

## GREAT PLAINS SUPER LAUNCH



Balloons being launched at the 2009 GPSL in Topeka, KS.

The twelfth annual Great Plains Super Launch (GPSL), hosted by Nebraska Stratospheric Amateur Radio (NSTAR), will be held in Omaha, Nebraska on June 7-10, 2012. The GPSL is an annual gathering of Amateur Radio High Altitude Ballooning enthusiasts from around the country to a site in the central US where they participate in technical presentations and a group launch. This is the second time the Super Launch has been held in Omaha, the first being in July 2005. About 75 amateurs and other interested individuals are expected to attend, with 7 to 10 balloons launched on Saturday morning.

Amateur Radio High Altitude Ballooning involves the use of amateur radio to track weather balloons from their launch to landing. The weather balloons can carry cameras and scientific instruments to make observations in the atmosphere. By tracking the balloons, the equipment can be recovered and reused on future flights. The balloons used are similar to those launched by the National Weather Service to make atmospheric observations. Most ARHAB groups use the Automatic Packet Reporting System (APRS) digital format to transmit the location and altitude of the balloon to the chase crew. ARHAB flights are typically launched in the early morning and the flight takes about two hours to complete, reaching altitudes of 100,000 feet or more.

The GPSL events are open to all interested individuals. There is a conference fee for the Friday events to cover the cost of meals (which are provided on-site) and the hall rental. Attendance at the launch is free and open to all.

Below is the schedule of events as of late February. Please check the website for updates as the date approaches:

**June 7 (Thursday):** Early arrivals' events at the Strategic Air and Space Museum in Ashland.

**June 8 (Friday):** Presentations and conference dinner at Arbor Hall (144<sup>th</sup> & Center in Omaha).

**June 9 (Saturday):** Launch day. Primary launch site is the Strategic Air and Space Museum parking lot, but subject to change due to wind forecasts. Final launch site selection will occur on Friday afternoon.

**June 10 (Sunday):** Backup launch day if Saturday's weather is bad.

The GPSL 2012 organizers can use some assistance from area hams. In particular, we can use 2-3 hams with pickup trucks to help transport helium cylinders to and from the launch site on the morning of the launch. Some groups attending GPSL 2012 will be shorthanded and will need assistance with balloon and payload handling during the launch.

The main websites for GPSL 2012 are <http://superlaunch.org> and <http://nstar.org/gpsl2012>. If you have questions, plan to attend, or would like to help, please contact Mark Conner at [n9xtn@arrl.net](mailto:n9xtn@arrl.net) or by phone at (402) 201-4422. To find out more about ARHAB in general, go to <http://arhab.org/>.

Mark N9XTN

AK-SAR-BEN Amateur Radio Club, Inc.

# Ham Hum

Volume LXII, Issue 3

March 2012

## The Droid You're Looking For...



...may be this one. So moving along...

For the February meeting, Scott KA4ZZQ gave a talk on programming Androids. (The communications devices, not the robots.) Though it's a complex subject, he provided a handout (available from the Club web site at (<http://www.aksarbenarc.org/main/>) and walked us through the basic procedure.

Scott pointed out that to write an Android application program, you must first install three sets of software onto your computer: First, install the Java Runtime Environment (JRE). Java is the programming language used to develop the application. Next, the Eclipse Integrated Development Environment (IDE). This is software that ties everything together and automates much of the coding process. Finally, the Android Software Development Kit (SDK). This has programs, libraries, and tools unique to the Android. Once all are installed, you're ready to begin writing code.

For the demonstration, Scott wrote and compiled a simple program (called *Madhouse*) that would display "Hello World" on the screen. Using the above software, he compiled and tested it (using an Android emulator in the IDE) before sending it to the unit. Testing with an emulator reduces the chance of bugs crashing an actual cell phone.

Once the program was debugged and ready to go, he installed the resulting binary image by emailing it to his Android and running the setup procedure. Success was indicated by the icon appearing and the display of "Hello World" when he executed it.

(DROID continued on the bottom of page 7.)



## March Meeting: The Kilo-Cycle



Pat KØCTU will demonstrate his bicycle-powered generator. In the past, he's used it to provide up to 140 watts (11 amps at 13 volts) to a 440 MHz mobile rig operating on high power. **Volunteers are invited to try it themselves.** Pat will provide a bicycle, but you may supply your own as long as the tires don't have a heavy tread.

Friday, March 9, 7:00 PM, Red Cross Building, 81<sup>st</sup> & Spring Streets, Omaha, NE.

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.

### Club Officers & Board Members

President	Mary Joseph	NØTRK	402-492-9156	n0trk@arrl.net
Vice President	Scott Avery	KA4ZZQ	402-880-9246	scott@averysgk.com
2011-2012 Secretary	Bill True	WA9ASD	402-426-2813	williamtrue@aol.com
2011-2012 Treasurer	Marvin Taylor	AEØEG	402-556-3668	AEØEG@arrl.net
2012 Director	Adam Kavan	KDØMMG	402-598-1521	akavan@gmail.com
2012 Director	Dave Rice	NØJSB	402-571-8915	davegr@netzero.net
Immediate Past President	John Gebuhr	WBØCMC	402-932-3443	wb0cmc@cox.net

### Club Committees

Courtesy Committee	(Open)			
Education	Mary Joseph	NØTRK	402-492-9156	n0trk@arrl.net
Field Day	(Open)			
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### Repeater Committee

Chairman	John Gebuhr	WBØCMC	402-932-3443	wb0cmc@cox.net
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Control Operator	Mary Joseph	NØTRK	402-492-9156	n0trk@arrl.net
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EC Sary County	Dennis Mitchell	KCØYKN		
Exams/Vol. Council	Brian Zdan	KMØY	402-553-2610	bzdan@novia.net
NE Section Manager	Art Zygielbaum	KØAIZ	402-421-0839	KØAIZ@arrl.org
Official Observer Coordinator	Bill McCollum	KEØXQ		ke0xq@cox.net

### Address Change?

If you've changed your mailing address, or would prefer to receive the Ham Hum via email, please contact Mary NØTRK (Membership) or Bill KCØSVZ (Publications) with your new information.

### AARC on the Web

**Club Web Site:** <http://www.aksarbenarc.org/>

**Facebook:** <https://www.facebook.com/aksarbenarc>

**Yahoo! Groups:** <http://groups.yahoo.com/group/AKSARBENtalk/>

(HAM TECH continued from page 10.)

Table 3 - Gain (dBd) Dipoles and 3-Element Yagis as a Function of Elevation Angle

El.	40DP33	20DP33	20Y33	20Y66	20Y100
5	-11.3	-5	+2.9	+5.0	+8.2
10	-6.3	-1	+4.5	+9.6	+11.2
15	-2.3	+1	+7.6	+11.0	+8.2
20	-0.3	+3	+9.4	+9.5	-12.8
25	+0.8	+4	+10.2	+6.5	+6.7
30	+1.8	+5	+10.4	-4.0	+9.6

Table 3 is a correction function used for the Signal and S/N data from Tables 1 and 2. They are all in dB so you simply add the correction function to the signal and S/N values. Select the appropriate antenna and an elevation angle from Table 3 that comes closest to the launch angle from Tables 1 or 2. Remember that the launch angle is determined by the ionosphere not your antenna. Also there are antennas at both stations on the link, not just your end. You apply the correction to both ends if you can make an educated guess as to what the other ham may use for an antenna. On 20 meters and higher frequencies a 3-element Yagi at modest height is a reasonable guess.

As an example, the uncorrected signal level and S/N for the path to England at 20 meters is: Sig = 31 dB above 0.5 microvolts and the S/N = 21 dB. The launch angle is 5 degrees with two F layer hops. A 20-meter, 33-foot high dipole would reduce both the Signal level and S/N by 5 dB, while a 33-foot Yagi would increase both by 2.9 dB and a 66-foot Yagi would increase both by 5 dB. If you have a 66 foot high Yagi and a station likely to reply to your CQ has one at 33 feet you will gain almost 8 dB over the uncorrected data. Your signal level will be 39 dB (S-8.8) and the S/N will be 29 dB (5 S units above noise).

Next month we dig into the W6EL PROP software and learn what else it will provide, where we get the values that are required to run it, and how to interpret the outputs.

John WY2J

*[Editor's Note: For Linux users (Ubuntu 11.04), W6ELProp version 2.70 (<http://www.qsl.net/w6elprop/>) appears to run properly on Wine 1.2.2 (<http://www.winehq.org/>). Your mileage may vary for Mac systems. As WY2J stated in the article, the next installment will cover using W6ELProp; however, you can find some basic information for getting started at <http://www.qsl.net/ab0mv/prop.htm>. --Bill, KCØSVZ]*

### Saturday Night Coffee

AARC members met for coffee and food at Perkins Restaurant on 108<sup>th</sup> & L Streets in Omaha at 6:00 PM, February 18<sup>th</sup>. Attending were Pat KØCTU, Claudia K1AUD, Bill KCØSVZ, Roxanne KDØMTK and son William NØCALL, Sean KDØQQZ, Christina NØRIS, Mary NØTRK, Greg WØAAI, and John WBØCMC. We talked and gossiped about all kinds of interesting things. Be there, you're missing out.

Note: The Club meets for coffee on the third Saturday of the month. See the *Club Calendar* in this issue for details.

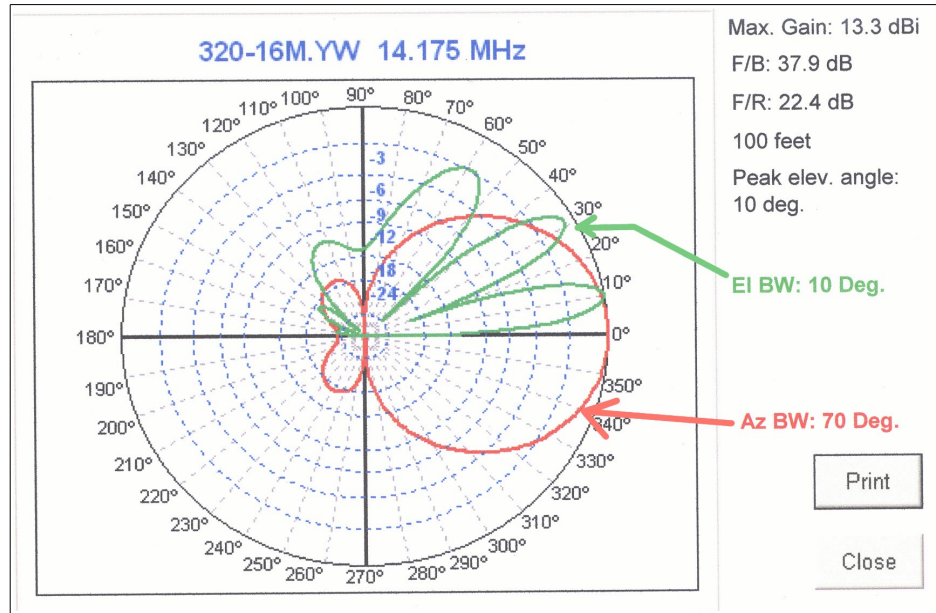
Bill KCØSVZ

Table 2 - Propagation C H, NJ to England  
Jan 2011 SSN = 31.1 SF = 90 K = 1 D = 3486 mi.

UTC	Freq	SigdB	S/NdB	Avail	Angle	Hop
1600	7.1	6	-12	1.0	19	FFFF
1600	10.1	18	3	1.0	13	FFF
1600	14.1	31	21	1.0	5	FF
1600	21.0	31	26	0.73	5	FF

So what does the data in the tables mean? On the 1300 mile circuit to Dallas you could use any of the four bands although the S/N on 40 meters is probably too low. On 20, 30, and 40 meters the probability of the band being open is nearly 100 percent (Availability = 1.0) while 15 meters is only 58 percent. So, antennas with useful gain for launch angles of 10 degrees are not too difficult to achieve at 15 and 20 meters. On the 3500 mile path to England it is going to be a choice between 15 and 20 meters but the 5 degree launch angle is more demanding.

I ran a number of simulations of a 3-element, 20-meter Yagi at different heights using the YW software. The 100-foot case performance and patterns are shown in the figure below.



I took the relative gain in 5° steps off of the plot, added it to the max gain of 13.3 dBi and subtracted the 2.15 dB correction factor for dBi to dBd to generate the 100 ft. Yagi column in Table 3 below. Similar runs on YW at 33 and 66 ft. height and Dipoles on EZNEC at 33 ft. fill out Table 3.

## Club Meeting Minutes – February 10, 2012

Bill WA9ASD, Secretary AARC

The meeting was called to order at 7:01 PM by saying the Pledge of Allegiance. There were 28 attendees. Introductions by name and call.

Officers and Board members present included: Mary, NØTRK; Scott, KA4ZZQ; Marv, AEØEG; Bill, WA9ASD; and Adam, KDØMMG and Dave, NØJSB.

Secretary's Report - A motion was made by Greg, WØAAI, seconded by Adam, KDØMMG, to accept the January club meeting minutes as published in Ham Hum. There were no corrections required and the motion passed unanimously.

Treasurer's Report - The balance in all of the accounts is \$22,062.48.

President's Report - Mary, NØTRK - The Budget Committee is setting a date so committee chairs can submit their budget requests.

Vice President's Report - The program for tonight's meeting will be on how to program an application for an Android phone.

### Public Service – ARES/SATERN/Community Events

ARES - Steve, NØUP:

- On February 22 the ICS Study Group will meet for preparation for the EMA courses required to participate in drills and emergencies. Courses 100B and 700 are required. Courses 200 and 800 are highly recommended. Taking Spotter Training is also highly regarded.
- On March 21 Spotter Training will be conducted at 7 PM at Boys Town.
- On March 24 the Douglas County siren test will be conducted. Contact Steve, NØUP to participate.
- On April 18 there will be Skywarn training at the Douglas County EOC starting at 6:30.

SATERN - no report

COMMUNITY EVENTS - Pat, KØCTU

- The MS Walk will be April 14th. Please contact Pat to sign up.
- The State Track Meet will be May 18 and 19. Volunteers need to contact Pat, KØCTU.

Education Committee - Mary, NØTRK - Of the 8 people who attended the class, 3 took the test and 2 passed.

Membership Committee - Mary, NØTRK - Dues are due. Reminder cards have been sent to all previous and former members. The club roster and membership cards should be available in March.

### Publications/Web Services

- Ham Hum - Bill, KCØSVZ - It's on time.
- Web Services - Mary, NØTRK - Still looking for active assistance with the club web site.

(Meeting Minutes continued from page 3.)

Repeater Committee - John, WBØCMC - The repeater is still working.

Field Day Committee - One person is considering being the chairperson - we should know soon.

QSL Committee - no report

Technical Committee - no report

Courtesy Committee - We need a volunteer for this position for this year.

Trailer Committee - There will be a meeting on February 16 to plan the next steps with the trailer.

Equipment Committee - The members of the Equipment Committee are: Corby, KØSKW; Steve, NØUP; Bill, WA9ASD; Mary, NØTRK and Pat, KØCTU. The committee will meet on February 23 at the Village Inn at 90<sup>th</sup> north of Maple at 6:30.

Public Awareness

- The people organizing OSFEST want us to participate in their convention in July.
- The club will participate in the Douglas County Safety Fair at The Westroads on April 28<sup>th</sup>. Club members will be available to help people program weather radios with the alert level and county codes. That weekend is also the Nebraska State QSO party so we will be operating in the parking lot on HF with our banner. There are many outside activities planned for the Safety Fair.

Old Business - none

New Business - The Flea Market Committee consists of Pat, NØCTU; Bill, WA9ASD and Adam, KD4MMG. The Flea Market will be held at the Sarpy County Fairgrounds on September 8 from 8 AM to 1 PM. On that Saturday, the Nebraska Football team will be playing at UCLA so even if the game starts at 11 AM their time it will be 1 PM our time when it starts. The hall holds 42 tables and costs \$400 with a \$200 deposit due now and the remainder the day of the event. We will also pay an additional \$50 to access to the building the day before for cleanup/setup. Volunteers are needed for the kitchen, to help vendors unload and set up, for table sales, for door prizes and talk-in. A sign-up sheet will be passed around.

Announcements - Norm, WAØJYD reported that there will be up to 6 hours of programs about ham radio on shortwave frequencies of 9,990 kHz and 5,885 kHz from 4 PM to 10 PM. It appears to be part of a test of a 100 kW shortwave station in Tennessee.

Door Prize Committee - Rollie, ABØNN - Tonight's door prizes are a float charger and 3 assorted storage bins. In addition there is a Brown Bag Door Prize and the Mr. Reeh Door Prize, with the theme of "What Is It?" or "Who Would Want It?" This prize is from the extensive collection of ham artifacts amassed by the world famous DXer Anton Reeh, UN1QUE from Kazakhstan.

At 7:44 PM a motion was made by John, WBØCMC, seconded by Scott, KA4ZZQ to end the meeting. Passed by unanimous vote.

*Bill WA9ASD, Secretary AARC*

## Contest Calendar

### March 2012

AWA John Rollins Memorial DX Contest	2300Z, Mar 7 to 2300Z, Mar 8 and 2300Z, Mar 10 to 2300Z, Mar 11
RSGB Commonwealth Contest	1000Z, Mar 10 to 1000Z, Mar 11
AGCW QRP Contest	1400Z-2000Z, Mar 10
EA PSK63 Contest	1600Z, Mar 10 to 1600Z, Mar 11
Idaho QSO Party	1900Z, Mar 10 to 1900Z, Mar 11
North American Sprint, RTTY	0000Z-0400Z, Mar 11
SKCC Weekend Sprint	0000Z-2400Z, Mar 11
Wisconsin QSO Party	1800Z, Mar 11 to 0100Z, Mar 12
NAQCC-EU Monthly Sprint	1800Z-2000Z, Mar 12
CWops Mini-CWT Test	1300Z-1400Z, 1900Z-2000Z, Mar 14 and 0300Z-0400Z, Mar 15
RSGB 80m Club Championship, CW	2000Z-2130Z, Mar 14
SARL VHF/UHF Analogue/Digital Contest	1600Z, Mar 16 to 1000Z, Mar 18
10-10 Int. Mobile Contest	0001Z-2359Z, Mar 17
BARTG HF RTTY Contest	0200Z, Mar 17 to 0200Z, Mar 19
Russian DX Contest	1200Z, Mar 17 to 1200Z, Mar 18
Oklahoma QSO Party	1300Z, Mar 17 to 0100Z, Mar 18 and 1300Z-1900Z, Mar 18
AGCW VHF/UHF Contest	1400Z-1659Z, Mar 17 (144) and 1700Z-1759Z, Mar 17 (432)
Virginia QSO Party	1400Z, Mar 17 to 0200Z, Mar 18 and 1200Z-2400Z, Mar 18
Field Hell Sprint	1600-1800 local, Mar 17
North Dakota QSO Party	1800Z, Mar 17 to 1800Z, Mar 18
Run for the Bacon QRP Contest	0100Z-0300Z, Mar 19
NAQCC Straight Key/Bug Sprint	0030Z-0230Z, Mar 22
RSGB 80m Club Championship, SSB	2000Z-2130Z, Mar 22
CQ WW WPX Contest, SSB	0000Z, Mar 24 to 2400Z, Mar 25
QRP Homebrewer Sprint	0000Z-0400Z, Mar 26
SKCC Sprint	0000Z-0200Z, Mar 28
CWops Mini-CWT Test	1300Z-1400Z, 1900Z-2000Z, Mar 28 and 0300Z-0400Z, Mar 29
Missouri QSO Party	1800Z, Mar 31 to 0500Z, Apr 1 and 1800Z-2359Z, Apr 1

### April 2012

RSGB 80m Club Championship, CW	1900Z-2030Z, Apr 2
ARS Spartan Sprint	0100Z-0300Z, Apr 3
SARL 80m QSO Party	1700Z-2000Z, Apr 5
LZ Open 40m Sprint Contest	0400Z-0800Z, Apr 7
PODXS 070 Club PSK 31 Flavors Contest	1200-1800 local, Apr 7
SP DX Contest	1500Z, Apr 7 to 1500Z, Apr 8
NAQCC Straight Key/Bug Sprint	0030Z-0230Z, Apr 11
CWops Mini-CWT Test	1300Z-1400Z, 1900Z-2000Z, Apr 11 and 0300Z-0400Z, Apr 12
NAQCC-EU Monthly Sprint	1800Z-2000Z, Apr 11
RSGB 80m Club Championship, SSB	1900Z-2030Z, Apr 11

For details, check: <http://www.hornucopia.com/contestcal/index.html>

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*You may be a ham radio operator if: You have looked at telephone poles and power line towers as potential antenna supports.*

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## The Extra Class Question of the Day

by Dan Romanchik, KB6NU

As many of you already know, I have written study guides for the Tech and General Class license exams ([www.kb6nu.com/tech-manual](http://www.kb6nu.com/tech-manual)). Until now, however, I've shied away from writing an Extra Class study guide. The two main reasons for this is that the material is much more complicated and there's a lot more of it.

This year, however, the NCVEC is updating the Extra Class question pool, and I've decided to bite the bullet and do it. So, I'm now in the process of writing a No-Nonsense Extra Class Study Guide.

After I got started on this, I had a D'oh! moment. It occurred to me that instead of just publishing this material in the study guide, I could also post some of it to my blog ([www.kb6nu.com](http://www.kb6nu.com)). So, now I have the *Extra Class question of the Day* feature on KB6NU.Com.

In reality, it's usually more than just a single question because many of the questions are on the same topic. That's OK, though, because in reality, I don't post these every day. So, it all works out. Having said all that, here's an example. The correct answer to the question is in bold.

Extra Class question of the day: *meteor scatter*

Amateur radio operators use many different ways to get signals from one spot to another. Perhaps one of the most interesting is meteor scatter propagation.

Meteor scatter propagation is possible because when a meteor strikes the Earth's atmosphere, a cylindrical region of free electrons is formed at **the E layer** of the ionosphere. (E3A08) **28 - 148 MHz** is the frequency range that is well suited for meteor-scatter communications. (E3A09)

Unfortunately, these ionization trails are relatively short-lived, so to communicate via meteor scatter, you need to either be able to detect when these paths are available or be transmitting when the paths are available. **All of these choices are correct** when talking about good techniques for making meteor-scatter contacts (E3A10):

- 5 second timed transmission sequences with stations alternating based on location
- Use of high speed CW or digital modes
- Short transmission with rapidly repeated call signs and signal reports

For more information on meteor scatter, go to:

- G3WZT's Meteor Scatter page ([www.qsl.net/g3wzt/g3wzt\\_ms.html](http://www.qsl.net/g3wzt/g3wzt_ms.html))
- RSGB's Meteor Scatter page ([www.rsgb.org/psc/meteor-scatter.php](http://www.rsgb.org/psc/meteor-scatter.php))

For more Extra Class questions of the day, go to [www.kb6nu.com](http://www.kb6nu.com).

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*When he's not trying to figure out how he'll be able to finish writing the No-Nonsense Extra Class License Study Guide, Dan, KB6NU is station manager at WA2HOM ([www.wa2hom.org](http://www.wa2hom.org)), the ham radio station at the Hands-On Museum in Ann Arbor, MI. If you have a particular question that you'd like him to make a "question of the day," e-mail him at [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com)*

## HAM TECH v2n2: HF Propagation and Antennas

By John Fogleboch Sr. WY2J

Email: [wy2j@arrl.net](mailto:wy2j@arrl.net)

(Reprinted from the South Jersey Radio Association <<http://www.sjra.org/>> newsletter, Harmonics, Ted Groke, W2TAG, Editor.)

This month we look at two subjects simultaneously, HF Propagation and HF antenna analysis. This approach was selected because of the tight interaction between the two. Unlike LOS and Tropo Scatter presented in earlier issues of HAM TECH, these two subjects rely on computer simulation rather than mathematical analysis.

There are several simulation programs that can predict HF (3 to 30 MHz) propagation performance. But few are free of charge and run on a Windows platform like W6EL PROP, which is available for downloading at [www.qsl.net](http://www.qsl.net). This propagation program does not allow integrating the antenna into the simulation, but does easily allow correcting the signal level and S/N predictions based on a separate simulation of the antenna. It also provides the key data item to drive the antenna simulation.

There are two antenna simulation programs that are included in the CD ROM that comes with every ARRL Antenna Handbook. They are: YW for Yagi antennas and the ARRL version of EZNEC, which is the complete EZNEC antenna analysis software but limited to 20 segments. It is adequate for simple dipoles and it also supports many of the antenna designs that are included in the handbook. If you want an unrestricted copy of EZNEC, prices start at \$50.

Newsletter space limitations in any one issue of precludes a full discussion of the software tools, how to use them, and what do they do for you. So this issue just introduces you to them and gives you a peek at what they produce. There are at least two more follow-on issues to finish the subject.

I fired up my copy of W6EL PROP in January, ran two simulations on 15, 20, 30, and 40 meter CW using 100 watts into a free space dipole, the default antenna of the software, using the solar parameters for the day. The first simulation was between Cherry Hill, NJ and Dallas, TX and the second was Cherry Hill to England. I then selected the time of day with the best signals for each simulation and included that data into Tables 1 and 2. This includes Time, Frequency, received Signal level in dB above 0.5 microvolts (S 2.33, 40 dB below S 9 on a properly calibrated S meter), Signal to Noise ratio in dB, Availability, elevation launch Angle, and ionosphere layer Hops.

Table 1 - Propagation C H, NJ to Dallas, TX  
Jan 2011 SSN = 31.1 SF = 90 K = 1 D = 1307 mi.

UTC	Freq	SigdB	S/NdB	Avail	Angle	Hop
1700	7.1	27	9	1.0	26	FF
1700	10.1	29	15	0.96	26	FF
1700	14.1	41	31	1.0	10	F
1700	21.0	40	34	0.58	10	F

(HAM TECH continued on page 10.)



## Veep Speaks

Greetings y'all RF-type dudes and dudettes! This month our program will be Pat, KØCTU, and his bicycle-powered generator. I wonder if part of the Zombie Apocalypse Stores should include a healthy supply of low-loss

hardline, so we won't have to pedal as hard? Hmmmm...

I'm finding it hard to believe it's March already. I'm also wondering if one's perception of time is proportional to one's amount of time already experienced. Seems I just wished certain Facebook friends happy birthday just a couple days ago.

Sigh.

Oh well. Easter is coming soon, so I'm getting my annual dosage of Peeps. I guess flying time may not be so bad after all.

73 -ZZQ  
[/veepspeak]

## February Door Prizes

The door prizes for the February meeting consisted of three small-parts storage bins, a Cen-Tech Automatic Battery Float Charger (though it's not water proof), the Brown Bag Prize, and the Mr. Reeh Door Prize.

Door Prize Giver Rollie ABØNN drew the tickets and announced the winners. The storage bins went to three people: Mitch WBØGBI, Ron KAØT, and Claudia K1AUD. Dave NØJSB got the battery charger. (He originally won one of the storage bins, but tranded up after his name was picked again.) The Brown Bag prize—an AC timer power switch—was awarded to Brian, KDØKFY. The Mr. Reeh Door Prize went to Marvin AEØEG and turned out to be a Regency Monitoradio MR-10 VHF (152-174 MHz) FM receiver.

Note that the proceeds for each month's tickets go for buying next month's prizes. Each month's tickets are kept and included in the Grand Prize(s) drawing in December. The more tickets you buy each month, the better your chances of winning at the end of the year. See the Club Meeting Minutes for more information.

Bill KCØSVZ

## Want Ads

For Sale Kantronics "The Interface" (used). Vintage RTTY-CW-µP Terminal Unit. No cables, or software. SN is 20679. Item is in good physical condition, but it is untested. Price: \$5 . Contact Mary NØTRK. Email: n0trk@cox.net

For Sale SkyWarn Signs (used). I have a pair of magnetic SkyWarn signs. Price \$10.00. If interested, send me an email. Contact: Bill KEØXQ. Email: ke0xq@cox.net

Make a Deal Satellite Dish (used). Have you considered making a radio telescope from an old satellite dish? My next door neighbor has an 8-foot-wide dish that he hasn't used for years. If you are interested in it I'm sure that you could make a deal with him. It's mounted on a post that is in concrete, but the post is more than one piece so it can be removed without messing with the concrete. It has the LNB and the motor drive on it. Contact Pat KØCTU. Email: k0ctu@arrl.net

## Club Calendar

- Mar 9** 7:00 PM AARC Meeting. Red Cross Building, 81<sup>st</sup> and Spring St, Omaha, NE.
- Mar 10** 11:00 AM HBQRP Meeting. Bredeaux Pizza, 1425 Silver Street, Ashland, NE.
- Mar 11** 9:00 PM Douglas County ARES Net, KØUSA 146.940(-) repeater.
- Mar 12** 8:00 PM AARC Social Net, KØUSA 146.940(-) repeater.
- Mar 13** 7:30 PM Lincoln Amateur Radio Club Meeting. 4647 Superior St, Lincoln, NE.
- Mar 15** 7:30 PM Bellevue ARC Meeting. 1908 Franklin St, Bellevue, NE.
- Mar 16** 7:00 PM SACMARC, Wendy's 610 Galvin Road, Bellevue, NE.
- Mar 17** 8:30 AM Lincoln Hamfest, Lancaster Events Center, 84<sup>th</sup> & Havlock, Lincoln, NE.
- Mar 17** 6:00 PM AARC Coffee. Perkins Restaurant, 108<sup>th</sup> & L Streets, Omaha, NE.
- Mar 18** 9:00 PM Douglas County ARES Net, KØUSA 146.940(-) repeater.
- Mar 19** 8:00 AM Severe Weather Awareness Week begins.
- Mar 19** 8:00 PM AARC Social Net, KØUSA 146.940(-) repeater.
- Mar 21** 7:00 PM Spotter Training, Boys Town Music Hall, 13715 Flanagan Blvd, Omaha.
- Mar 22** 7:30 PM Southwest Iowa ARC Meeting. 705 N 16<sup>th</sup>, Council Bluffs, IA.
- Mar 23** 5:00 PM Severe Weather Awareness Week ends.
- Mar 23** 7:30 PM PARC Meeting. 1900 E. Military Ave, Fremont, NE.
- Mar 24** 8:00 AM Siren Test. Contact Steve, NØUP to participate.
- Mar 24** 1:00 PM Spotter Training. UNL Hardin Hall, 33<sup>rd</sup> St. & Holdrege, Lincoln, NE.
- Mar 25** 9:00 PM Douglas County ARES Net, KØUSA 146.940(-) repeater.
- Mar 26** 8:00 PM AARC Social Net, KØUSA 146.940(-) repeater.
- Mar 27** 6:30 PM AARC Board Meeting. Village Inn, 7837 Dodge, Omaha, NE.
- Mar 27** 6:30 PM License Exams, VE Team, Red Cross Bldg, 81<sup>st</sup> & Spring, Omaha, NE.
- Mar 29** 7:00 AM Spotter Training. Fire Training Site, 3100 Cornhusker Rd, Bellevue, NE.
- Apr 1** 9:00 PM Douglas County ARES Net, KØUSA 146.940(-) repeater.
- Apr 2** 8:00 PM AARC Social Net, KØUSA 146.940(-) repeater.
- Apr 8** 9:00 PM Douglas County ARES Net, KØUSA 146.940(-) repeater.
- Apr 9** 8:00 PM AARC Social Net, KØUSA 146.940(-) repeater.
- Apr 10** 7:30 PM Lincoln Amateur Radio Club Meeting. 4647 Superior St, Lincoln, NE.
- Apr 13** 7:00 PM AARC Meeting. Red Cross Building, 81<sup>st</sup> and Spring St, Omaha, NE.

For more details and the latest updates, see the *Upcoming Events* section of the AARC web site (<http://www.aksarbenarc.org/main/>).

## Lincoln Hamfest 2012

The 2012 ARRL Nebraska State Convention will be held on March 17<sup>th</sup> at the Lancaster Events Center, 84<sup>th</sup> Street and Havelock Avenue in Lincoln, Nebraska.

Hours: 8:30 AM to 3:00 PM. Flea market setup at 7:30 AM.

FREE PARKING. (RV Parking is also available for a small fee.)

There will be vendors, forums, FCC testing, CW certification, and more.

Door prizes awarded throughout the day (must be present to win).

Sponsored by the Lincoln Amateur Radio Club (<http://lincolnhamfest.org/>)

(DROID continued from page 1.)

Note that the necessary software is freely available for Linux, Windows, and the Mac at the following links:

Android SDK: <http://developer.android.com/sdk/index.html>

Eclipse IDE: <http://www.eclipse.org/>

Java: <http://www.oracle.com/technetwork/java/index.html>