

# *The eKilo - What*

Monthly Newsletter of the San Angelo Amateur Radio Club

March 2013



## PRESIDENT'S MESSAGE

The date for the April meeting of the SAARC is nearly upon us. We still have to choose a site for the 2013 Field Day and I plan to try and finally tie the ribbon on the "move the .94 repeater issue". After having spoken with both Charlie Campbell and Joe Kent, I have learned of some alternatives that were never offered before. There are also some frequency coordination issues that would have been addressed when we try to move the repeater. I want to encourage everyone to attend the meeting Thursday and, if not participate, at least be present as we discuss the options and make a decision. We really do need as many members there as can possibly make it. I will also be looking for suggestions as to what the club might do to interest more people, young and old, in Amateur Radio.

SAARC was pretty well represented at the Midland Hamfest. It was different than recent years in that it was quite warm instead of lingering winter chill that we have had in recent years.

73, I'll be looking for you at the meeting.

Tom, K4OTM

## San Angelo Rodeo Parade



Photos provided by Gary/W5ETJ – Story on Page 3.

A special thanks to Gary/W5ETJ for help with editing the entire contents of this issue. –Ed.

Club News

**SKYWARN**

SKYWARN training occurred in March in time for the coming weather seasons.

David Behrend, KB5FNK, a member of the San Angelo Amateur Radio Club, provided the introduction to the presentation.

Mike Dominy/KD5URW, a Club member and Emergency Communications Coordinator, discussed national, Texas and local weather events and statistics. The SKYWARN role, as well as REACT,ARES, RACES support to local agencies during local weather events and emergencies was described.

Hector Guerrero/KC5BRB, NWS Warning and Coordination Meteorologist, presented an overview of NWS, tornado and other weather films, weather statistics and characteristics. Details on how to report weather to the NWS was also detailed.

Amateur Radio observers provide on the ground weather information to supplement NWS observations at Mathis Field to allow the most accurate and current local weather details.

About 50 attendees received SKYWARN TRAINED cards ant the conclusion of the presentation.

Matt Healy, W5MAT, provided the accompanying photographs and contributed to this piece. – Ed.



Interested in a 6 m net? Contact Hughbert/KC5NPC



## ARRL NEWS

ARRL news has come at a voluminous rate in March and April. Therefore, to limit the number of pages devoted to the League, editorial prerogative has been exercised and the various announcements summarized.

Apr 2, 2013

In the February *eKilo-What*, TSPOTA contest April 6-7 was announced. Bill Roberts, W5NPR, has reminded us of this event. Refer to February issue of *eKilo-What* for more information or <http://www.tpwd.state.tx.us/> or <http://www.tspota.com/>.

Mar 28, 2013

Texas Rep. Rene' Oliveira (D-Brownsville) has filed and agreed to carry HB 2524 on behalf of the ARRL West Gulf Division and Texas Ham Pac on March 5, 2013.

The Bill, if passed, will add §202.019 to the Texas Property Code. It will prohibit property owners associations (HOAs) from denying a homeowner the right to install a permanently installed standby electric generator.

David Woolweaver and I extend our appreciation to Rep. Oliveira for his support.

John Robert Stratton N5AUS

Mar 29, 2013

New Annual Division Awards

The categories of awards, nominations procedures, judging panel and other information is available at [www.arrl.org](http://www.arrl.org). Nominations are being accepted until April 15, 2013.

PRB-1 in Oklahoma

The Oklahoma SGL, Eddie Manley K5EMS, and Oklahoma SM, Kevin O'Dell N0IRW, have supervised the successful advancement of Oklahoma HB1921 from the House to the Oklahoma Senate. Oklahoma HB1921, an "Enhanced" PRB-1 bill, is sponsored by Dale Dewitt-R and Ben Sherrer-D. Passage looks good according to Eddie. Kevin states, "...our legislation changing the wording in our state PRB-1 law has passed the House floor vote unanimously". When passed, HB1921, will greatly benefit the amateurs in the Sooner State\*

Balloon Launch

Michael Willett, K5NOT has been coaching the Women In Aerospace Leadership Development (WIALD) group at UT-Austin, who wants to start launching ARHABs as part of the freshmen and higher curriculum.

We have a date set for a launch from Hillsboro Airport on April 6th, fallback April 7th.

The payloads consist of an impressive array of CPU boards interfaced to pressure sensors and accelerometers, and of course will include cameras (Cannon modified with a script) and a high-def video camera or two. They have a good grasp on the basics, FAA rules and challenges of those high-altitudes. ARBONET will be supplying some of the launch gear to include our K5ARB-10 APRS beacon, as well as a SPOT messenger for ground locate backup.

The balloon will likely be a 1200 to 1500 gr balloon and they are working on getting helium through UT-Austin. ARBONET will back them up on these items as needed.

If you are interested in assisting with any or all aspects of this

flight, your participation is encouraged! I would like them to see the support from our DFW area Ham community and realize a very successful first flight!

Here is a link to their web page, as well as, a power point somewhat based on Mike's talk there earlier this year:

<http://wiald.ae.utexas.edu/Current%20Project/Current%20Project.html>

(Contributed by Jerry Keisler, WA5KZA)

\*Having had experience educating an HOA with the contents and intent of PRB-1, any legislation strengthening the Amateur position is good to see. -Ed



### Scanner Jack's Corner

New scanner frequency data is being updated and will be available for the next issue.

In the meantime Scanner Jack encourages you to call him for help with any scanner problem you may be experiencing. Jack, KB5TMY, is available at (325) 651-4840.

## A SERVICE IDEA

Hughbert/ KC5NPC sent this:

What To Do With All Your Junk! A Project

Suddenly I am 65 years old and I am thinking "How the heck did this happen?!". I find myself reading the list of SK's in QST and I know some of them!. Holy crap, I must be getting old. This leads me to the subject I decided to write to you about.

The average age of the Ham radio population must be well over 50 years of age. We are a dying breed. And as we die off, we leave our treasure chest of radios and junk for our next of kin - usually our wife - to sort through and get rid of. And if you are a good husband you have given your XYL a detailed list of everything you have and how much it is worth. Yeah, RIGHT!!!

No, what happens is that your family is stuck with a bunch of radio stuff they know nothing about and they have no clue what it is worth. They have a yard sale or put it on Craig's List and get pennies on the dollar for your treasured TS-2000. Now you're rolling over in your grave because some CBer just put your rig on channel 35. Bummer!! But what if there was a way for your family to contact someone who could guide them in what the value of your old equipment really is and could help with getting the most from your old gear?.

Here is where your local Ham radio club members can preform a service for the deceased Ham's family and help recover the most money possible for the widow and/or family members.

What I propose is that your club form a committee. It should be made up of older and younger members who can be contacted by a widow or the family of a club member [or non- member; your club can decide who to offer this service to]. This committee would survey the SK's gear, make a list, and assign a suggested value to the piece of equipment to help the family understand that all that junk is worth a lot of money. Every one loves a bargain, but I think that returning the true value of a piece of equipment to the family is the right thing to do for the amateur radio fraternity.

In your club, as in my club, there are folks who know about the value of this gear and take a special interest in following how the price of gear goes up and down as technology changes. Tap into these people and use their expertise to help a SK's family recoup all they can from the estate.

How do you get the word out to the Ham community about this service?. Well, your club members will be easy to reach and share the information, but non members will be a little harder to get to. I suggest a general mailing of post cards, announcements in Ham magazines and nets, papers, internet and at Hamfests. The idea is to make folks aware that the service is there to help. A Ham can pick up a flyer at a Hamfest and give it to his wife and tell her to put it in a safe place because she may need it someday.

"OK, so what is in it for me?", you ask. Well for openers, you are truly helping your fellow Ham community in their time of need. Let's help our own!. Next you'll know that your own family will be helped when it is their turn to decide what to do with YOUR stuff. And lastly, you will have a possible first crack at some equipment you may want , or another member of your club may find what they may need.

Remember FAIR MARKET VALUE!!!. If your club is a 501C3 you might suggest a donation to the club for your consulting work. Or if the family wants the club to handle the sale of the gear a 10% donation fee may be in order. Run it by your members and see what they are comfortable with.

If we do not take care of our own how can we possibly take care of someone else in their time of need?. So before you go to that GREAT HAMFEST IN THE SKY, form a group and take care of your unfinished business. Make sure your family gets their fair share when you part ways with your equipment. Besides, your XYL and her new boyfriend will need the money for their cruise to the Bahamas. HI HI

73, Dennis W5DPK

## OPERATING/TECHNICAL

### A POOR MAN'S WATTMETER

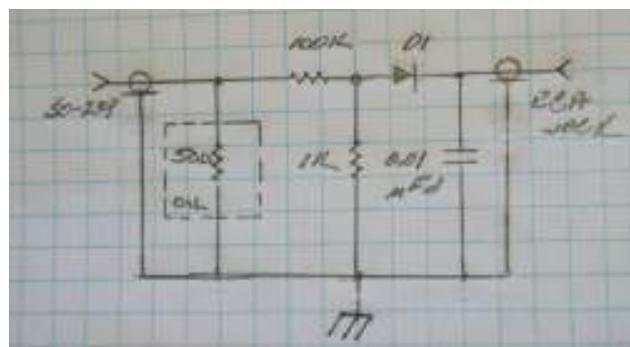
By Pete Norris, KJ5SS

Long ago I decided I really needed a power meter. The prices for most exceeded my resources, in my mind, and so alternatives were sought. Heath offered a dummy load which looked like a one gallon paint can, a big resistor and some transformer oil and they called it a "Cantenna". My kind of people!

The Cantenna, shown in the photo, was a little more in that it had a detector mounted on the can lid. The detector schematic, as it appears on the can, is shown in Figure 1.



Figure 1. Cantenna and Detector



The 1:100 divider provides about 3 volts peak at the detector for 1000 watts sinusoidal input and less than 1 volt for 100 watts. A 10 watt input is too low to be useful. The detector output is supplied through an RCA jack. A voltmeter, not supplied with the Cantenna, may be used to indicate the RF power. To read the peak voltage, the meter resistance must be much greater than 1 K. To avoid discharge of the 0.01  $\mu\text{F}$ d capacitor, the time constant of the load and the capacitor should be much greater than the period of 1 cycle at the lowest frequency. If 1 MHz is chosen as the lowest frequency of interest, then 1000  $\Omega$  ( $t = 1/f = 0.1RC$ ) would be an acceptable minimum. A simple VOM with a 2 K $\Omega$ /volt input (10 K $\Omega$  on the 5 volt scale) will do.

As I was interested in power levels of 100 watts and below, I decided to modify the detector to improve lower power level performance. The new circuit is shown in Figure 2. A new divider and a voltage doubler circuit was used to increase the output voltage level. The voltmeter circuit used is also shown. The 100 microammeter was found in a box of meters purchased at a hamfest and used as a 0-100 watts meter. A hole was also drilled in the top of the detector box, a grommet installed and a test lead added just long enough to slightly clear the grommet thus providing an RF test point.

The voltmeter is shown in below Figure 3. After packaging the parts and a separate table of power and voltage values (Peak volts, RMS volts, Power, and dBm) was used with the meter to make readings. Having a sheet to refer to was a nuisance so the sheet was pasted to the meter. A calibration resistor with a locking nut was used and set using an oscilloscope. Unfortunately, the calibration resistor had been located in the middle of the available box surface interfering with placement of the table. Had this been anticipated the calibration resistor would have been located elsewhere.

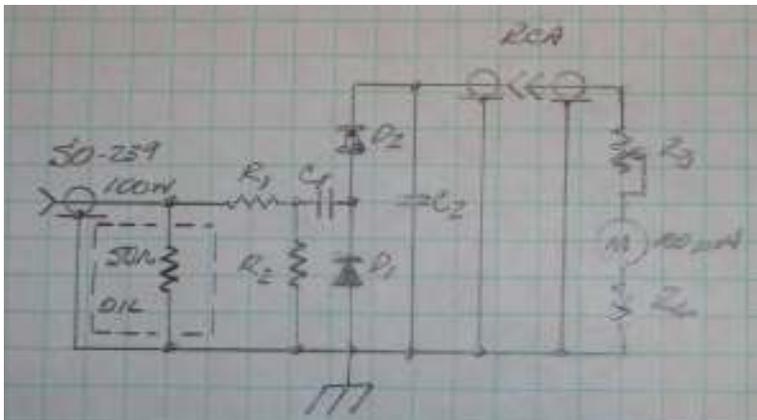


Figure 2. Doubler and Voltmeter Schematic



Figure 3. Voltmeter

Over the years, two Cantennas were bought at ham fests about \$15.00, if memory serves. Now I have one for high power and one for 100 watts and down.

MFJ has a near equivalent to the Cantenna: their "Versa Load" (MFJ-250X), without a detector, lists for \$49.95 (2010 catalog) plus \$12.00 S&H. The MFJ-250 is \$69.95 plus \$18.00 and includes the transformer oil. Mineral oil can be substituted for transformer oil in the Cantenna, and probably with near equivalent performance in the VersaLoad. High power cannot be applied as long with transformer oil but practically no degradation in performance below 400 watts input is seen for the Cantenna derating chart (Figure 4.). Mineral oil is available in the pharmacy section at Walmart and elsewhere for about half the cost of the MFJ transformer oil.

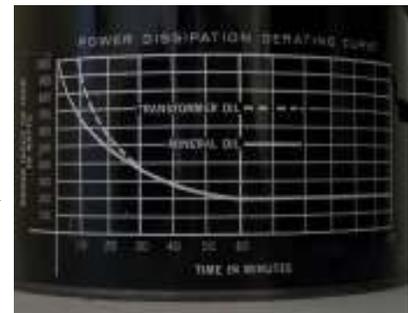


Figure 4. Derating Chart

Next time a component selection approach for the new detector will be suggested.

Comments or questions? Call Pete, KJ5SS at 325-617-4387.

## Midland Hamfest 2013

It was 4:30 am on March 16<sup>th</sup> when the alarm went off to let me know it was time to get up, get ready and head to Midland for my first Hamfest there. I didn't really understand why anyone in their right mind, who really didn't need anything for his ham shack, would lose that much sleep for the day trip. It was a real puzzle to me.

At 6:00 am Ralph Stout, KA5ULE called to let us know he was on his way to our house so we could ride together. Ralph's wife Cindy and my wife Leslie wanted to make the trip so they could get a little good shopping in after the festivities closed. While on the road, Ralph was able to make contact with a number of hams from San Angelo but we quickly went out of the repeaters range and weren't able to continue on simplex. As we topped the last hill overlooking Big Spring, Ralph changed to 147.300, the talk-in frequency at the Midland County Horseshoe Arena and immediately started copying the traffic from others that were making the trip in for the day.

As we arrived at the facilities one could see a sea of cars, all with numerous antennas. We counted the antennas on one of the vehicles and they had 10 to match the radios, scanners and other monitors that were neatly mounted in the console. There were hams of all degrees of experience, a plethora of different interests and all were there to enjoy the event.

When we entered the arena we were given our pre-registration packages and I knew I had the grand prize ticket in my envelope. Dutifully I kept half of the ticket and dropped the other half in the big hopper. I told a number of hams they were wasting their time dropping theirs into the hopper as I was sure that it was mine that was the grand prize! None listened to me.

The arena had four or five rows of tables with ham operators selling those special items you simply couldn't live without. Those special items you don't really need, but you were sure it would be nice to have an extra one in the radio shack, just in case.

As I looked over the number of folks at the gathering I noticed Gary Chaffin, W5ETJ, had gotten a table right next to Joe Kent, W5UI. Both were there to part with a few treasures that they had resigned themselves to be "able to live without." They both were able to move some of those priceless treasures.

There must have been at least 15 hams from San Angelo at the Hamfest. Many were wearing their blue Club shirts and that let our group stand out. It gave all of us a day to relax; we enjoyed exchanging stories, and we were even able to find a few items we could use back in the radio room. After a great day at the Hamfest we were even able to go with our wives and do a little shopping that they enjoyed. A great way to end a great day! Did I hear someone say Belton is coming up?

Matt Healy, W5MAT

p.s. I didn't win the grand prize, maybe next year.

### Upcoming Hamfests & Conventions

Date	Event	Location	Information
04/20/2013	Ham Expo	Belton, TX	<a href="http://www.tarc.org/hamexpo/">http://www.tarc.org/hamexpo/</a>
4/27/2013	Hamfest	Ruston, LA	<a href="http://www.phara.us">http://www.phara.us</a>
4/27/2013	Hamfest	Albuquerque, NM	<a href="mailto:w5fha@arrl.net">w5fha@arrl.net</a>
5/4/2103	Hamfest	Smithville, TX	<a href="http://www.bcarc-hams.org/">http://www.bcarc-hams.org/</a>
5/11/2013	Picnic/Hamfest	Amarillo, TX	<a href="http://www.w5wx.org">http://www.w5wx.org</a>
6/7/2013	Hamcom	Plano, TX	<a href="http://hamcom.org">http://hamcom.org</a>
7/13/2013	ARRL Hamfest	Texas City, TX	<a href="http://www.tidelands.org">http://www.tidelands.org</a>

## RECENT PROGRAMS

<b>Dec '12</b>	Christmas Dinner—Eatin Meetin
<b>Jan '13</b>	Scanner Jack/KB5TMY—Scanners
<b>Feb '13</b>	Tom/K4OTM—Flying
<b>Mar '13</b>	Tom Dufresne/WB5MTR - High Voltage Safety

## For Sale

Kenwood TS 430S with matching Power Supply - \$326.00. Hubert/KC5NPC, tbum@aol.com.

Coleman Powermate Generator, 6,250 Watt, excellent condition. Used one time for Field Day (approximately 36 hours). With wheel kit—\$400.00; Yaesu FT-736R UHF/VHF Base Station w/new tone board—\$500.00; Kenwood 2000—\$1200.00; Yaesu FT736R—\$450.00; ICOM IC910H all mode transceiver—\$1150.00; Heathkit Station monitor SV-614—\$100.00. Contact Joe Kent/W5UI at [joewSui@gmail.com](mailto:joewSui@gmail.com) or (325) 896-2038.

Kenwood TS-930SAT HF transceiver, \$400; Mirage KS-1/440 70 cm preamp, \$75; Icom AG-25 mast mount 2 meter pre-amp, \$90; Cushcraft AP-8 8-band trap vertical with radial kit \$100.00. Contact Glenn Miller/AA5PK at [aa5pk@outlook.com](mailto:aa5pk@outlook.com) or (325) 949-4775 (evenings).

## HF Nets of Note de Gary Chaffin/W5ETJ

NET	DAYS	LOCAL TIMES	DIAL
Concho Valley Ragchew	M-T-W-T-F	1800 - 1900	3825
Texas Traffic Net	S-M-T-W-T-F-S	0830 - 0930	7285
7290 Traffic Net	M-T-W-T-F-S	1000 - 1200	7290
7290 Traffic Net	M-T-W-T-F	1300 - 1400	7290
Texas Traffic Net	S-M-T-W-T-F-S	1830 - 1930	3873
Central Gulf Coast Hurricane Net	S-M-T-W-T-F-S	1900 - 2000	3935
Texas ARES Net	Monday	1930 - 2000	3873
Big Bend Emergency Net	Sunday	0830 - 0930	3922
Texas Trader's Net	Sunday	0900 - 1000	7245

### Emergency Communications

de Mike Dominy/KD5URW - Emergency Coordinator

#### Tom Green County ARES Net

Meets every Monday night at 8:30 CST (2030 hr) on the 444.350 MHz (PI 162.2) (N5SVK). The net can also be reached by EchoLink at WB5VRM-R or Node 412402. Other frequencies are announced on the Concho Valley Net at 8:00 pm.

### ARES Net Report

Date	Net Ctrl	Check-ins	Time	Freq
3/4	KD5URW	10	10	444.350
3/11	KD5URW	9	18	444.350
3/18	KD5URW	12	14	444.350
3/25	KD5URW	8	10	444.350

## Concho Valley Two Meter Net

<u>Date</u>	<u>NCS</u>	<u>Check-ins</u>	<u>Duration</u>
2/4	KB5FNK	16	15 min
2/11	KB5TMY	17	16 min
2/18	KB5TMY	15	16 min
2/25	KB5TMY	15	15 min
3/11	KB5SBE	17	18 min
3/25	KB5SBE	11	9 min

This net meets every Monday night at 8 p.m. on the club's 146.94 repeater. All amateurs licensed to operate on that frequency are invited to participate.

## Concho Valley Open FM Repeaters

2 Meter		70 centimeter	
145.27-	San Angelo PL 88.5	441.750+	San Angelo PL 162.2
or PL 100.0 for local transmit		442.250+	San Angelo PL 162.2
146.72-	Eldorado PL 100.0	444.225+	Robert Lee PL 162.2
146.88-	San Angelo PL 88.5	444.350+	San Angelo PL 162.2 (Echo-Link Node)
146.94-	San Angelo PL 103.5	444.875+	Brady PL 162.2 Linked to 444.225+
147.06+	San Angelo PL 103.5		
147.34+	Robert Lee PL 88.5	147.30	San Angelo PL 88.5
146.90-	Brady PL 162.2		
147.30	Brady PL 114.8 (Echo-Link Node)		

## Membership Renewal

Membership renewals are due in January 2013. Prices are as follows:

- Regular memberships: \$20
- Each additional family member: \$5
- Seniors (age 65+) and Juniors (under age 19): \$10
- Renewal package deal: 5 years for \$80
- Associate members: \$20



P.O. Box 4002  
San Angelo, TX 76902-4002

Get all the latest club news on the World  
Wide Web at [www.w5qx.org](http://www.w5qx.org)

### 2012 SAARC Officers:

President - Tom Austin/K4OTM  
Vice President - Joe Kent/W5UI  
Secretary/Treasurer - Bob Freeman/KD5PIX  
Emergency Coordinator - Mike Dominy/KD5URW  
Activities Manager - Hughbert Robinson/KC5NPC  
Grounds Chairman - Marcus O'Quin/KF5GKC  
W5QX Trustee - Charlie Campbell/KC5EZZ

**SAARC Monthly Meetings:** 2nd Thursday,  
1930, Clubhouse, 5513 Stewart Lane

**Annual Dues:** \$20, Sr. & Jr. \$10

**The Kilo-What:** Edited by Pete Norris/KJ5SS  
325-617-4387, [norrispeter26@gmail.com](mailto:norrispeter26@gmail.com)

**Article submission deadline:** Ten days prior  
to monthly club meeting.



**NEXT MEETING: 4/11/2013**  
**PROGRAM: TBD**

**MATHIS FIELD CLUBHOUSE**