RCA AMATEUR RADIO CLUB

OCTOBER, 2008   **MONTHLY NEWSLETTER**   INDIANAPOLIS, IN

THE NEXT MEETING OF THE **RCA AMATEUR RADIO CLUB** WILL BE
TUESDAY, OCTOBER 14th, 6:30 PM AT THE G.T. SOUTH'S,
5711 E. 71st STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE SEPTEMBER MEETING – Thanks to everyone who turned out for the September meeting. One of the largest groups in some time. Dave, W9CGI, announced he will **not** be traveling to the Caribbean in October as we announced in last month's newsletter. The status of the '88 repeater was discussed. The Echolink computer is still down. We're hoping to have it back soon. The tubes and stuff we received from the VanSickle estate is being inventoried and some of the tubes may be sold of EBay. Chuck Crist, W9IH, is scanning some of the material for a historical web page.   The W9IMS special event station was discussed as was the upcoming Greenfield Hamfest. Bob, W9KVK, gave a brief summary of this trip to Russia including the traveling on the on the Trans-Siberian Railroad, the Russian ice breaker Kapitan Khlebnikov, and seeing the total eclipse of the sun on August 1st.

RCA ARC NEWSLETTER BY EMAIL – Remember, if you have contact with any of the hams who have left Thomson and may not have changed their email address on our newsletter distribution list, suggest that they do so. Point them to the bottom of the W9RCA.org web page where you will find this link to subscribe to or change your subscription: http://lists.w9rca.org/mailman/listinfo/w9rca-news

ECHOLINK IS BACK ON THE '88 REPEATER – The EchoLink on the repeater lives again! It was hard to tell how much it was being used in the past two years, so it was gratifying to hear people say how much they missed it while it was down.

During these past two years, there have been dozens of EchoLink add-on programs written that bring additional functionality to an EchoLink repeater like ours. However, all these programs require a much more powerful computer. We are currently running on a 500MHz P2. The new programs require a 1GHz P4 or better. So, if you have upgraded recently to a dual or quad core machine, we would love to get donation of your old P4 so that we can update the EchoLink repeater! Thanks! --David, N9KT

Thanks, David for getting it going again. It's there for everyone to use. Instructions are at: http://www.w9rca.org/repeater.html --AF9A

INDIANAPOLIS VE TESTING SCHEDULE   -- Here is the Indianapolis Radio Club VE testing schedule for the rest of the year. Calling in advance to ensure testing availability is suggested but not mandatory.
> November 1st
> December 6th

SPONSOR: Indianapolis Radio Club (W9JP)
LOCATION: Indianapolis Training Center 2820 N. Meridian Street.
CONTACTS: Gale Wuollet, AA9WU (h) 317-849-8449, or Jay Wright, KK9L 317-203-3335.

HAMFESTS; EVENTS

RICHARD GARRIOTT, W5KWQ, FOLLOWS DAD OWEN, W5LFL, INTO SPACE

Twenty-five years after his father made that first QSO from space, Richard is bent on honoring him by operating ham radio in space. Frank Bauer, KA3HDO, ARISS International Chairman, said, "The ARISS Team is very happy to be able to make Richard's time in space extra special, since his flight coincides almost exactly 25 years from when his father made history."

The first thing Richard did after passing his Technician exam was to start talking to ARISS in earnest. "ARISS coordinates and sponsors everything to do with ham radio in space, and NASA Mission Control will be handling all of the ham radio schedules," White said. In mid-August, ARISS Team Member Kenneth Ransom, N5VHO, set up a training session at NASA Johnson Space Center for Richard. Following that, Richard completed his Russian radio training. ARISS Team Member Sergej Samburov, RV3DR, trained Richard on SSTV, packet, the use of the ARISS equipment, and the onboard computers in Star City, Russia at the Gagarin Cosmonaut Training Centre. The next month, Samburov had Richard learn how to handle radio ops, especially pile-ups.

Hardware deliveries: Richard plans to take a Kenwood VC-H1 SSTV communicator with him on-board the Soyuz for his flight and leave this on-board the ISS for future ARISS use. The VC-H1 has completed all hardware certification on the US and Russian sides. The final test, an EMI radiated emissions test, was performed last week and the test data was delivered to Sergey Samburov, RV3DR in Russia this week. The VC-H1 provides a very simple interface for ISS crew members and does not require the use of a computer. Computer usage has been a real challenge for ARISS, so the VC-H1 represents a lesson learned to improve ARISS operations.

Backup hardware: At this week's ARISS-International Meeting we received confirmation from Sergey, RV3DR, that the recent Progress flight delivered the flight backup D-700, a David Clark Headset for the Ericsson system, and an additional VOX box and cables to support the computer-operated SSTV system. The D700 may be installed as early as late this week, depending on crew availability. The flight backup will not provide a significant change in ARISS ops. It will make it easier for the crew to change program modes (PMs).

Richard Garriott Operations -- Call for Support: Early during Richard Garriott's flight, he expects to setup the VC-H1 and autonomously transmit a new Earth image every 3 minutes. He hopes to have this system on a great deal of his flight. We encourage the ham community to bring SSTV equipment into schools and download these images in real-time. The ARISS

team also plans to display images from hams around the world on a special on a web/blog site. A beta site has been developed and will be rolled out to the ham community in the near future.

To successfully implement the on-line SSTV picture site and support it 24/7 during Richard's flight, we will need some savvy individuals that can sort through the many SSTV photos that ARISS will receive and keep the SSTV site up to date in near real time. Some computer skills will be required. We are looking for global support from a few individuals in each international region to make this happen. That way we will not be asking individuals to volunteer all-night to realize this project. If you are interested in helping on this, please e-mail me directly.   (Frank Bauer, KA3HDO, AMSAT V.P. for Human Spaceflight Programs, E-mail: ka3hdo@comcast.net)

The primary purpose of ARISS is to allow students engaged in a science and technology curriculum to speak with an astronaut orbiting the Earth on the International Space Station. Using amateur radio, students ask questions about life in space or other space-related topics. Students fully participate in the ARISS contact by helping set up an amateur radio ground station at the school and then using that station to talk directly with the on-board crew member.   Preparation for the experience motivates the children to learn about radio waves, space technology, science, geography and the space environment. In many cases, the students help write press releases and give presentations on the contact to their fellow students and to the local community. Through this hands-on experience, students are engaged and educated in the Science, Technology, Engineering and Mathematics (STEM) fields, and are inspired to pursue STEM-related careers.

For more information about amateur radio on the ISS and Richard Garriott's flight, go to:

http://www.ariss.org
http://richardinspace.com
http://spaceadventures.com
http://www.challenger.org
http://www.arrl.org
http://www.amsat.org
http://www.spaceflight.nasa.gov/station/reference/radio/index.html
http://dln.nasa.gov/dln/content/catalog/details/?cid=634
http://www.nasa.gov/mission_pages/station/science/experiments/ARISS.html

Scout Jamboree on the Air:
http://www.scout.org/jota

ARRL/TAPR DIGITAL COMMUNICATIONS CONFERENCE: "PRETTY INTERESTING!"

Almost 150 aficionados of digital communications came to Chicago for the 27th annual ARRL/TAPR Digital Communications Conference (DCC) the weekend of September 26-28 http://www.tapr.org/dcc.html. This conference is an international forum for radio amateurs to meet, publish their work and present new ideas and techniques. Presenters and attendees had the opportunity to exchange ideas and learn about recent hardware and software advances, theories, experimental results, and practical applications. Not only was the conference technically stimulating, it was a weekend of fun for all who have

more than a casual interest in any aspect of amateur digital electronics and communications; introductory sessions were scheduled throughout the conference to introduce new technical topics for both beginners and experts.

Friday was a full day of technical presentations, including "A Protocol for Multicast Weather Data Distribution over AX25," by Nick Luther, K9NL; "SuitSat-2 Update," by Steve Bible, N7HPR; "EcomScs and GateWayScs AX25 Packet Radio E-Mail," by John Blowsky, KB2SCS, and "Frequency and Other New Initiatives in APRS," by Bob Bruninga, WB4APR. The last presentation of the afternoon was "D-STAR Uncovered," by Peter Loveall, AE5PL.

Friday evening there was "a string of D-STAR presentations starting at 7 PM and lasting until after 10 PM. Presentations included the D-RATS messaging software by Dan Smith, KK7DS. Peter Loveall, AE5PL, presented 'D-PRS Update' about ways th D-STAR data links can be used to send and plot APRS position maps or interface to the APRS system. Robin Cutshaw, AA4RC, gave a presentation about DV-Dongle, a PC add-on that allows connection to D-STAR repeaters around the world through an Internet connection.

In addition to the main technical presentations on Saturday, there was also a full day of introductory sessions, mostly about digital voice and D-STAR.

Also on Saturday, Matt Etttus, N2MJI, gave a report on the Ettus Research USRP2. Tom Clark, K3IO, gave an "AMSAT Update." Paul Wiedemeier, KE5LKY, presented his paper on "Using UDPcast to IP Multicast Data over Packet Radio." Paul Rinaldo, W4RI, gave his "SDR Outlook" that covered the international regulatory front and presented some of the concerns that some world governments have with regard to the flexibility of SDR. Scott Cowling, WA2DFI, gave an "HPSDR (High Performance Software Defined Radio) Update" during which he described the various circuit boards that make up the HPSDR project. He also demonstrated a complete working radio in the demo room. Jerry Shirar, N9XR, presented a paper called "Clocking the Data," concerning the use of an inverter and a crystal to form a Colpitts oscillator.

Victor Poor, W5SMM, gave an update on Winlink 2000. "He reported that the network presently consists of one Web site, five Common Message Server sites around the world, 150 Radio Message Service Pactor Gateway sites, 800 RMS Packet Gateway sites and over 13,000 registered users,"

Rick Muething, KN6KB, described his "WINMOR Soundcard ARQ Mode for Winlink HF Digital Messaging." Rick reported that WINMOR is 3 to 4 months from beta testing. His preliminary comparisons to Pactor 1, 2 and 3 are based on simulator tests. He indicates that WINMOR will have better throughput than Pactor 1 and comparable to, or perhaps a bit better than Pactor 2, but not quite as good as Pactor 3. He indicated that the efficiency is within about 70 percent of Pactor ARQ."

Phil Harman, VK6APH, presented the Sunday morning seminar, "Software Defined Radio through the Looking Glass."

The decision was made to break with tradition, and return to Chicago next year, September 25-27. For more information on the 2008 Digital Communications Conference, please visit TAPR's DCC Web page http://www.tapr.org/dcc.html. –ARRL Letter

COPY W1AW WITHOUT A RECEIVER

Bryn, N4VM has generously made available hundreds of hours of W1AW code practice MP3

files that you can download and play on your MP3 player or computer at http://www.pcpractice.com/CW/.

They range in speed from 5 to 40 wpm. Text files showing the sent characters are also provided. They are indexed by speed: 5, 7-1/2, 10, 13, 15, 20, 25, 30, 35 and 40 wpm as well by date of transmission. There are also two directories 18 and 18 wpm - both of which contain 18 wpm Morse code practice.

On a related note, W1AW can be heard most evenings on CW via the short-wave receiver located at the amateur radio club ETGD at the University of Twente, The Netherlands http://websdr.ewi.utwente.nl:8901/.   Tune to 7047.500 kHz, CW, between 19:00 and 20:00 EDT. The W1AW schedule is at http://www.arrl.org/w1aw.html .

MONTANA HAM ASSISTS IN RESCUE OF FELLOW AMATEUR 600 MILES AWAY

On Sunday, September 21, Bob Williams, N7ODM, of Bozeman, Montana, was just tuning around on 40 meters, giving his rig a test just before a scheduled QSO with his brother Rich, K7URU, in Spokane, when he heard a faint CW signal around 1 PM (MDT): Glenn Russell Ruby Jr, W7AU, of Corvallis, Oregon had broken his leg and was using a portable radio and Morse code to send out a call for help. Williams said he was able to understand the injured man's code even when his signal became very weak.

"He called me. He must have heard me testing out the radio. When I finished, I signed off with my call, and then I heard, 'N7ODM, this is W7AU/7,' so I answered," Williams told the ARRL. "I told him to go ahead, I had solid copy. He told me that he was a hiker that had fallen and broken his leg. He identified himself as Russ, provided information as to his GPS coordinates, the shelter, food and water on hand, as well as his detailed physical condition. He told me exactly who I needed to contact for assistance."

According to Williams, Ruby had slipped on a wet rock and broken his leg while out hiking in the Buck Creek Pass area of the high Cascades in Western Washington, 600 miles away from Williams. "Russ really had his act together," Williams said. "Before he even called for help, he set up his tent. It was raining when he fell, so he climbed into his tent and got into some warm clothes and had a snack of sunflower seeds and dried apricots. After that, he strung up a wire antenna, fired up his Elecraft K1 and called me." Williams said that Ruby told him he had a "couple of weeks worth of battery power" for the radio.

Ruby asked Williams to notify the Snohomish County Search and Rescue in Washington State. "I didn't have their number, so I called my local 911 dispatcher. All they had was the info for King County in Washington, so I called them and they gave me the number for Snohomish. When I got a hold of Snohomish County Search and Rescue, they asked me to obtain additional info from Russ, such as the color of his tent and if he was in a clear or wooded area, and remain in contact with him as long as possible," Williams said.

"Russ and I were able to maintain contact until about 8 PM on Sunday, during which time I was able to pass additional traffic between Russ and Search and Rescue, but then his signal got so weak where I couldn't copy it anymore. Before he faded, we had agreed to try and make contact in the morning. I tried, starting around 6:30, but he never heard me. I finally heard him calling me around 9 on 7.051 MHz. We kept in contact until he was evacuated from the site by Search and Rescue at about 10:35 AM," Williams told the ARRL.

On Sunday, rescue crews reached Ruby, who had set up camp on Buck Creek Pass, at about 6000 feet just west of the Chelan County line. He was taken to safety Monday on horseback.

Williams said that bad weather Sunday prevented a helicopter rescue: "It was snowing all night; Russ told me that when he woke up Monday morning, his tent was all covered in snow."

"I just happened to be at the same frequency," Williams said. "It's just a stroke of luck that turned out great. It was quite an experience. I'm just glad that he was a ham radio operator and that I was able to talk to him. It made the difference for him. What I did was not anything special. I'd like to think that any ham in Montana would've done the same thing." --ARRL Letter

SHORTS

DX Engineering Acquires Comtek Systems: On September 24, DX Engineering http://www.dxengineering.com/announced it had acquired North Carolina-based Comtek Systems http://www.comteksystems.com/ . Comtek's manufacturing and customer service operations will move to DX Engineering's Akron, Ohio facility. "Comtek's products are highly regarded among Amateur Radio operators," said DX Engineering president Paul Sergi, NO8D. "The addition of these products to our popular line of antennas enhances our ability to supply complete, high quality, directional antenna systems. It's a win-win for DX Engineering and Comtek Systems customers." James Miller, K4SQR, principal of Comtek Systems concurred: "DX Engineering will continue the tradition of top quality products and customer satisfaction that we have provided for years. DX Engineering and Comtek Systems have complementary product lines and the synergy created by combining the two companies will bring many benefits to the Amateur Radio fraternity." --ARRL Letter