following is the schedule for W5YI-VEC Amateur Radio exams for the year 2017. At the Community Room of the Bloomington Public Library located at the intersection of E. Olive St. and S. East ST. Entrance off of S. East St.

Setup is from Noon to 1:00 normally. Exams begin at 1:00 P.M.

Please bring two forms of identification. You must have a Social Security Number. We cannot administer a test without your SSN. You will need a copy of your Current license plus any CSCE you want to apply.

2018 dates to be determined

Exams' in Morton are held at the Morton Public Library, 315 West Pershing at 12:00 Noon the third Saturday of even numbered months and. Sep 21 (Superfest),

AREA NETS

Mon thru Sat 9:00 A.M. CT 14.2475 (HF)
Displaced Peorians
Tuesday 9:00 P.M. 146.255 (103.5 PL)
Woodford County
Tuesday 7:15 P.M. 146.910
Tazwell County ESDA Net
Tuesday 8:30 P.M. 28.450
CIRC Open 10 meter Net
Tuesday 9:00 P.M. 146.940 (103.5PL)
CIRC Open Net
Wednesday 9:00 P.M. 147.060
Open Net Has Newsline
Wednesday 9:00 P.M. 442.250 103.5 PL
ARES Open Net
Varies 147.100 103.5 PL
Sometimes Trader's Net follows ARES Net held on 442.250
Thursday 8:00 P.M. 28.450
Vertical polarization is encouraged but not required
Thursday 9:00 P.M. 146.760 (162.2 PL)
Open Net with Newsline
Thursday 9:00 P.M. 146.850 (103.5 PL)
Open Net Peoria
Sunday 08:15 A.M. 1.915
Open 160 meter AM net
Sunday 7:00 P.M. 146.985 Clinton ARC net
Sunday 8:30 P.M 147.075 156.7 PL
Sunday 8:30 P.M. 146.730 123.0 PL Open Net

Regular Calendar of Events

Daily Coffee Klatch Monday thru Friday
9:00 a.m. at Dairy Queen Veterans at Cub's
XYL's Join the OM's Monday and Friday
Weekly 10 Meter Net
Every Tuesday evening at 28.450 MHz- at 8:30 p.m.
Weekly 2 Meter Net
Every Tuesday evening on the 146.940- repeater at 9:00 p.m.
Weekly 6 Meter Net
Every Thursday evening at 50.135 MHz at 7:00 P.M.
Weekly 160 Meter AM Net
Every Sunday morning at 1.915 MHz at 8:15 A.M.
CIRC Meeting
Fourth Wednesdays of the month at 7:00 p.m. at the Red Cross building in Bloomington (Just north of the airport)

CENTRAL ILLINOIS RADIO CLUB
P.O. BOX 993 BLOOMINGTON, IL 61702-0993

WEB PAGE
HTTP://WWW.QSL.NET/W9AML/

President: Jim Baker (WB9EDL)
Vice-President: Rick Suhadolc (N9CKL)
Secretary: Duane Benjamin (KC9PIM)
Treasurer: Tom Planner (KJ9P)
Newsletter Editor: Jeff Lovell (KC9QQM)

The CIRC is a not-for-profit ARRL special service club whose purpose is to advance the service of Amateur Radio. Located in Central Illinois, the CIRC and its members welcome all to use the 146.94 repeater and to attend club meetings.

Submissions for the newsletter should be received by the 15th of the month and may be emailed to:
Jeff Lovell
e-mail kc9qqm@gmail.com

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