



HARMONICS

1916

South Jersey Radio Association

2013



SOUTH JERSEY RADIO ASSOCIATION LEAPS INTO THE PAST, PRESENT, AND FUTURE HAPPY LEAP YEAR 2012 – part 5

(Even if it's now 2013 and not a leap year)

South Jersey Radio Association takes a giant leap forward. We have passed the half century mark and still going strong. We can now officially boast that "Our radio club is older than your radio club." With age comes wisdom so we are not only the oldest but probably the wisest.

1976

Happy Birthday America No. 200

Happy Anniversary South Jersey Radio Association No. 60

Our leaders for 1976 were:

President Frank Widmann, WA2YSW

Vice President Walt Schmidt, W2EA

Treasurer Al Abercrombie, W2GJS

Recording Sec. Spruge Buder, W2TDN

Corres. Sec. Amor Klotzbach, W2FYS

Directors:

Sy Adler, K2KA

Joe Duffin, W2ORA

Fred Holler, W2EKB

Jack Koch, K2MZP

Dave Newbourg, W2ITG

Ed Poole, WN2ZDU

Joe MacMillan, W2FGY

This is interesting and amusing. Eleven of the twelve members of the Board of Di-

rectors were RCA employees. Did you know that the 722 part of the telephone number actually was RCA?

To celebrate our 60th Anniversary special event station WS2JRA was on the air from 4 June through 14 June 1976 operating 1.8 MHz to 432 MHz - CW, SSB, AM, FM, and Oscar mode B. There were articles in both the Sunday Bulletin and the Courier Post about SJRA.

The January VHF Party bagged 179,584 points.

Dues for 1976 were \$8.00 if paid before 1 February and \$10.00 is paid after that date. The early bird got the discount.

On 20 February 1976 a memorable three way QSO took place. Participating in this QSO were three of SJRA's 'Hall of Fame' members - Gordon Kressel, W2BQ, Bill Pyle, W3WR, and Hendry Byam, W2BOD.

In 1976 Gordon Kressel was 78 years old. This Founding Father received the call 3WU in 1914. After WWI he became 3BO. When southern New Jersey became part of the 2nd district he was assigned the call W2BQ.

During the 9 January Board of Directors meeting Joe Duffin, W2ORA, was looking into the use of Xeroxed Gummed labels as an alternative to the use of the Addressograph of the circulating of Harmonics. I guess Jim, KR2T, and I, KV2M do not realize

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SOUTH JERSEY RADIO ASSOCIATION

HARMONICS is published monthly and is the official news letter of the South Jersey Radio Association. The SJRA was established on June 16, 1916 and has been meeting continuously since its inception. The club has been affiliated with the American Radio Relay League since 1920.

The SJRA meets each month on the fourth Wednesday, January through September; and usually the third Wednesday, October, November and December; in one of the Meeting Room of the Gibson House at 525 East Main Street, Marlton, NJ 08053. Visitors are always welcome at our general meetings. **“Our Meetings are Smoke Free”**

SJRA operates the K2AA Repeater (145.290 - PL 91.5) located in Medford, NJ and the K2AA DX Cluster (145.770) located in Mt. Laurel, NJ. The repeater and DX Cluster are open for use without restriction to all licensed amateur operators. The DX Cluster is also accessible on line (see www.sjra.org for information).

There are currently over 150 SJRA members active in most all aspects of amateur radio. Membership is by application and is subject to the approval of the Board of Directors. Club dues are currently \$30/yr. for memberships, \$22.50/yr for retired-person membership (62 plus 1 yr membership), and \$15/yr. for additional family members and student membership. Membership information is available on the K2AA Repeater or from Mary Von Lintig, KV2M, 856-772-6475

EMAIL: [sjra at sjra dot org](mailto:sjra@sjra.org) SJRA's web page www.sjra.org
 Mark O'Brien, K2AX, is the SJRA/ARRL VUCC card checker
 Joe Fisher, KC2TN, is the SJRA/ARRL WAS card checker

Officers

President: Ken Botterbrodt, K2WB
Vice Pres.: Jon Mac Millan, W2MC
Treasurer: Ray Golley, N3RG
Rec. Sec: Lou Priestley, N2HQL
Cor. Sec: Ted Groke, W2TAG

Directors:

Kathy Edwards, KM2KME
 Rich VonLintig, KV2R
 Debbie Pullaro, W9QWN
 Ira Weinstein, W2IRA
 Mary VonLintig, KV2M
 Jim Vecchiola, KR2T
 Al Witner, N3AVT

Committees:

Historian: Mary VonLintig, KV2M
Membership: Mary VonLintig, KV2M
Field Day: Ken Botterbrodt, K2WB
Contests: Jon Mac Millan, W2MC
Repeater: Joe Fisher, KC2TN
Programs: Kathy Edwards, KM2KME
H&W: Kathy Edwards, KM2KME
Awards: Lou Priestley, N2HQL
Hospitality: Jean Priestley, KA2YKN
Nets: John Fogleboch, WY2J
Publicity: Debbie Pullaro, W9QWN
Picnic: Debbie Pullaro, W9QWN
Ways & Means: Ray Golley, N3RG
Property: Jon Mac Millan, W2MC

Harmonics Staff:

Publisher/Editor: Ted Groke, W2TAG
 or Don Beaulieu, WA2DUE
Circulation: Mary VonLintig, KV2M;
 Jim Vecchiola, KR2T

 ★ **Harmonics** is now available on the WEB in pdf format at: ★
 ★ <http://www.sjra.org> ★
 ★ **South Jersey ARRL Section News** is available on the WEB at: ★
 ★ <http://www.arrl.org/sections/?sect=SNJ> ★

LOCAL WEEKLY NETS

Monday	K2AA, Medford	145.290 @ 8PM
Thursday	Various Locations	28.405 @ 8PM

Harmonics Deadline

Articles submitted for the next HARMONICS will be accepted until Monday, March 11, 2013. Email: [ted.w2tag at gmail dot com](mailto:ted.w2tag@gmail.com)

SWAP SHOP - For Sale/Wanted ads are free of charge and are accepted for Amateur Radio related items only. While ads are not restricted to SJRA members, there is only limited space available and members have priority for listings. No items will be accepted for inclusion in the Swap Shop from commercial vendors or traders. All ads must be submitted at least three weeks prior to the scheduled SJRA general meeting date.

GENERAL ADVERTISING - Limited commercial advertising is accepted on a space available basis. Annual advertising rates range from \$25/yr (Min 1/8 page) to \$200/yr (Full Page). Information is available from Ken Botterbrodt, K2WB.

Meeting Minutes

Minutes of General Meeting January 23, 2013

The meeting opened at 1932 by Ken, K2WB. It was held at the Gibson house in Marlton New Jersey. The members introduced themselves and answered the question of the night, which was do you work or know Morse code. The minutes of the December meeting were approved as printed in Harmonics on a motion by N2HQL/W2RDS. Ray, N3RG, gave the treasurers report stating we had 44 paid up members. The report was approved on a motion by N2HQL/N2YU.

Tonight's program will be the estate/member auction. Mario, N2AK, will be running a program to do another kit, adding a frequency counter to the receiver previously built.

VE report by Al, N3AVT, all applications are in to Laurel amateur club. Nets, by John, WY2J, 5 to 6 people are checking in on 10 M, at 28.405. Last week nine people checked in on 2 m. The repeater is working, we will need to wait till spring to replace the antenna and upper cable.

Joe reported he is still taking orders for club stuff, there is a new shirt available. Web report, by Ira, W2IRA, new development software has been installed. Field day 2013 will be held again at Savage field, a sign-up sheet will be available on the web site.

No Old Business was discussed. New Business: Ken is looking for volunteers for the nominating committee. We went to recess for refreshments and opened up at 2020 for the auction.

Minutes of Board Meeting February 6, 2013

All board members were present except W2MC, N3RG, W9QWN and W2TAG. The meeting was opened at 1932 at the Gibson house in Marlton New Jersey. The minutes of the January board meeting were approved as printed on a motion by N2HQL/KM2KME.

New members: Paul Hayden, KF2Y to reenroll. Motion to accept by N2HQL/KV2M, accepted. Mary announced her intention to drop the membership chairman position at the end of this term.

Corresponding Sec. report: nothing sent this month. Harmonics due date is as usual, the Monday after the board meeting. The repeater was working well this morning. Contests logs are to be sent directly to the league, with copies to W2MC.

The picnic is still planned for field day at 1400 hrs. Health and Welfare by Kathy, KM2KME; nothing heard. Programs scheduled: February is the white elephant sale, March will be a presentation on the website, July will be a presentation on the Laurel VE system.

The planned site for the VE testing will be on commerce Lane in Berlin, New Jersey on the second Wednesday of each month. All paperwork has been sent in to the VE coordinator.

Website by Ira, W2IRA, the development setup has been installed by Bob, N2SCJ.

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(SJRA Past, Present, and Future from page 1)

how easy we have it when it comes to the circulation of Harmonics. All we have to do is stick the prepared labels (thank you Ray, N3RG) on the already folded and sealed Harmonics and then put a stamp on them.

Happy Anniversary No. 60 to SJRA.

On 22 June 1976 the 60th Anniversary of our radio club was celebrated at Peoples National Bank in Haddon Township. There were more than 115 people at the Anniversary party. Among those present were twenty past presidents of SJRA and Connie Mac - W3SW who was the Atlantic Division director. Four charter members also joined the festivities. They were Gordon Kressel - W2BQ, Mr. Patterson, W2YR, Hendry Byam, W2BOD, and Bill Pyle, W3WR. What an impressive gathering. SJRAers sure do know how to do things in style.

Field Day 1976 was also 59(9). We were 8A and finished in first place for that division with 11,500 points.

During 1976 our current President Ken, K2WB, upgraded from Novice class. His old call was WN2UAD and his new call became WA2UAD. Ken is a man of many call signs, but that is another story.

It is said 'Into every live a little rain must fall.' Some of that 1976 rain fell on our treasurer Al, W2GJS. He had his 2 meter FM gear stolen from his car on 31 March while parked at the Ramada Inn in Arlington, VA. I do not know if he ever recovered his property or if the thief was caught.

Effective 24 March the FCC dropped the requirement of "at least one minute" of error free copy in the code test.

An amendment of our Constitution was added in 1976 regarding members reaching the age of 62.

More than 1,000 attended the Hamfest and picnic.

Don Beaulieu, WN2DUE, and Mario Dianora, WB2KFK were welcomed to SJRA during her 60th year and Hendry Baum was approved as an honorary member.

Since 1976 was a very special year for our great Country and our radio club, I decided that it should stand alone and not have to share the spotlight with any other years. The past of our radio club during leap years will be continued in future articles during this year even though it is not a leap year.

73 to all and I am History
Mary, KV2M



Here is a photo featuring (left to right): Hendry Byam, W2BOD, Gordon Kressel, W2BQ, Connie Mac, W3SW, Bill Pyle, W3WR, and Mr. Patterson, W2YR

HAM TECH

Vol 4 No. 2 by John - WY2J

wy2j at arrl dot net

Oscillators and Frequency Synthesizers

Part 1 of 3 - LC and Crystal Oscillators

Introduction - The generation of clean and stable continuous wave oscillations has been fundamental to radio since the early 20th century when the spark transmitter and crystal receiver faded into history. The first vacuum tube Morse keyed CW transmitters were a power inductor capacitor (LC) oscillator connected to an antenna. The companion early receivers were a regenerative detector or vacuum tube amplifier with an LC tuned circuit with positive feedback turned up into oscillation. The audio beat note heard in the headphones was the difference in frequency between the transmit oscillator and the oscillating detector in the receiver so stability of both of these oscillators became very important. Small percentage errors in the frequency of either oscillator yields large errors in the resulting beat note. This simple one tube CW transmitter, with a two or three tube oscillating detector receiver, were used through the WW2 era although the transmitter was frequency stabilized with a quartz crystal. In part 1 of this series we will explore LC and crystal oscillators and in parts 2 and 3 the modern frequency synthesizers which provides frequency variability with crystal stability.

Inductor Capacitor (LC) Tuned Oscillators - Most all oscillators of interest to Hams consist of a single stage amplifier with a tuned circuit connecting the output back into the input with the loop gain equal to +1. Two configurations of oscillators commonly used by Hams are shown in Fig. 1 with the resonator in the gate circuit of the FET amplifier. Output is taken from the FET source

and fed back into the resonator circuit tap. The first configuration is a series tuned oscillator while the second is parallel tuned. Both work but the series tuned tends to have better stability. Some impedance matching is generally required within the oscillator and the technique employing a tapped inductor is named a Hartley oscillator while a tapped capacitor is used in a Colpitts design. A series tuned Colpitts is often called a Clapp oscillator. Typical circuits are shown below in Figure 1.

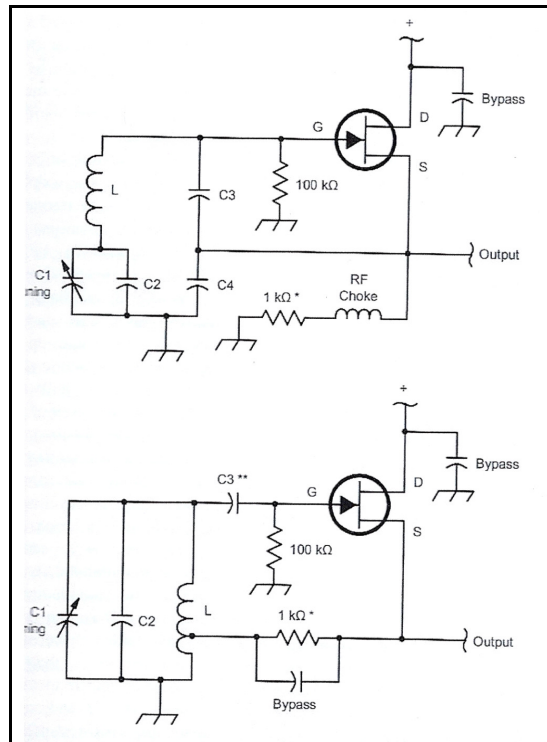


Figure 1: Two types of oscillators. Top - Series tuned Colpitts or Clapp. Bottom - Parallel tuned Hartley.

(Continued on page 6)

(Ham Tech from page 5)

All of these configurations can produce clean spurious free oscillations with low phase noise if the DC voltages are regulated and well filtered for low frequency hum such as 60 Hz and switching power supply ripple. A well designed 5 MHz LC oscillator typically has a noise floor 170 dB below carrier in a 1 Hz bandwidth from 10 KHz to 10 MHz off of the carrier. They also change frequency easily by employing variable capacitors (VFO) or variable inductors (PTO).

What LC oscillators do not do well is provide long term frequency stability. The inductor in particular drifts with temperature as do capacitors, but to a lesser degree. A well designed LC oscillator at 5 MHz will drift 50 Hz to 500 Hz in a typical temperature varying room over a few hours. This is 1 part in 10^5 to 1 part in 10^4 . Set-ability is no better than a few KHz due to tuning linearity and backlash errors. Temperature compensation with negative temperature coefficient trimmer capacitors and temperature control with ovens helps reduce drift but is a complex solution.

The Quartz Crystal Oscillator - By the mid 1930's the quartz crystal came into use to stabilize the long term frequency of ham transmitters. This was a cheap and easy solution to assuring you were on frequency. The predecessor of the FCC was threatening to shut down ham radio if something wasn't done to keep hams within their bands. When the FCC opened the first novice band in 1950 they placed this 50 KHz segment right in the middle of the 80 meter band and required that novice class hams use crystal control. They had long memories of hams with early VFO control and no way to accurately measure frequency.

The crystal oscillator is nearly identical to the LC design except that the LC resonator is replaced with a quartz crystal. Series and parallel tuning are used but the series resonant frequency of the crystal is more stable and less susceptible to external capacitance changes. Figure 2 shows a typical series resonant crystal oscillator that uses the crystal as the oscillator resonator and as a very narrow filter to reduce the close to carrier phase noise.

Most Ham used crystals are AT cut which have a very low but not zero frequency drift at room temperature. The SC cut is less common and has a temperature coefficient of frequency drift which is zero at one elevated temperature. To make use of this advantage of SC cut crystals requires that they be operated in a controlled temperature oven. The long term stability of these oven stabilized crystal oscillators is better than 1 part in 10^9 or 0.014 Hz at 20 meters. The short term stability is better than 1 part in 10^{10} over 1 second. The phase noise is -125 dBc/Hz at 1 KHz offset which is about 15 dB poorer than the 5 MHz LC oscillator described above. The trade off is phase noise for long term stability in the crystal oscillator because the power level is lower.

High quality crystal oscillators are the second best frequency source know. Long term stability of 1 part in 10^{10} per day can be obtained with fractional degree temperature control. Only the atomic frequency standards which use Rubidium or Cesium gas tubes to stabilize crystal oscillators are better but with orders of magnitude increase in cost and complexity.

Stabilities for Rubidium standard are:

Accuracy: 1 part in 10^{11} at time of manufacture or 1.4 times 10^{-4} Hz at 20 me-

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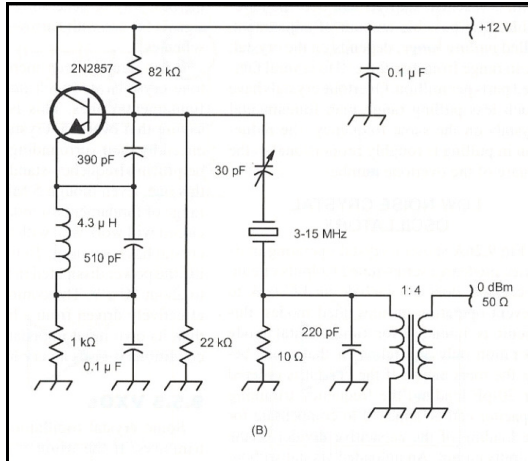
(Ham Tech from page 6)

Figure 2 - Series tuned Colpitts crystal oscillator with the crystal also serving as a noise filter.

ters. Long term stability is less than 2 parts in 10^{11} per month or 2.8×10^{-4} Hz at 20 meters.

Stabilities for Cesium primary standards are:

Accuracy: 7 parts in 10^{13} at manufacture or 9.8×10^{-6} Hz at 20 meters. Long term stability is 5 parts in 10^{12} over the 3 year life of the cesium tube or 7×10^{-5} Hz at 20 meters.

Next month - We explore the Digital Phase Locked Frequency Synthesizer that has the flexibility of the LC VFO with the long term accuracy and stability of the crystal oscillator.

**List Your "For Sale"
Ham Stuff in the SJRA
Harmonics**

Email Ted, W2TAG, with your listing, ted.w2tag at gmail dot com

President's Message

Ken - K2WB

If the snow or freezing rain damages your antennas, wait for better weather to repair. No reason to be a hero, there are no awards or prizes in getting hurt. Please be careful and think safety at all times.

Check on neighbors, friends and the elderly during inclement and cold weather.

This month is our annual White Elephant sale; this is a good time to donate some of the treasure that has been sitting around not being used for years. The meeting is one of the most entertaining ones to see. Bring some stuff, some money and have fun. We promise not to tell your spouse on what treasures that may follow you home (your secret is safe with us).

Congratulations to Joe Taylor, K1JT. The SJRA Board of directors decided to make him an honorary life member of the SJRA. Joe's has been an avid amateur radio operator, inventor and author of the WSJT software for digital meteor scatter, Nobel Prize Winner to name a few.

We are looking for help with some of the aspects of the operation of the club, membership and programs to be specific. If you are interested in helping contact me, and I will put you in touch with the right person.

Our new VE team is getting ready for action, if you are interested contact Al, N3AVT.

Field Day will be here 135 days, now is a good time to start planning. Contact me if you have any questions or would like to help.

Stay warm!

Not a State Territories

Part 1 – American Samoa

The United States has three territories – American Samoa, Guam, and United States Virgin Islands. A territory is any extent of region under the jurisdiction of the federal government of the United States including all waters and all U.S. Naval vessels. U.S. territories have less political power than U.S. commonwealths. Congress tends to impose its will on territories.

American Samoa is an unincorporated territory of the United States consisting of five volcanic islands – Tutuila, Ta'u, Ofu, Olosega, and Aunu'u, plus two coral atolls – Swain's and Rose Islands. The capital is Pago Pago. They are located in the Pacific Ocean roughly halfway between New Zealand and the Hawaiian Islands.

The government of American Samoa is under the supervision of the U.S. Navy. Tutuila is the most important possession. The United States has had a naval and coaling station in the island since 1872. American Samoa became a United States territory on 17 April 1900. During WWII the number of American troops outnumbered the local population. American Samoa is self-governed under a construction that became effective on 1 July 1967.

Interesting stuff about American Samoa:

Independence Day is 1 January. Its first Independence Day was in 1962

American Samoa is the only United States territory located south of the equator

Motto – Samoa, Muamua Le Atua. (Let God be First.)

Anthem – Star Spangled Banner

Dialing code – 684

Currency U.S. dollar

Time zone – Samoa Standard Time (SST). That is UTZ-11.

Official language – Samoan language and English

People born in American Samoa are American nationals but not American citizens.

American Samoa has three airports, all of which have paved runways but there are no railways.

American Samoa became the first U.S. State or territory to ban plastic bags.

Economy – based on fishing and agriculture

There are 116 km of coastline.

There are 19 species of snails on the main island of Tutuila. (Bet you did not know that.)

There is a statue of Charlie the Tuna at the company cannery at Atu'u, Pago Pago.

The American Samoan quarter has a picture of George Washington on the front. On the back there is an ava bowl that is used to make a ceremonial drink for special events, the whisk and staff that is symbolic of the rank of Samoan orator. The inscription on the quarter reads 'American Samoa', 'Samoa Muamua Le Atua', "E Pluribus Unum", and the date.

Now for the best part:

ASARA stands for American Samoa Amateur Radio Association.

73 from the State of New Jersey, the QTH of SJRA, the oldest continually operating radio club in the United States and the best.

Mary, KV2M

21 Things To Do After You Get Your Ham Radio License

Dan, KB6NU, *cwgeek at kb6nu dot com*

Field Day, held on the last full weekend in June, is the quintessential amateur radio event. It includes elements of just about everything that makes amateur radio the great hobby that it is, and you should make every effort to participate in Field Day the first year that you're licensed.

Field Day got its start in 1933 as an emergency-communication exercise. Ham radio operators dragged their equipment out into a field somewhere and operated using emergency power sources. The aim was to see how prepared amateur radio operators were to respond to an emergency and to learn how to do it better.



Tents often serve as shelters for Field Day stations. Photo courtesy of Ken Barber, W2DTC.

Emergency communications preparedness is still the primary purpose of Field Day. Amateur radio operators tune up their gasoline-powered generators and test

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Monthly Puzzle

Don – WA2DUE, *wa2due at arrl dot net*

Last months puzzles were:

You just won a lottery and the payment options are; \$1 on the first day, \$2 on the second day, \$3 on the third day, and so on for 14 days; or 1¢ on the first day, 2¢ on the second day, 4¢ on the third day and so forth for 14 days. Which option will pay you more and how much more?

Solution: Given is two series, one arithmetic and the other geometric. The sum of the first is $n(n+1)/2$ and the second is $a(r^n-1)/(r-1)$ where 'n' is the last number, 'a' is the first number, and 'r' is the common ratio. In this case 'r' is 2 and 'n' is 14. The sum of the arithmetic series is 105 and of the geometric series 163.83 and their difference is \$58.83.

You want to make a tank circuit for 21 MHz and have on hand a 33 pF capacitor. How many microhenries must the inductor have to be resonant at that frequency?

Solution: To be in resonance the reactance of both the capacitor and inductor must be the same.. Determine the reactance of 33pF at 21 MHz by the equation $X_c = 1/(2\pi fC) = 229.66$ Ohms.

Then determine the inductance with the equation $X_L = 2\pi fL = 1.74$ μ H

Solutions were received from Richard, KV2R; Mary, KV2M; Bob, KD2ADL; and Fred, W2EKB. Thank you all, it is really satisfying to know that the puzzles are being used to keep the mind in good health.

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(Monthly Puzzle from page 9)

For February let us consider:

A communication tower is seen mounted on top of a hill. From a mile away the base of the tower is 16 degrees from horizontal and the top of the tower is 27 degrees from horizontal. Approximately how tall is the tower and how high is the hill? For this puzzle consider the earth to be flat.

The keys 'A' below and above middle 'C' on the piano keyboard are 220 and 440 Hertz respectively. They form a geometric series whose first term is 220 and the thirteenth term is 440. Find the frequency of the fourth term (middle 'C') carried out to the second decimal place.

Please send solutions or comments to wa2due at arrl dot net.

(Meeting Minutes from page 3)

Historian, Mary, KV2M, an old device, called an electro-voice was shown. It is a chart similar to a circular slide rule that gives bearing headings and other information by callsign.

Old Business; the incorrect youth plaque was re-engraved.

New Business: a motion by Richard, KV2R, to name Joe Taylor, K1JT, as an honorary life member. Second by Kathy, KM2KME. The motion passed. Ken announced that non-members who currently receive and e-mail copy of Harmonics will have that service dropped.

A letter had been received from Ben Heady, W2IJP, requesting that his widow be assisted in setting up an eBay account when he becomes a silent key, so that she may sell his equipment. Adjournment at 2020. Submitted by Lou, N2HQL

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their solar panels to ensure that they will be ready in case of an emergency. And, by hauling out into the field all manner of radio equipment, we find out what radios will work best in that operating environment.

Of course, the only way to tell how well your equipment will work is to actually operate it. That's where the contest part of Field Day comes in. Stations score points by making contacts with other stations, and those with the most points win. Other things being equal, the stations that work the best will make the most contacts and score high in the contest.

Many Field Day stations have multiple transmitters, and when you have multiple transmitters, you need multiple antennas. Setting up a multiple-transmitter operation can be a lot of work. That's why Field Day is often a club activity. For some clubs, it's the biggest event of the year. In addition to all the technical activities, clubs use Field Day as a social event. There's food and drink and reminiscing about Field Days gone by. For some hams, that's more fun than actually operating.

Finally, because Field Day is such a big event, the ARRL encourages us all to use the event to reach out to the public, elected officials, and served agencies, such as county emergency management and the Red Cross, and educate them about amateur radio. Unlike many contests, where you only score points when you make contacts, you score Field Day points for holding your operation in a public place, handing out brochures to interested parties, and having the mayor come and visit your Field Day site.

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SJRA Jackets, Shirts, Hats

Order NOW - Next order going in soon!



Spring Jacket is \$44 (S,M,L,XL), Fall Jacket is \$55 (S,M,L,XL),

Shirts are \$27 (S,M,L,XL), Hats are \$25 (one size fits all)

Name & Call Sign embroidery included...Larger sizes slightly more!

Email Joe, KC2TN, with orders or additional info:

kc2tn at comcast dot net

(21 Things from page 10)

How to participate

By participating in Field Day, you'll learn more about amateur radio in a single day than you will doing just about anything else. If you're a club member, ask how you can help out organizing your club's Field Day event. That's sure to win you points, and it will make your Field Day experience that much more fun and educational.

If you're not a club member, or if you'll be out of town that particular weekend, you can find a Field Day site by going to the

ARRL Field Day Locator. The clubs that are listed there are sure to welcome you, especially if you arrive early and help them set up.

I hope I've persuaded you to participate in the next Field Day. You'll not only learn a lot, but you'll have a lot of fun. Don't forget to take some sun screen and mosquito repellent!

You can read all of KB6NU's musings about ham radio on his blog at: www.kb6nu.com.

February Meeting
Forth Wednesday

February 27, 2013

"Our Meetings are Smoke Free"

The meeting commences promptly at 7:30PM in the first floor Meeting Room of the Gibson House on Main Street, Marlton, NJ 08053. Guests are always welcome.

Program For February:

This month we are having our White Elephant Auction...Bring in your "stuff" and your wallet and you will get the great opportunity to take home many treasures to add to your collections!!

February 2013 Health and Welfare:

Many Birthdays this month! Happy Birthday to the following:

4- Ted Groke, W2TAG; 11- Donna O'Brien, W2DOB; 12- Noah Weinstein, KC2YAT; N13- Jack Imhof, N2VW; 15- Al Witner, N3AVT; 16- Riley Stoneking, N2RAS; 16- Amber O'Brien, KD2BOO; 19- MacKenzie O'Brien, KD2BMV; and 22- Shawn MacDonald, K2SMD.

Kathy Edwards, KM2KME

First Class Mail

South Jersey Radio Association
PO Box 1026
Haddonfield, NJ 08033

