NSTAR

NSTAR Flight 09-B is scheduled for Saturday, July 11th at 7:30am CDT (1230 UTC). Launch site is not finalized, but will most likely be DC West High School in Valley NE or Gretna HS in Gretna NE. This flight will support the UNO Aerospace Education Workshop by flying teacher-constructed BalloonSats (small experiments in cubes suspended from the balloon). If the surface winds cooperate, the launch time may be delayed 30-60 minutes.

APRS will be on 144.36 MHz with callsign N9XTN-11 and 144.39 MHz with callsign N9XTN-12. A simplex repeater will be on 446.30 MHz with a voice announcement every 3 minutes. The simplex repeater antenna has been improved and we hope to have better performance for this flight.

The current forecast puts the landing about 90 miles ESE of the launch site. If we use Valley NE, the landing will be a few miles east of Clarinda IA.

While we hope to be able to drive directly from the launch site and be in place for the landing, given a flight distance of 90 miles and the track not really following the road network, we can use some chasers staged to the landing area. If you're planning to be in the landing zone, let me know. Also, anyone who would like to come out for the launch is more than welcome.

NSTAR Flight 09-C will be at the Great Plains Super Launch in Topeka on Saturday, July 18th. Frequencies will be the same. More information is at http://www.superlaunch.org and anyone is welcome to attend that event as well.

73 de Mark N9XTN

NSTAR's website is http://www.nstar.org.

Ham Hum Delivery

If you would like the Ham Hum delivered electronically by email, please let N0UP n0up@cox.net know. We will make sure your hum arrives when the mailed hum would arrive. This is an opt-out of receiving the Hum by mail only. If you do not request an emailed copy, you will continue to receive it by postal mail.   Ed.

Meeting Minutes

The June Minutes were not yet available by press time; they should be ready for next month.

AK-SAR-BEN Amateur Radio Club, Inc.

Ham Hum

The AK-SAR-BEN ARC has two 30 foot (approximate) towers that are for sale. These are the Motorola 30 series that would include three 10' sections, a top section and rotor plate. They are being offered for sale to make room for easier to erect antenna supports.

The Motorola 30 tower is similar to Rohn 25. These are the towers that have been used for AARC Field Days up until a couple of years ago.

There has not been a price set as of this issue of the Ham Hum. Interested parties should contact Corby KØSKW, or a member of the board of directors.

The AK-SAR-BEN ARC is also looking for a low-profile (under 16' retracted) crank up tower. Contact Steve, NØUP for more information.

July Meeting Program

Do you have a mess of cables, a jumble of cords or a pile of wire? Then come to the meeting on Friday and learn some good ways to stow that cable so it is ready when you need it.

Then after we have worked up a good appetite wrapping up wires, we'll adjourn to Perkins at 108th & L for some good food and laughs.

Field Day

Field Day 2009 has come and gone and boy what a great time.   The weather was great!   The fellowship was terrific and we got lots of visitors and new hams on the air.   We've had more stations on the air before, we've earned more points before, but I don't think we've had any more fun.   Several folks learned more about the OMMRS portable stations and learned the ins and outs of getting them on the air.   We ran from batteries and solar panel charging for several hours as well.

We were so busy operating and helping others learn the ropes, we didn't get too many photos.   But we will post what we have.   If you stopped by and took any photos, sent them along to n0trk@cox.net and we will put them on the web.

We had so much fun, after tear down, we went for lunch and starting to plan for next year!

HAM HUM is the official newsletter of the AK-SAR-BEN Amateur Radio Club, Inc. in Omaha, Nebraska. It is printed monthly and is distributed to members of the club, local disaster officials, local electronics outlets, and editors of other ham radio newsletters.

Articles about activities of members are solicited. The subject matter must be of general interest to radio amateurs and be understandable to a significant portion of the membership. No payment will be made to contributors and submissions will be subject to the usual editorial review. Articles containing statements that could be construed as libel or slander will not be accepted. No guarantee can be made that an accepted article will be published by a certain date. Send your contributions to Ham Hum, P.O. Box 24551, Omaha, NE 68124-0551 or email hamhum@aksarbenarc.org. Please contact the editor for permission to reprint anything appearing in the Ham Hum.

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2008-2009 Board	Jim Harper	KCØSHZ	402-659-0102	kc0shz@yahoo.com
2009-2010 Board (Secretary)	Greg Carlson	N7JOD	402-305-2009	revgreg1@gmail.com
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EC Sarpy County	Dennis Mitchell	KCØYKN		

Upcoming Events

July 10	AK-SAR-BEN ARC Business Meeting, 6:00 PM Red Cross
July 10	AK-SAR-BEN ARC Club Meeting, 7:30 PM, Red Cross
July 11	1DIJ 1 Day In July. Midwest HomeBrewers and QRP groups special QRP operating event in Ashland. Noon till dark. For more info, contact W9HZC.
July 11-12	Babcook Memorial Bicycle Race
July 17-19	RAGBRAI, Bicycle Ride Across Iowa
July 25	Cornhusker State Games Bike Tour
July 28	HDXA & AARC VE Test Session, 6:30 PM, Red Cross
August 14	AK-SAR-BEN ARC Business Meeting, 6:00 PM Red Cross
August 14	AK-SAR-BEN ARC Club Meeting, 7:30 PM, Red Cross
August 15	OMMRS/Offutt AFB Drill
September 26	River City Round Up Parade
September 27	Make-A-Wish Bike Ride
October 10	Market-To-Market Foot Race

More Windows Characters

From Joe, WØLHZ

Alt + 0176 = ° (Degrees)	Alt + 0162 = ¢
Alt + 0188 = ¼	Alt + 0189 = ½
Alt + 0190 = ¾	Alt + 0185 = ¹
Alt + 0178 = ²	Alt + 0179 = ³
Alt + 0163 = £	Alt + 0128 = €
Alt + 0169 = ©	Alt + 0174 = ®
Alt + 0153 = ™	Alt + 0165 = ¥
Alt + 0177 = ±	Alt + 0247 = ÷
Alt + 0166 = ¦	Alt + 0149 = •
Alt + 0134 = †	Alt + 0227 = ã
Alt + 0151 = — (m dash)	Alt + 0150 = – (n dash)
Alt + 0181 = µ (micro)	Alt + 0133 = …
Alt + 0216 = Ø	Alt + 0937 = Ω (Omega, Ohm)

Win (Windows) Key   Same as clicking on Start
Win Key + E Opens Windows Explorer
Win Key + F = Find Files & Folders
Win Key + R brings up the Run command.
Win Key + Pause/Break Key takes you to System Properties
Win Key + D toggles you between the Desktop and wherever you happen to be.

More special characters can be found on the character map, normally located under the start menu under the accessories folder.

Cornhuskers State Games - Bike Tour

The **Cornhusker State Games** have expanded their operation to the Omaha area with the Bike Tour moving to start in the city formerly known as Elkhorn. The ride will be on Saturday July 25 and will feature 3 distances on an out and back route. (Using turn around points for each distance) The most distant point will be Tekamah.   They have asked for radio support from us, and let's do our best to support them.

We need a minimum of 7 hams to get this done.   Mobiles most likely will be needed. We also need a couple of people who can ride with the event director and in the bike repair vehicle.   Others will be needed at the turn around points to assist the cyclists.   (hand held's with a magmount antenna will work in a couple of places, or if there are enough people we can double up HT's with mobiles.)

Contact csg-bikes@aksarbenarc.org to sign up to help.

Does Your Club Have an Elmers List?
By Dan Romanchik, KB6NU

Whilst looking up information for a recent hamfest, I found the club's website and began surfing around. In doing so, I came across their Elmer page (http://www.mcrca.org/elmers.htm). On it, they list a variety of topics with the name, call, and phone number of someone who can answer questions on that topic.

My club something similar once, but it was less than successful. I think that one of the problems was that we asked people to fill out a form on our website if they needed any help. That information was e-mailed to one guy, who then forwarded it to the appropriate Elmer. There was just too much time lag between the time someone asked for help and when they got it. Or, it may have been that filling out the form was just too impersonal.

We are going to try it again, though, using the format that the Monroe club uses. I'm also going to give it more billing on our website, and push it more at meetings and other gatherings.

The topics the Monroe club lists on their website are:
  * Antennas   * Buying Your First Radio   * Code Practice
  * Computers   * Packet   * County Hunting
  * DXCC Awards   * Rag Chewers Club   * Worked All States
  * DX   * FM   * Homebrew
  * Testing   * Public Service   * Technical Q&A
  * Traffic   * Tube Radios

We already have Elmers for several of these topics. I, for example, would be more than happy to volunteer to be the Morse Code/CW Practice Elmer. We have one member who is an avid County Hunter, another who restores vintage gear, and yet another who's been spearheading a statewide effort to set up a packet network throughout Michigan.

In addition, we are going to add or modify several of the categories. For example, Computers might become "Computers/Software" depending on who volunteers to be the Elmer. We have a couple of guys who are heavily into VHF/UHF operation and contesting, so we'll be adding those topics as well.

I really do hope that this will be an important resource for our club. In the past year, we've helped quite a few folks get their licenses, and now we need to help them take advantage of that license and get the most out of the hobby. Elmering is the way to do that.

Does your club have an Elmer list? If so, does it have topics that I haven't thought of yet? How do you get newcomers to take advantage of the knowledge and experience of your Elmers? And, finally, what topics have you volunteered to be Elmer for? Let me know by e-mailing me at cwgeek@kb6nu.com.

A Tale of Two Tubes

By Dan Romnanchik, KB6NU

A couple of weeks ago, I worked N4QR on 40m CW. I could tell by the tone of his signal that he was operating a homebrew transmitter. There wasn't any 60 Hz on his signal, and it didn't chirp exactly, but I could tell it wasn't the pure tone you get out of today's radios.

I asked him about his rig, and he told me that it was a one-tube transmitter made with a 6L6. I forgot to ask him where he got the schematic, but a quick Internet search turned up the following:

* The May 2005 issue of the K9YA Telegraph (http://www.k9ya.org) has an article written by N4QR titled, "The Wonderful One-Tuber," that contains the schematic for the transmitter. The K9YA folks don't make issues of The Telegraph available on their website, but I was able to get a copy of the issue by e-mailing them.
* A 6L6 Classic (http://www.io.com/~nielw/6l6/6L6.htm)
* WB2MIC 6L6 Transmitter Project (http://www.metaphoria.us/hamradio/6L6_transmitter_schematic.htm)

The 6L6 is a pentode that, according to Wikipedia (http://en.wikipedia.org/wiki/6L6), was introduced by the Radio Corporation of America (RCA) in July 1936. Apparently, it was used quite a bit in public address systems.

After the tube became successful, tube manufacturers introduced a number of variations, including the venerable 807. The original 6L6 was capable of delivering 19 W; the latest variation, the 6L6GC is rated for 30 W. The 6L6GC is still used in guitar amps, and is still manufactured in Russia, China, and by Groove Tubes (www.groovetubes.com) in the U.S. They sell a number of different 6L6 variants; the cheapest is $16, the most expensive $180!!

Tube #2
One of the reasons I was interested in the 6L6 is because about a year ago I came across a schematic for a transmitter using 6A6 dual triode. I had just come into possession of a couple hundred tubes, and while I didn't have a 6A6 (at least I haven't found one yet), I do have a couple of 6J6 dual triodes. They're not quite as high power as the 6A6, but I'm still thinking about building a little transmitter with one.

As you might expect, there's a bunch of information on the Internet about this tube:
* The Jones Push-Pull Transmitter (http://wv7g.home.mindspring.com/jones_6j6.html) was built with a 6J6 instead of a 6A6.
* Another schematic can be found on the AK0B website (http://www.qsl.net/ak0b/).
* 6J6 data sheet (http://www.gargnas.net:3000/tubedata/6J6.pdf) from the GE data book.

One interesting fact about the 6J6 is that IBM used it in the 604 computer. Unfortunately, they found it to be not as reliable as they wanted it to be, but at first none of the tube manufacturers were interested in making a more robust version. This led IBM to set up a tube-making laboratory where they could experiment with designs. They developed a more reliable version of the 6J6 and finally convinced RCA to manufacture the tube. According to the author of the history of the 604 (http://ed-thelen.org/comp-hist/IBM-604.html#new), part of the concern is that IBM would decide to get into the tube business.

So, the next time you hear a signal that doesn't sound so perfect remember that there just might be a story behind it. Ask the op about his transmitter, and listen to what he or she has to say.

When not pondering the mysteries of vacuum tube part numbers, KB6NU teaches ham classes, works CW on the HF bands, and blogs about ham radio at http://www.kb6nu.com.

Babcook Memorial bicycle races

July 11th and 12th will be the annual **Dave Babcook Memorial Bike Race**, held in conjunction with the Omaha Cycling Weekend. Once again the Ak-Sar-Ben Amateur Radio Club has been asked to provide communications to help ensure rider safety. Proceeds from this race stay in Omaha and go to benefit Pancreatic Cancer research. Dave Babcook was an avid cyclist from the area and died of Pancreatic Cancer.

This year, Saturday morning will be the Mount Michael Time Trial starting at 9:00 a.m. Volunteer communicators need to be on site by 8:30 a.m. Mostly mobiles are needed for this event, dual bands would be nice, but 2 meters only will work too. We should be done by noon that day.

The second stage of the Dave Babcook Memorial Bike Race will be a road race on Sunday Morning. The race once again starts and ends at Mount Michael with the first riders going off at 9:45 so we need to be onsite by 9:00 a.m. for assignments and allow for time to get into position. Races should be done by 3:00 p.m. Mobiles are again the name of the game, but a handheld with a magmount antenna should be useable as well. Might need some folks to drive the officials.

If you can help, contact babcook@aksarbenarc.org to Volunteer.