

Since
1917



QSO

"The Voice of RAWNY"



W2PE

USS Little Rock Club Station

September, 2013

Radio Association of Western New York, Inc.

RAWNY GENERAL MEETING TUESDAY, SEPTEMBER 10TH

Stub's and their uses will be the subject of the program at our September meeting. Mike, **KA2GVY** and Jim, **KA2IWK** will provide you with all you need to know about those rascals. Doors will open at 7:00PM. With the meeting starting at 7:30PM. We will also unveil the parameters for the **Novelty Home Brew Project** to be presented at our meeting in January. The members that participate will compete for some **VERY BIG PRIZES**.



**HOBBY
HIGHLIGHTS**
By RICH KG2OR

In 2006 I was writing about Hobby Highlights and focusing upon **VE3FMQ**, Joe Cooper. He came to RAWNY. His lecture was about Software Defined Radio. An amateur radio club in Cresco, Iowa had just received a grant from Homeland Security for 150,000 dollars, and I discussed the ARRL Repeater Directory. It is an important tool to have while traveling. Also, I wrote about solar sunspot numbers, and my long standing call for a national data base for club literature stored in newsletters.

I have learned that a book came out in 2006 published by MIT Press called "Ham Radio's Technical Culture," by Kristen Haring. While I have only read some notes about the book I really would like to read it. She is a PhD in history from Harvard University. She emulates our culture, club, and community of technically talented people and forms a historical and scientific narrative of the hobby from the 1930's.

It is good to see a book like this written. It is about time, even though I am seven years late noticing it; that an author could make a synthesis about many dimensions of our service, and the developments amateur radio operators have made by being gifted technically. 73's, **KG2OR**, Richard Sellers

55 YEARS AGO: A NEW DAWN FOR 11 METERS



* Channel 11, Wednesday, September 11th at 7 PM (AM mode) *

Love it or hate it, 11 meters (27 MHz) is the place where many of us got our start in 2-way radio. This is particularly true if we entered the ham radio hobby from the 1970s through 1980s. The Class D Citizen's Radio Service marks 55 years this month after its official opening on September 11th 1958. (An earlier UHF system existed, but did not see widespread use due to cost and technology limitations). Lately, I've been speaking with a few local hams who recall their start on 11 meters, and the idea was brought up to dust off our old rigs and try some on-air operation. To be clear: No one is suggesting a preference for CB over ham radio; The benefits of amateur radio are abundantly clear! What we are interested in doing is reliving a bit of our communications past by taking old equipment out of "mothball" status. The Citizen's Radio Service is now "licensed by rule," meaning that individual FCC licenses are no longer issued or required. Those desiring a quick overview of current-day FCC requirements may want to review the material posted online at <http://www.fcc.gov/encyclopedia/citizens-band-cb-service>. Interested in joining us for some on-air activity? To commemorate 55 years of the Citizen's Radio Service, operators are encouraged to gather on Channel 11, Wednesday, September 11th at 7 PM (AM mode). Who has the oldest working radio? Will any tube-type radios be heard? Come and join the fun, or just tune into this frequency with your receiver (27.085 MHz AM) to see what can be heard. All operators are welcome for this informal gathering. If you plan to participate—even just as a listener—please drop me an e-mail at wb2qmy@arrl.net. See CB page 11

**CHECK OUT OUR NEW
WEB SITE [HTTP://W2PE.COM](http://w2pe.com).
SEND US YOUR COMMENTS
AND SUGGESTIONS.**

Web Site – <http://w2pe.com>

e-mail – w2pe@arrl.net

CLUB POSITIONS

BOARD OF DIRECTORS

PRESIDENT -
KEVIN KEDZIERSKI WA2FKV - 2015

VICE PRESIDENT -
DAN SZYMENDERA JR. KC2RBP - 2016

SECRETARY -
LOUISE (LEE) BRANDT KC2RBL - 2016

TREASURER -
AL MINKLEI KA2ORB - 2015

DIRECTOR -
RANDY RANCE N2RRR - 2014

DIRECTOR -
GEORGE ROBERTS KA2QYA - 2016

DIRECTOR -
HAROLD FREUND KD2V - 2015

DIRECTOR -
RICH SELLERS KG2OR - 2014

DIRECTOR -
JIM COLLINS KAZIWK - 2016

DIRECTOR -
GARY BOYNE K2JYV - 2014

DIRECTOR -
MIKE SULKOWSKI KA2GVY - 2016

OTHER POSITIONS

CLUB STATION CHIEF OPERATOR -
JIM COLLINS KAZIWK

HISTORIAN -
JIM COLLINS KAZIWK

LICENSE CLASSES -
KEVIN KEDZIERSKI WA2FKV

MEMBERSHIP -
HAROLD FREUND KD2V

NET CONTROL MANAGER -
KEVIN KEDZIERSKI WA2FKV

PROGRAMS -
DAN SZYMENDERA JR. KC2RBP

PROPERTIES -
JIM COLLINS KAZIWK

PUBLICITY -
OPEN

QSO EDITOR -
KEVIN KEDZIERSKI WA2FKV

TECHNICAL ADVISOR -
MIKE SULKOWSKI KA2GVY

W2PE TRUSTEE -
JIM COLLINS KAZIWK

WEB MASTER -
JIM COLLINS KAZIWK

CLUB INFORMATION

GENERAL MEETING-
THE RAWNY MEETS THE 2ND TUESDAY OF
THE MONTH FROM SEPT TO MAY AT 8:00PM
AT THE CHURCH OF THE NATIVITY, ON THE
COR OF THORNCLIFF RD. AND COLVIN BLVD.
TONAWANDA, NY. DOORS OPEN AT 7:30PM.

BOARD MEETING -
THE BOARD MEETS ON THE 4TH TUESDAY OF
THE MONTH FROM AUGUST TO MAY AT 7:30PM
AT THE CHURCH OF THE NATIVITY.

CALLSIGN -
W2PE EXPIRES 11/2018

NETS -
EVERY MONDAY EVENING AT 7:00PM
146.91/224.62/444.00/224.28MHZ;
DUES -
DUE SEPTEMBER 1ST OF EACH YEAR. ANNUAL
DUES \$15.00 INDIVIDUAL MEMBER; \$20.00
FAMILY AND \$7.50 FULL TIME STUDENT.

APRS -
144.390MHZ, SIMPLEX W2PE

We would like to expand our club communications to a "Yahoo! Group." With this group, you control your email address, so if it changes, you update your Yahoo! membership and you can still receive all club correspondence. This group is like the email list-server we had years ago, but better!



JIM KAZIWK

Members can post files or articles of interest to the club and all : photography, home brew (either kind!) or many, many others. There are groups for a particular model radio or antenna or other clubs anywhere in the world. subscribers will see it. There are other groups that might interest you like

Feel free to use your existing Yahoo! account, or create one if you are not already with Yahoo!. You don't need to use the Yahoo! mail to get emails. You can subscribe using your Call-Sign@arrl.net address. You also control how you want to receive emails, one at a time or in batches.

Try it today, we are here:
<http://groups.yahoo.com/group/rawny>

We will be replacing the email method we use now with this method, so please join as soon as you can.

Thanks and 73! Jim, **ka2iwk (@arrl.net)**

BREAKFAST BREAK

SATURDAY, SEPTEMBER 21ST
9:00AM

BOULEVARD FAMILY RESTAURANT
NIAGARA FALLS BLVD.
NR ELLICOTT CREEK PARK
(NEXT TO ABC RENTAL)

After the **RAWNY** Breakfast Breaks in September, October and November, we will open the **USS Little Rock** Club Station for anybody wishing to see our operation and maybe do some operating from the ship. If you don't get to the breakfast you can meet us at the ship about 11:00AM.

RAWNY INFORMATION NET EVERY MONDAY @ 7:00PM
146.91MHZ, 224.82,MHZ 444.000MHZ, 28.68MHZ

SIGHTS AND SOUNDS

IEEE's *Spectrum* magazine has a number of good articles in print or on-line. A particularly interesting article showed up this month - The Hunt for the Magnetic Monopole. And no, they are not writing about ground-plane antennas made of steel. Elsewhere on the magazine's website, there are a pair of articles (Part One, Part Two) about an engineer rigging up a simple SDR and discovering some HF radio signals. <<http://spectrum.ieee.org/semiconductors/materials/the-hunt-for-the-magnetic-monopole>> <<http://spectrum.ieee.org/geek-life/hands-on/a-40-softwaredefined-radio>>

Before you drive home after the contest, consider that sleep deprivation makes for an impaired driver. If you've been awake for 18 hours, it's similar to having a blood alcohol content of 0.05 percent -- perilously close to the legal limit in many states and not really a good idea to be driving at that level no matter what the legalities may be. A 24-hour period without sleep takes you to about 0.10 percent and that *is* the legal limit in all states. Take a nap before heading for home! **ARRL Contest Update**

WEB SITE OF THE WEEK

Oleg **UA9QCQ** and friends have created a comprehensive website with a contest calendar, results compilations, and a Cabrillo format checker for logs to be submitted to contest sponsors. Watch for more features to be added. (Thanks, Zoli **HA1AG**) <<http://ua9qcq.com/en/main.php?lang=en&mf=0>> **ARRL Contest Update**

LOCAL REPEATERS -

FREQ	CALL	LOCATION	PL
ARATS 146.955-	W2SEX	N.TONAWANDA	151.4HZ
BARRA 29.68-	AB2UK	BOSTON	107.2HZ
145.170-	K2ISO	WETHERSFIELD	
146.730-	K2ILH	NIAGARA FALLS	107.2HZ
146.910-	W2EUP	BOSTON	
147.000+	N2YDM	KENMORE	107.2HZ
224.820-	W2EUP	BOSTON	
442.000+	WR2AHL	WETHERSFIELD	110.9HZ
443.925+	WB2DSS	NIAGARA FALLS	151.4HZ
444.000+	WA2HKS	BUFFALO	
444.750+	WB2DSS	KENMORE	151.4HZ
GRAM 147.285+	W2RCX	BATAVIA	141.3HZ
LARA 146.820-	W2RUI	LOCKPORT	107.2HZ
LARC 53.170-	W2SO	LANCASTER	107.2HZ
147.255+	W2SO	LANCASTER	107.2HZ
224.640-	W2SO	LANCASTER	107.2HZ
443.850+	W2SO	LANCASTER	107.2HZ
STARS 147.090+	WB2ELW	COLDEN	107.2HZ
442.325+	WB2ELW	COLDEN	107.2HZ

LOCAL VHF NETS -

MONDAYS -

RAWNY INFORMATION NET WEEKLY AT 7:00PM
146.91/224.82/444.00 MHZ

TUESDAYS -

WEEKLY SWAP NET AT 7:00PM
145.47 RIPLEY, 146.76 WARREN, 146.835 EDEN, 147.105
WETHERSFIELD, 444.100 COLDEN, 444.850 KNAPP CREEK,
444.050 ATTICA THIS LINKING SYSTEM IS NOW STATEWIDE
AND THEY TAKE ADS FROM ALL OVER.

WEDNESAYS -

BARRA TECH NET WEEKLY AT 8:00PM
146.91/224.82/444.000 MHZ

THURSDAYS -

ARATS INFORMATION NET AT 8:00PM
146.955-; PL 151.4

STARS INFORMATION NET AT 7:30PM
147.090+; PL 107.2

OLD TESTAMENT COMPUTING

In ancient Israel, it came to pass that a trader by the name of Abraham Com did take unto himself a young wife by the name of Dorothy. And Dot Com was a comely woman, broad of shoulder and long of leg. Indeed, she was often called Amazon **Dot Com**.

And she said unto Abraham, her husband, "Why dost thou travel so far from town to town with thy goods when thou canst trade without ever leaving thy tent?"

And Abraham did look at her as though she were several saddle bags short of a camel load, but simply said, "How, dear?"

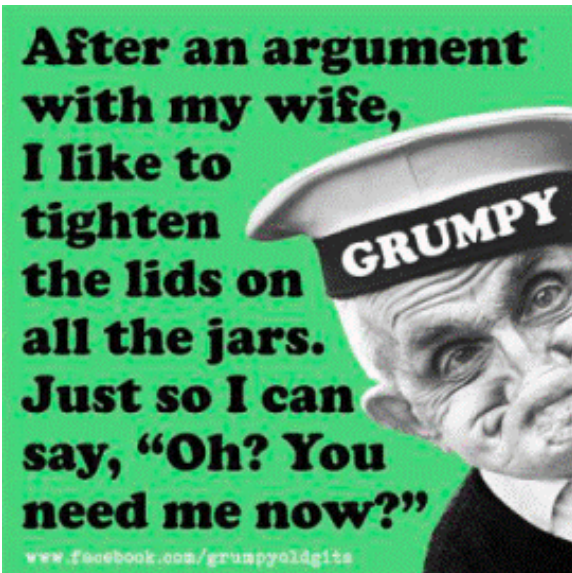
And Dot replied, "I will place drums in all the towns and drums in between to send messages saying what you have for sale, and they will reply telling you who hath the best price. The sale can be made on the drums and delivery made by Uriah's Pony Stable (**UPS**)."

Abraham thought long and decided he would let Dot have her way with the drums. And the drums rang out and were an immediate success. Abraham sold all the goods he had at the top price, without ever having to move from his tent.

To prevent neighboring countries from overhearing what the drums were saying, Dot devised a system that only she and the drummers knew. It was known as Must Send Drum Over Sound (**MSDOS**), and she also developed a language to transmit ideas and pictures - Hebrew To The People (**HTTP**).

And the young men did take to Dot Com's trading as doth the greedy horsefly take to camel dung. They were called Nomadic Ecclesiastical Rich Dominican Sybarites, or **NERDS**.

And lo, the land was so feverish with joy at the new riches and the deafening sound of drums that no one noticed that the real riches were going to that enterprising drum dealer, Brother William of Gates, who bought off every drum maker in the land. Indeed he did insist on drums to be made that would work only with Brother Gates' drumheads and drumsticks. See IT Pg 4



IT Cont

And Dot did say, "Oh, Abraham, what we have started is being taken over by others."

And Abraham looked out over the Bay of Ezekiel, or **eBay** as it came to be known.

He said, "We need a name that reflects what we are."

And Dot replied, "Young Ambitious Hebrew Owner Operators."

"**YAHOO**," said Abraham.

And because it was Dot's idea, they named it **YAHOO Dot Com**.

Abraham's cousin, Joshua, being the young Gregarious Energetic Educated Kid (**GEEK**) that he was, soon started using Dot's drums to locate things around the countryside.

It soon became known as God's Own Official Guide to Locating Everything (**GOOGLE**).

That is how it all began. And that's the truth.

Anonymous

What is the difference between mechanical engineers and civil engineers?

Mechanical engineers build weapons.

Civil engineers build targets.



THE GAVEL
KEVIN, WA2FKV

I don't know about your Summer, but mine was very busy between Work, **RAWNY** and Elvis. I'm looking forward to slowing down a bit and getting back to the ham radio projects I started back in '03.

In a few days, on Tuesday, September 10th, we will meet at the Church of Nativity for our first **RAWNY** General meeting. I'm

looking forward to seeing everyone again. Jim, **KA2IWK** and Mike, **KA2GVY** will put on a program about Stub's and their uses. We will also unveil the project information for our January "Novelty Home Brew Night". Of course there will be a **Very Big Prize** for the winner. I hope more will take the plunge and enter. It will be easier this time.

A hearty welcome to our newest members: Kevin Guadagna, no call and Doug Hanes, **KD2DKH**. We look forward to seeing a lot of them at our activities.

Check out the new website <http://w2pe.com> Tell us what you think about it and if you have any suggestions as to what you would like to see included on the site. Jim, **KA2IWK**, **RAWNY**'s **IT** guy, has been working on this for a while and would like to get some input from the members.

I will be sending out emails after the meeting to enlist the help from all of you for our upcoming Youth Night on Tuesday, November 12th. The last several years were phenomenal. We had a great turn out with a lot of positive comments from the leaders and parents. I hope to add a few new Displays/ Demonstrations this year. If you have attended this event, you have seen the enthusiasm of the kids learning about our hobby.

See Gavel Page 12

AMATEUR RADIO EXAM SCHEDULES

ARATS -

WHEN: FIRST SATURDAY OF EACH MONTH (EXCEPT WHEN FALLING ON A HOLIDAY WEEKEND THEN THE SECOND SATURDAY) FROM SEPT THRU JUNE

WHERE: NORTH TONAWANDA FIRE STATION

CONTACT: BILL KLEPSEK PHONE: 716-839-3525 EMAIL: WA2AIV @ ARRL.NET

LARC -

WHEN: THIRD WEDNESDAY OF THE MONTH

WHERE: LANCASTER ARC CLUB HOUSE, 525 PAVEMENT RD., LANCASTER, NY

CONTACT: HAL CAMERON NH7R OR PETE ORENORF AB2KG PHONE: 716-662-0096 EMAIL: FOUROZI @ AOL.COM

PROS -

WHEN: THIRD SATURDAY OF THE MONTH 10AM

WHERE: OLD TOWN HALL, SAVAGE HALL OFF OF RT. 39, SARDINIA, NY TALK IN: 145.390

CONTACT: PAT MURRAY PHONE: 716-652-8178 EMAIL: TILLFAM3 @ NETZERO.NET

STARS -

WHEN: VARIES

WHERE: GRACE LUTHERAN CHURCH, MCKINLEY PKWY AT NEWTON RD, HAMBURG, NY

CONTACT: JOHN CRAWFORD SR. KB2VWC PHONE: 716-649-5933 EMAIL: KB2VWC @ UNO.COM

FACTS YOU MAY NOT KNOW

It takes glass one million years to decompose, which means it never wears out and can be recycled an infinite amount of times!

Gold is the only metal that doesn't rust, even if it's buried in the ground for thousands of years. Your tongue is the only muscle in your body that is attached at only one end.

If you stop getting thirsty, you need to drink more water. When a human body is dehydrated, its thirst mechanism shuts off.

Each year 2,000,000 smokers either quit smoking or die of tobacco-related diseases.

Zero is the only number that cannot be represented by Roman numerals.

Kites were used in the American Civil War to deliver letters and newspapers.

The song, Auld Lang Syne, is sung at the stroke of midnight in almost every English-speaking country in the world to bring in the new year.

Drinking water after eating reduces the acid in your mouth by 61 percent

Peanut oil is used for cooking in submarines because it doesn't smoke unless it's heated above 450F

The roar that we hear when we place a seashell next to our ear is not the ocean, but rather the sound of blood surging through the veins in the ear.

Nine out of every 10 living things live in the ocean

The banana cannot reproduce itself. It can be propagated only by the hand of man

Airports at higher altitudes require a longer air-strip due to lower air density

The University of Alaska spans four time zones

The tooth is the only part of the human body that cannot heal itself.

In ancient Greece, tossing an apple to a girl was a traditional proposal of marriage. Catching it meant she accepted.

Warner Communications paid \$28 million for the copyright to the song Happy Birthday.

Intelligent people have more zinc and copper in their hair.

A comet's tail always points away from the sun

The Swine Flu vaccine in 1976 caused more death and illness than the disease it was intended to prevent.

Caffeine increases the power of aspirin and other painkillers, that is why it is found in some medicines.

The military salute is a motion that evolved from medieval times, when knights in armor raised their visors to reveal their identity.

If you get into the bottom of a well or a tall chimney and look up, you can see stars, even in the middle of the day.

When a person dies, hearing is the last sense to go. The first sense lost is sight

In ancient times strangers shook hands to show that they were unarmed

Strawberries are the only fruits whose seeds grow on the outside

Avocados have the highest calories of any fruit at 167 calories per hundred grams

The moon moves about two inches away from the Earth each year

The Earth gets 100 tons heavier every day due to falling space dust

Due to earth's gravity it is impossible for mountains to be higher than 15,000 meters

Mickey Mouse is known as "Topolino" in Italy

Soldiers do not march in step when going across bridges because they could set up a vibration which could be sufficient to knock the bridge down

Everything weighs one percent less at the equator

For every extra kilogram carried on a space flight, 530 kg of excess fuel are needed at lift-off

The letter J does not appear anywhere on the periodic table of the elements.

Lancaster NY - Hamfest Sunday - September 8, 2013

Bowen Road Grove

\$5.00 admission and free tailgating

There is a large outdoor covered Pavilion that sellers can use

3845 Bowen Rd, Lancaster NY 14086
(Located across from rear entrance of Como Lake Park)

Web Site: <http://gbhamfest.hamgate.net/>

PENDING AMATEUR SERVICE RULE CHANGES ARE NOT ON BACK BURNER, FCC ASSURES VECs

Speaking in late July at the 28th annual National Conference of Volunteer Examiner Coordinators (NCVEC) meeting, Bill Cross, **W3TN**, of the FCC's Mobility Division within the Wireless Telecommunications Bureau (**WTB**), assured attendees that pending proposals to modify the Amateur Service Part 97 rules are not on the back burner but still under review. FCC personnel addressing the teleconference were unable, however, to predict when the Commission would take action on the *Notice of Proposed Rulemaking and Order* (NPRM) in **WT Docket 12-283**.

Among the FCC proposals: Granting exam credit for expired and beyond-the-grace-period licenses; shortening the grace period during which an expired ham ticket may be renewed; correspondingly revising the time a call sign remains unavailable to vanity applicants; and reducing the number of volunteer examiners needed to administer examinations. The docket also seeks comment on amending the rules to permit remote test administration and proposes allowing Amateur Radio stations to transmit certain emission types.

FCC Program Analyst Rebecca Williams of the FCC's Gettysburg Office told meeting participants that the FCC will not remove or conceal a licensee's name or address from its public database. She said she's received numerous complaints from licensees about their information being public. According to §97.23, licensees must provide a valid mailing address, but as Williams pointed out, that can be any US address where the licensee can receive mail, such as a work address or a post office box. Licensees can protect their privacy and remain within the rules, she said.

She also reminded her audience that since February 14, 2011, a radio amateur can serve as a trustee for only a single club and may not also be a club license trustee for another club. The rules further prohibit clubs from having more than one vanity call sign. Amateurs who served as trustees for more than one club, and clubs holding more than one vanity call sign before the change may continue to do so, she said.

NCVEC Chair Larry Pollock, **NB5X**, presided over the teleconference. ARRL VEC Manager Maria Somma, **AB1FM**, Assistant Manager Perry Green, **WY1O**, and Regulatory Information Manager Dan Henderson, **N1ND**, represented the ARRL VEC for the session. Representatives from 12 of the nation's 14 VECs took part in the meeting.

NCVEC Question Pool Committee (QPC) Chair Roland Anders, **K3RA**, told the gathering that the QPC has been working to update the Technician question pool. The new Tech question pool will go into effect next July 1. Anders said the QPC has been reviewing the entire question pool with a goal of fixing and removing outdated or poorly worded questions and to develop questions as new technology is introduced. He said the most difficult part of the job is coming up with distractors — incorrect answers — for the multiple-choice exams that are reasonable but also absolutely incorrect.

The gathering re-elected by acclamation the current leadership slate, including Pollock, who will serve a fifth term as chair. Other officers are Vice Chair Mark Erbaugh, **N8ME**; Treasurer Willard Sitton, **W4HZD**; Assistant to the Treasurer Ray Adams, **W4CPA**; Secretary and Custodian of Records Michele Cimbala, **WK3X**, and Assistant to the Custodian of Records Gene Wright, **WA6ZRT**. The rules reporter position remains vacant. **ARRL Letter**



Bill Cross, W3TN



NEWS, PRESS RELEASES, AND GENERAL INTEREST

Don't look now but Tad **K7RA** has been bringing you the ARRL Propagation Bulletin for 22 years now! As Tad was quoted in ARLP033, "...your current author's stewardship of this bulletin began in 1991, not because of any particular expertise regarding astrophysics, but due to a similar sudden burst of solar activity, which happened to coincide with the former (and only other) author of this bulletin becoming too ill to write. The event was Thursday, January 31, 1991 when the solar flux reached 357. Someone needed to write about this. I had no idea when I alerted folks in Newington that it would be me." Wow - an SFI of 357? That hasn't happened lately...but I'm sure Tad would let us know if it did!

Hey, what's whizzing around up there - can you receive packets from satellites? If so, why not listen for the NASA PhoneSats that download messages via ham radio? "Crowd-sourced" science via ham radio resulted in these CubeSats that use a smartphone as their controllers. Practice in receiving these packets is great for next year's Field Day bonus points...just sayin'.

Beginning the end of paper logging -- which hadn't even started yet -- August 26th marked the date that the first practical typewriter was patented. Ham handwriting would prove to be challenging in the future, however, even though "mills" were commonplace by the time radio was invented.



DX Engineering - well-known by contesters for its high-performance products has added a high-performance contester - Tim Duffy K3LR (right) - as its Chief Marketing Officer.

SIGHTS AND SOUNDS

CQ Addis Ababa! Tomorrow (9 PM EDT, Aug 29th) Ken **K4ZW** shares his experience of operating the 2013 **IARU** contest with students of the Addis Ababa Institute of Technology from their club station **ET3AA**. Registered viewers will see the history of **ET3AA** and preparation leading up to the contest. This was the very first contest for many of the **ET3AA** students. See how they did! As a bonus, Ken will share some secrets of breaking DX pile-ups as learned from the DX side of things.

Hams love maps and here are 40 that purport to "explain the world!" Well, maybe, and maybe not, but they are interesting, particularly maps 24 and 35 for hams. <http://www.washingtonpost.com/blogs/worldviews/wp/2013/08/12/40-maps-that-explain-the-world/> https://www.youtube.com/watch?v=VpQwuGueeoA&feature=youtube_gdata_player

Speaking of maps, what are the endpoints of the planet's longest straight line over water - try Russia and Pakistan as illustrated by this YouTube video! Now *that* is long path. (Thanks, Doug **NH6ZA**)

OPERATING TIP

Work a contest one month before the real contest. The Sun rotates once every 27 days, so work a contest the month before the one you really want to concentrate on to experience the propagation you will have later. (From **K9JY**'s "30 Days - 30 Ham Radio Contesting Tips" website)

TECHNICAL WEB SITE OF THE WEEK

Bits, tools, torches, saws, carts...what's not to like? The Toolmonger website has all sorts of information on...surprisingly...tools. [Http://www.toomonger.com/](http://www.toomonger.com/)

WORD TO THE WISE

Tag - no, not "you're it!" but the Cabrillo data element. When you see "Cabrillo tag", the reference is to the line of information beginning with a word or words followed by a colon (:) and then some alphanumeric characters. For example, the tag containing your power level is "CATEGORY-POWER:". The "tag value" is whatever information follows the colon until the end of the line marked by a carriage return and line feed character (CR/LF). Continuing the example, there are three recognized (legal) tag values for power; QRP, LOW, and HIGH. **ARRL Contest Update**

THE GOLDBERG BROTHERS

The Inventors of the Automobile Air Conditioner

Here's a little fact for automotive buffs or just to dazzle your friends.

The four Goldberg brothers, Lowell, Norman, Hiram, and Max, invented and developed the first automobile air-conditioner. On July 17, 1946, the temperature in DETROIT WAS 97 DEGREES.

The four brothers walked into old man Henry Ford's office and sweet-talked his secretary into telling him that four gentlemen were there with the most exciting innovation in the auto industry since the electric starter.

Henry was curious and invited them into his office.

THEY REFUSED AND INSTEAD ASKED THAT HE COME OUT TO THE PARKING LOT TO THEIR CAR.

They persuaded him to get into the car, which was about 130 degrees, turned on the air conditioner, and cooled the car off immediately.

The old man got very excited and invited them back TO THE OFFICE, WHERE HE OFFERED THEM \$3 MILLION FOR THE PATENT.

The brothers refused, saying they would settle for \$2 million, but they wanted the recognition by having a label, 'The Goldberg Air-Conditioner,' on the dashboard of each car in which it was installed.

Now old man Ford was more than just a little anti-Semitic, and there was no way he was going to put the Goldberg's name on two million Fords.

They haggled back and forth for about two hours and finally agreed on \$4 million and that just their first names would be shown.

AND SO TO THIS DAY, ALL FORD AIR CONDITIONERS SHOW -- LO, NORM, HI, AND MAX -- ON THE CONTROLS.

Control yourself !!!

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<http://www.dump.com/rotatingsupercell/>

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VANITY CALL SIGN FEE GOES UP AUGUST 23

The new FCC regulatory fee of \$16.10 to apply for an Amateur Radio vanity call sign will go into effect Friday, August 23, when the new regulatory fee schedule will appear in the *Federal Register*. Earlier this year the FCC had proposed upping the vanity call sign fee from its current \$15 to \$15.20, but in the *Report and Order* in MD Docket 13-140, released August 12, the Commission offered no explanation for the higher fee.

In another change, starting in FY 2014, the FCC will require that all regulatory fee payments be made electronically.

The *R&O* ordered a broad schedule of new fees and waived the usual 30-day waiting period following *Federal Register* publication, because it feared there would not be time for FY 2013 fees to become effective before the start of the new federal fiscal year on October 1.

The FCC says it expects \$230,230 in revenue to cover the costs of administering the vanity call sign program. It anticipates 14,300 vanity call sign applications.

ARRL Letter



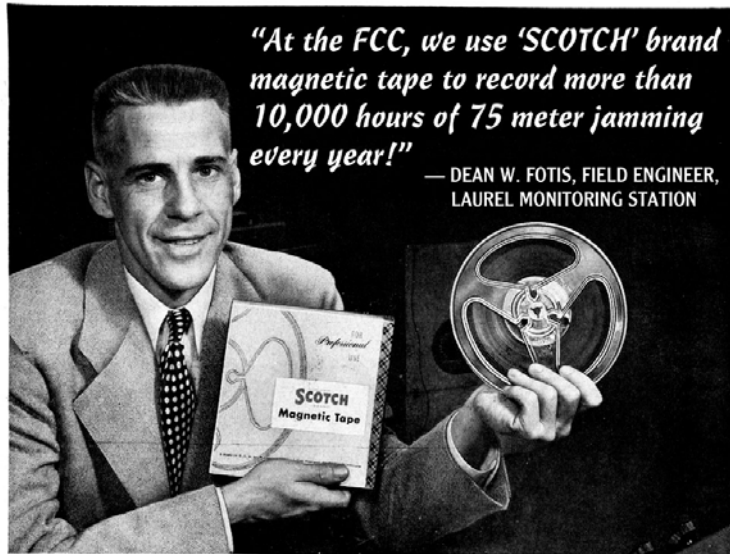
TECHNICAL TOPICS

If you have a crank-up tower and are seeing some broken strands on the lifting cable, there are standards for when a wire rope should be replaced by OSHA and inspection tips from Safety Solutions. (Thanks, Grant **KZ1W**) http://www.grainnet.com/articles/Inspecting_Wire_Ropes-10905.html

Don **WD8DSB** recommends using Kynar-insulated wirewrap wire to wind binocular core receiving antenna transformers. The Kynar insulation resists being scratched by the core's sharp edges and it can be easily removed for soldering. Radioshack stocks the wire in 50-foot spools of different colors.

ARRL Contest Update

BLAST FROM THE PAST



"At the FCC, we use 'SCOTCH' brand magnetic tape to record more than 10,000 hours of 75 meter jamming every year!"

— DEAN W. FOTIS, FIELD ENGINEER,
LAUREL MONITORING STATION

"Shutting down 75 meter jammers is *priority number one* at the FCC. True, it took us over 12 years to shut down WA9KJI, and K5BLB and K5ZU died on us after a couple decades, and we *still* haven't done anything about W9ART—but think about it: long-term operations like these pay our salaries, and they take a lot of magnetic tape."

"That's why every FCC monitoring station uses dry lubricated 'Scotch' brand magnetic tape with the new low-tension reels, ensuring that every rude noise, obscenity, and distorted music transmission from every jamming station will be preserved *literally* for centuries without deterioration, just in case we ever do start to take action against these egregious miscreants who are harming the Amateur Radio Service."

**SEE YOUR DISTRIBUTOR FOR A SUPPLY OF
7" PROFESSIONAL REELS AND NEW
DRY LUBRICATED TAPE!**

The term "SCOTCH" and the plaid design are registered trademarks for Scotch Recording Tape made in U.S.A. by MINNESOTA MINING & MFG. CO., St. Paul & Minneapolis—also makers of "Scotch" Brand Pressure-sensitive Tapes, "Under-eal" Rubberized Coatings, "Scotch-lite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing. "3M" Alternative, "3M" Adhesives General Export: 122 E. 42nd St., New York 17, N. Y. In Canada: London, Ont., Can.



***A greatly improved tape to match
this greatly improved reel!***

● **"DRY LUBRICATING"** process gives you a tape that practically eliminates sticking, squealing and cupping... a completely dependable tape that turns in a flawless performance in extreme conditions of heat and humidity!

● **THINNER CONSTRUCTION** allows a full 1200 feet of tape to be wound on the new reel despite its larger hub. Magnetic properties of this new tape are identical with "Scotch" Brand 111-A, the industry's standard of quality.

● **100% SPICE-FREE!** Tape supplied on the new 7" professional reel is guaranteed to be completely free of splices.

● **GUARANTEED UNIFORMITY!** Output variation of tape wound on the new 1200-foot reel is guaranteed to be less than plus or minus ¼ db at 1000 cps within the reel, and less than plus or minus ½ db from reel to reel.

TECHNICAL TOPICS

Speaking of wire wrapping, Mike N2MS reminds us that the technique was very popular in the 60's and the 70's before the advent of multilayer printed circuit boards. The Apollo Guidance Computer's backplane was connected via wire wrap. Wirewrap is still quite practical for the home-builder. <http://w2dtc.com/2011-0522-infoage/2011-0522-0061.jpg>

The RF & Microwave Toolbox app from the Elektor magazine developers is now up to 55 different functions. It runs on devices using the Android OS and just costs a few euros. <http://www.elektor.com/news/rf-microwave-toolbox-app-updated.2538725.lynkx?referer=rss>

The Speag Time Domain Sensors are neat isolated probes for sampling E and H-fields from 10 MHz through 6 GHz. The probes are powered and send RF signals over fiber optics so they have minimal effect on the fields. <http://www.speag.com/product/tds/>
ARRL Contest Update

TECHNICAL TOPICS AND INFORMATION

Here are some useful formulas for resistive signal splitters from EDN. These come in handy for dividing receive antenna signals between several radios without any matching transformers. The small amount of loss is usually not a problem on the lower HF bands. <http://www.edn.com/electronics-blogs/living-analog/4418921/Resistive-signal-splitters>

From the coherer to the cat's whisker to the semiconductor diode and now to a light-wave RF detector? Maybe you'll have to adjust the laser to shine on the most sensitive spot! (Thanks, Brian Fernandez) <http://www.technologyreview.com/view/517336/physicists-detect-radio-waves-with-light/>
Gary W9XT presents his portable NVIS antenna design in this online presentation. A few more of his good talks are available as well.

Vacuum tube fans will find the PSU Designer software useful, indeed. It is intended to help design simple, unregulated linear supplies using vacuum tube rectifiers. The software does not appear to be certified to run on Windows Vista or Windows 7, however. (Thanks, Paul W9AC) <http://www.duncanamps.com/psud2/>
Did you ever wonder about "why 50 ohms?" Gary K9AY tackles the subject in this High Frequency Electronics editorial. (Thanks, Brad NK8J) http://www.highfrequencyelectronics.com/Archives/Jun07/HFE0607_Editorial.pdf

You can add a couple more good propagation websites to those you've already bookmarked: one from VE3EN and the other from Jan Alvestad. <http://www.solarham.net/> <http://www.solen.info/solar/>

FCC CITES MORE RETAILERS FOR MARKETING UNAUTHORIZED RF DEVICES

The FCC this month cited retailers in California and Texas for illegally marketing non-certified amplifiers. According to an August 15 *Citation and Order*, the FCC's San Francisco office investigated complaints and "confirmed that DNJ Radio of Fremont was offering for sale non-certified RM Italy linear amplifiers and amplifier kits capable of operation with both CB 11 meter transceivers and [Amateur Service] 10 meter transceivers." The FCC said the devices listed in the *Citation* have not received FCC grants of certification, required for external RF power amplifiers operating below 144 MHz and marketed in the US. The Commission also cited Radio Master, a CB shop catering to truckers -- for similar violations. According to a *Citation and Order* released August 20, FCC agents from its Dallas office in February inspected the Radio Master shop at a truck stop in Rockwall, Texas, where they observed a used Palomar 250 RF amplifier offered for sale.



"The unit did not have an FCC identification number to confirm that the model had been granted an FCC certification," the Commission said in the Radio Master *Citation*, noting that under its Part 2 rules, external RF power amplifiers capable of operating below 144 MHz "may not be offered for sale unless they have first been authorized in accordance with the Commission's certification procedures."

The FCC discounted a disclaimer on DNJ Radio's website that the devices it's marketing "are for industrial, scientific, medical, or export use only," and that using them on 11 meters would violate FCC rules. "The amplifiers...are being offered for sale from within the United States, and anyone within the United States could buy the devices regardless of the disclaimer," the FCC said. Future violations by either retailer could result in hefty fines and/or equipment seizure, the Commission said.

The Commission told both firms to take immediate steps to discontinue marketing unauthorized RF devices, and it gave them 30 days to provide certain information in writing.

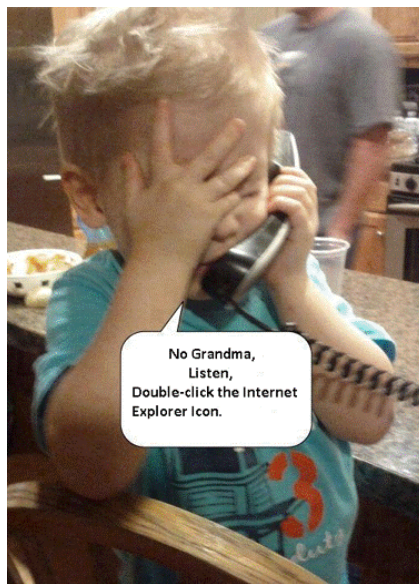
In June, the FCC issued a *Citation and Order* to a Nebraska-based online retailer for illegally marketing unauthorized RF devices -- including 10 and 12 meter amplifiers capable of putting out up to 8200 W.

ARRL Letter

TECHNICAL TOPICS AND INFORMATION

Guy **K2AV** found a particularly interesting view of propagation provided by the Reverse Beacon Network (RBN) watching a particular signal over an entire contest. The results document the propagation modes changing, particularly if conditions are quiet. He presents an example recorded during the 2011 **ARRL DX CW** contest on 40 meters when multi-multi stations were all calling CQ consistently. Start by logging on to the RBN's analysis page. "Enter 02/19/2011 as the date. Click on the Europe bar. When the station selection expands, click on S5ØARX. Enter **NY4A**, **W3LPL**, and **K3LR** under stations. Look at the 40 meter spots. On the right side of the graph for the... day, Saturday evening was for propagation one of those wide open very "smooth" propagation evenings analogous to reflections off a lake on a windless day. In particular, starting around 19Z or so, see how **NY4A**'s strength goes through three jumps up to a plateau. You can see that LPL and LR climb them as well. These plateaus follow the propagation changing modes (numbers of hops and angle) as the band opens into the evening. Note that the **NY4A** 5-element long quad (at 84 feet center height, over 179 feet of catenary) engages all three modes cleanly and fully as they open, without any fading. If the path to EU from **NY4A** is cleanly open, the path must be open from LPL and LR distances. By common expectation LPL and LR should have a propagation advantage over **NY4A**. LPL and LR both have excellent stacked 3 or 4 element 40m Yagis. But note how as the fourth mode is engaged, both LR and LPL fall off because they are not cleanly engaging the mode, most likely

because the increasing elevation angle is (moving) into a notch in the Yagi vertical pattern. Also note that **NY4A** carries the best signal for most of the 24 hours. This is an evaluation of the **NY4A** 40 EU quad vs. known excellent installations that is hard to argue with." **ARRL Contest Update**

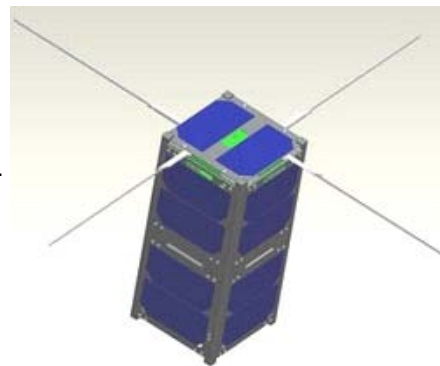


HAM RADIO PAYLOADS PREPARING TO LAUNCH

Two **CubeSats** carrying SSB/CW and FM voice transponders are scheduled to be launched into a 600 km orbit during the first half of next year. That news came during the **QB50** Project presentation at the **AMSAT-UK** International Space Colloquium earlier this summer. The **QB50** project team has signed a *Memorandum of Understanding* with **AMSAT-UK**, **AMSAT-Francophone** and **AMSAT-NL** to enable two Amateur Radio payloads to fly on two yet-to-be-named "precursor" CubeSats in advance of the main mission, to deploy about 40 double satellites. The CubeSat launch allows for the testing of key satellite and payload components. In addition, the precursor mission allows for experimentation and validation of the **QB50** operational concept. The Amateur Radio payloads will become the primary payload of the spacecraft once all **QB50**-related experimentation has been concluded.

The **AMSAT-F** payload for one of the satellites will be an FM voice relay with VHF uplink and UHF downlink. It will also transmit FX25 telemetry at 9.6 kbit. The **AMSAT-NL** payload on the other precursor satellite will incorporate an SDR-based, linear V/U transponder core. It will provide a telemetry downlink at 1.2 kbit. The **QB50** spacecraft generally will have downlinks in the 435-438 MHz Amateur Satellite Service allocation, although some are expected to use 2.4 GHz.

Meanwhile, the Baltic nation of Lithuania is hoping that its first two satellites will be launched later this year from the International Space Station (ISS). The nanosatellites carrying Amateur Radio payloads could be among the CubeSats sent by payload handler NanoRacks LLC to the ISS on the SpaceX CRS-3 mission this November. The Kaunas University of Technology is developing **LituanicaSAT-1**, while the Lithuanian Space Association is working on **LitSat-1**.



Artist's conception of a QB50 double CubeSat



Artist's conception of LituanicaSAT-1

This year marks the 80th anniversary of the historic flight by Lithuanian pilots Steponas Darius and Stasys Gireenas in the *Lituanica* aircraft. On July 15, 1933, they took off from Floyd Bennett Field in New York and flew across the Atlantic, covering a distance of 6,411 kilometers in 37 hours and 11 minutes. Tragically they perished after crashing in Germany, just 650 kilometers from their destination of Kaunas, Lithuania.

LituanicaSAT-1 will carry a VGA camera, GPS receiver, 9600 bps AX25 FSK telemetry beacon and a 150 mW V/U FM voice transponder. **LitSat-1** is planning a U/V linear transponder for SSB/CW communications. --**AMSAT News Service/AMSAT-UK**

NOISE SCALE

<http://leenks.com/link458853.html>

IF YOU REMEMBER ALLIED RADIO, CHECK OUT THIS FUN LINK

http://www.alliedcatalogs.com/catalogs_main.html

INTERESTING VIDEO ON BATTERIES

http://www.youtube.com/watch_popup?v=Y_m6p99l6ME

CB cont

This will allow future updates to be sent for other on-air events. When e-mailing, please indicate your location, what you plan to use for equipment, and what your identifier will be (former CB call letters, "handle" or other identifier). Any "pseudonym" or identifier may be used, per the FCC information given above, but call letters from another radio service should not be used. If there is enough interest, operation may continue at future times. I hope to hear from you!

(Article courtesy of: "The **RaRa RAG**" September, 2013)

GAVEL cont

We are always open for new ideas to present to the kids. If you know of a scout or youth group that might be interested in attending our event pass on my email address: wa2fkv@arrl.net or they can call me at 693-3917 during the day. I will tell them to bring their brothers and sisters with the group. Remember the future in our hobby will be in the hands of our youth.

The 56th Jamboree on the Air will be held the weekend of October 19th and 20th. RAWNY will be participating in possibly two locations. If you would like to help out this year let me know (wa2fkv@arrl.net). Many hands make for light work. Getting the kids on the air is priceless. Lee, **KC2RBL**, Jim, **KA2IWK** and myself, **WA2FKV** set up at Scout headquarters on Genesee Street last year and had a great time with the kids and adults. It was a limited display, but we were able to get every one of the scouts on the air. By participating, you get a special patch from the **BSA**. We are working out the detail of our operations now. This is a worthwhile activity to get involved with. It will segue into our November Youth Night. Let us know if you would like to help. You can also get involved by inviting a scout Pack or Troup to your own shack. Either way lets get those kids involved.

Early in June we were involved with Museum Ships on the Air from the USS Little Rock station. There were about 104 ships on the air from all over the world. This year Lee, **KC2RBL**, Kevin, **WA2FKV**, Rich, **KG2OR**, Eric, **KC2WGF**, Jim, **KC2YIT**, Gwen, **KC2WSE**, Alan, **KD2AGL** and

Stu, **AE2SS** manned the station. The event is sponsored by the Battle Ship New Jersey Amateur Radio Club. This is a good summer activity where you are the hunttee instead of the hunter. We would like to activate the **USS Croaker** as well as the **USS The Sullivans** next year if we can find enough operators to keep the station on the air for at least one of the two days.

We had our second Post Field Day meeting last July to go over our operation and how to improve the experience for all those that participate. We always have a decent turn out of members and their families. There didn't seem to be many people touring the park this time, probably due to events being held on the dock (Concerts, Walks, etc). We did seem to keep the stations on the air throughout the event. Next month we will publish out results as well as how we fared compared to the last 34 years on the USS Little Rock.

And last but not least, during the Summer we decided to open the station on the Saturdays after our Breakfast Break. This was to give some of the members a chance to come down and see what's going on. We plan on continuing the invitation on the Saturdays of September 21st, October 19th and November 16th. Summer was just too busy for many of the members to make it down. Hopefully, if you haven't had a chance to see the operation, you will make the trip to the park. For those of us that have been involved with the station over the years, it has been well worth it. That's all for now. See you on Tuesday.

73, Kevin **WA2FKV**

SUBJECT: GOVERNMENT PIPE SPECIFICATIONS

1. All pipe is to be made of a long hole, surrounded by metal or plastic centered around the hole.
2. All pipe is to be hollow throughout the entire length - do not use holes of different length than the pipe.
3. The I.D. (inside diameter) of all pipe must not exceed the O.D. (outside diameter) - otherwise the hole will be on the outside.
4. All pipe is to be supplied with nothing in the hole so that water, steam or other stuff can be put inside at a later date.
5. All pipe should be supplied without rust - this can be more readily applied at the job site. N.B. Some Vendors are now able to supply pre-rusted pipe. If available in your area, this product is recommended as it will save a lot of time on the job site.
6. All pipe over 500 ft (153m) in length should have the words "long pipe" clearly painted on each end, so the Contractor will know it is a long pipe.
7. Pipe over 2 miles (3.2 km) in length must have the

words "very long pipe" painted in the middle, so the Contractor will not have to walk the entire length of the pipe to determine whether or not it is a long pipe or a very long pipe.

8. All pipe over 6" (152 mm) in diameter must have the words "large pipe" painted on it, so the Contractor will not mistake it for small pipe.

9. Flanges must be used on all pipe. Flanges must have holes for bolts quite separate from the big hole in the middle.

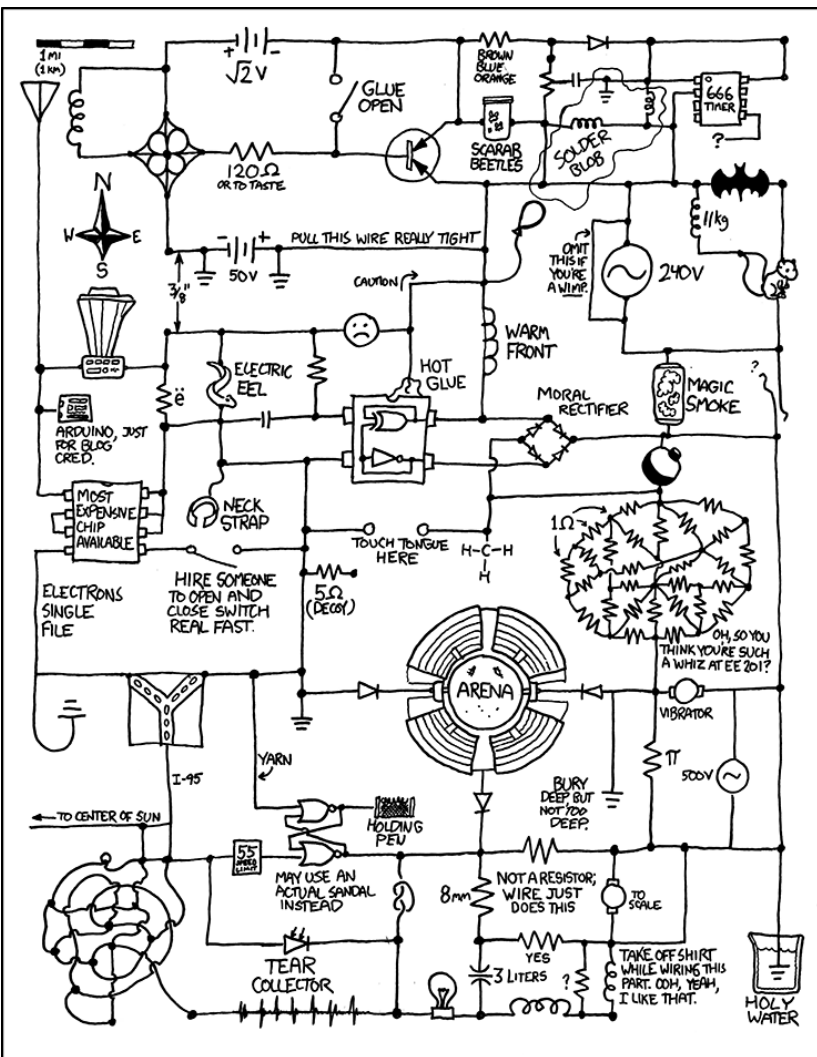
10. When ordering 90 degrees, 45 degrees or 30 degrees elbow, be sure to specify right hand or left hand; otherwise you will end up going the wrong way.

11. Be sure to specify to your vendor whether you want level, uphill or downhill pipe. If you use downhill pipe for going uphill, the water will flow the wrong way.

12. All couplings should have either right hand or left hand thread, but do not mix the threads - otherwise, as the coupling is being screwed on one pipe, it is unscrewed from the other.

A black and white kitten is lying on its back on a textured, light-colored surface. The kitten's front paws are held up near its eyes, and its hind legs are also extended upwards. The kitten has large, round, light-colored eyes and a dark face with white markings on its chest and paws. The background is a plain, light-colored wall.

For the home brewer

**ADDRESS**