



HARMONICS

1916

South Jersey Radio Association

2015



Leaders of the Pack – All Our SJRA Presidents

Part 3 – From 1967 through 1987

The pack leader to start off our next 50 years was Amor – N2FY (Friendly Yankee). His smile and sense of humor still resonate through the archives of SJRA. For many years Amor graced 'the Mountain' with his operating skills, abundance of elbow grease, and the preparation of breakfast. The tail end of this pack belongs to Joe Lameiras – K2WJL (Wonderful Joe Lameiras). Joe remembers those Field Days that he spent many an hour in that green tent.

Amor R. Klotzbach II: 1966. Call N2FY former W2FYS. Also President in 1971.

One card is in membership file and I really had to search for him. The card is dated July 1957. License class – Extra. Call – N2FY. Address – 1705 Lark Lane, Cherry Hill, NJ and also P.O. Box 1105 Hendersonville, NC. Sponsor – Zollers, W2EWN.

A Norman Into Jr.: 1967. Call K2IEO.

No membership records are available. (Again, I really searched and searched. Maybe that unclassified bug ate it also. I did; however, find Norman Into's name in the April 1955 edition of Harmonics. He was being accepted as a new member under the same call of K2IEO.)

Herbert C. Brooks: 1968. Call K2BG.

Two cards are in membership file. Card

No. 1 is dated 20 July 1949. License class – 'B'. Call K2BG. Address – 800 Lincoln Avenue, Palmyra, NJ. Age – 47. Occupation Freight inspector. Card No. 2 is dated 27 March 1952. License class – 'A'. Call – K2BG. Address – 60 Sheffield Place, Vincentown, NJ. Age – 49. Occupation – Inspector. Sponsor – P. Catona.

William H. Eppley: 1969. Call W2SDB.

Card in membership file is dated 23 April 1953. Call – W2SDB. Address – 434 Adams Avenue, Cape Canaveral, FL.

Anthony W. Slapkowski: 1970. Call WB2MTU.

Card in membership file is dated 18 September 1967. Call – K4AWS. Address – PO Box 15, Sumterville, FL. Occupation – Retired. Sponsor – W. Schmidt – K2BD(?)X.

Amor R. Klotzbach II: 1971. Calls N2FY former W2FYS(see 1967)

William Kirlin: 1972. Call - WA2KRX.

Card in membership file is not dated. The only information is call – WA2KRX. Address – 18 Manor Drive Lake Swannanoa, Oakridge, NJ

Joseph Winston MacMillan: 1973. Call - W2FGY

Two cards are in membership file. Card No. 1 is dated 22 January 1953. License class – Advanced. Call – W2FGY. Address – 2310 River Avenue, Camden, NJ. Age – 36.

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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 K2UK Repeaters (146.865 and 442.350 - PL 131.8) located in Pine Hill, NJ. The repeaters are open for use without restriction to all licensed amateur operators.

There are currently over 100 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
 SJRA VE Team: ve@sjra.org is the SJRA/ARRL VUCC card checker
 Joe Fisher, KC2TN, is the SJRA/ARRL WAS card checker

 ★ **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> ★

Officers

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 Rick Lawn, W2JAZ
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 Mary VonLintig, KV2M
 Jim Vecchiola, KR2T
 Al Witner, N3AVT

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Picnic: **Vacant (Please Volunteer)**
Ways & Means: Ray Golley, N3RG
Property: Jon Mac Millan, W2MC
Web Site: Ira Weinstein, W2IRA

Harmonics Staff:

Publisher/Editor: Ted Groke, W2TAG
Alternate Editor: Rick Stoneking, W2RDS
Circulation: Mary VonLintig, KV2M;
 Jim Vecchiola, KR2T

LOCAL WEEKLY NETS

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

Harmonics Deadline

Articles submitted for the next Harmonics will be accepted until Monday, May 11, 2015. 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 3/25/2015

The meeting opened at 1930, with a salute to the American flag led by Jon, W2MC. The membership was asked to identify itself with the answering of the question 'what was your last DX?'. The minutes of the last board meeting were approved as printed in Harmonics, motion by W2RDS /W2JAZ. There was no Treasurers but report, Ray N3RG, had called in stating no changes from last month.

New members by Mary, KV2M: Robert C Beyer, KE2D, and Robert M Beyer, KD2AWE. As historian Mary presented a copy of the 1925 annual report sent to ARRL.

Health and Welfare: reports that Al, K3EOD became a silent key. Frank Widmann, WA2VYA had a kidney removed. The April birthday cards going out soon.

Programs: Tonight will be Sheldon Parker, K2MEN, and Rick Lawn, W2JAZ, with a presentation on radio control.; April will be Joe Everhart, N2CX, presenting Dave Benson's SW40+ QRP transceiver kit and Elmer 101; May will be the Storm Robotics Team.

Harmonics; Ted stated April 6 as the deadline, he gave thanks to all submitters.

VE team; Al, N3AVT- five or six of this month, not sure of total.

Nets: by John WY2J, 2 m has been doing okay with 5 to 6 check-ins. 10 m has been doing well until March when check-ins dropped off.

DX report by Jack, N2VW; 7QAA-Malawi from 22 March until one April on sideband and RTTY. 3A Monaco by F4FET and F4FAU. From April 2 till April 5, looking for North America.; C2- Nauru as C21EU from March 25 until April 4; DX0P - Spratly Islands from April 14 through April 20 - all modes, all bands; PY0T/PQ0T- Trinidad island, April 3 through April 6. Don't forget the CQ WPX SSB contest March 28 and 29th. Field day - June 27 and 28th.

Repeaters by Joe, KC2TN - all are working, still researching relocation. Club stuff; 100TH Anniversary patches about 8 inches diameter are available for \$25 each.

Report of nominating committee by Jim, KR2T: President - Ken, K2WB; VP - Jon, W2MC; Recording Sec. - Lou, N2HQL; Corresponding Sec. - Dennis AC2FO; Treasurer - Ray, N3RG. Directors; Roy, WB2EOD, Rich, KV2R, Rick, W2JAZ, Ira, W2IRA, Al, N3AVT, Tony, N2ATB, Ted, KD2ARD. Nominations will be open from the floor in April. Please ask someone before you nominate them.

No old business

New business; Skip N2EI reported the ARRL claims website is open. Jon W2MC introduced the rules and benefits of the SJRA Centennial membership.

Minutes of Board Meeting April 1, 2015

Meeting was opened at 1940 by Ken, K2WB. All members were present except Ira, W2IRA. The minutes of the previous

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HAM TECH

Vol 6 No. 4 by John - WY2J

wy2j at arrl dot net

Understanding Common Multiband Antennas

Part 1 of 3: The 135 foot Dipole

Introduction - This three part series on three simple and commonly used multiband antennas focuses on how they work and what are their advantages and disadvantages in amateur application. Part one explores the 135 foot horizontal dipole operating from 80 to 10 meters. Next month we look at a cousin, the G5RV and follow on a month later with the 43 foot vertical. All of these antennas are widely used and can be easily constructed by the ham or purchased in the market place. But are any of these antennas good performers with acceptable limitations or do they just have a long history with little quantitative data to back up the claims. Ham Tech will try to answer this question.

Our Model and Rational - The antenna length is exactly 135 feet long, #14 copper, center fed and 40 feet high. It is a flat top dipole not an inverted V which has poorer performance especially on the higher frequency bands. The antenna length used is very close to resonance at 3.5 MHz, the lower end of 80 meters. The 40 foot height was selected as a practical upper limit for end point antenna anchors in most ham's locations. The antenna is center fed with 100 feet of window line commonly called 450 ohm but closer to 400 ohm impedance with a 91 % velocity factor. Antenna analysis was done with EZNEC 4 using a NEC 2 engine. The antenna was segmented with 89 segments in the computer model to meet the minimum requirement on 10 meters and have an odd number

of segments to assure exact center feed. The ground conductivity which severely affects all horizontal HF antennas was set at 0.005 mhos and a dielectric constant of 13, commonly called average ground.

Antenna Current Distribution - The current distribution on our dipole controls the antenna radiation pattern in both the azimuth and elevation planes. Of course the reflection from the ground modifies the elevation pattern significantly like any other antenna and this factor is included in all of the patterns shown here. At 80 meters our dipole is about a half wavelength long and the sinusoidal current distribution in it peaks at the center feed point and tapers off to zero at the ends. At 40 meters the antenna is about one wavelength long and the current varies sinusoidal with zeros at the ends and a near zero at the center. Unlike the 80 meter case the voltage and impedance at the center feed point is very high at 40 meters and the current is very low. The azimuth radiation pattern for both 80 and 40 meters is a figure 8 broadside to the wire. The 40 meter pattern

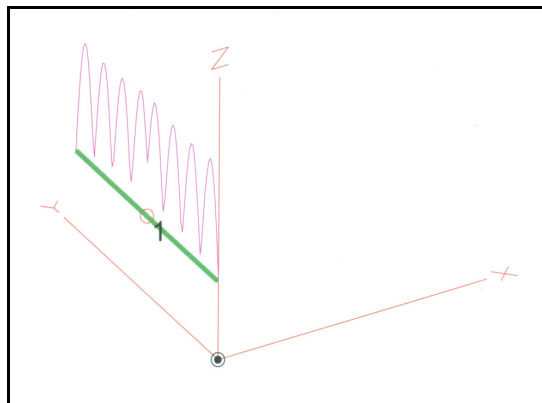


Figure 1, Current on a 135 ft. Dipole at 28 MHz

(Continued on page 5)

(Ham Tech from page 4)

is somewhat narrower than at 80 meters implying higher gain, about 2 dB. But if we increase the frequency above the one wavelength case more current cycles appear in the current distribution, the reason why this antenna is known as the harmonic dipole. Figure 1 shows the current distribution at 28 MHz, 8 times the 80 meter case and with 8 current peaks.

The dipole is the green line along the Y axis of Figure 1 and the small circle is the center feed point. Since the current fed into the two halves of the dipole are 180 degrees out of phase the two center current lobes are out of phase and each additional lobe is phase reversed. This is why at 10 and 20 meters the broadside radiation vanished. It will reappear at angles off broadside where the differential phase shift of the paths to a point in space shifts the phase so that all currents add up in phase.

Azimuth Radiation Patterns - Calculated azimuth radiation patterns at 40, 20 and 10 meters are shown in figures 2, 3 and 4 below. These are for useful DX elevation angles of 25, 10 and 5 degrees respectively on 40, 20 and 10 meters

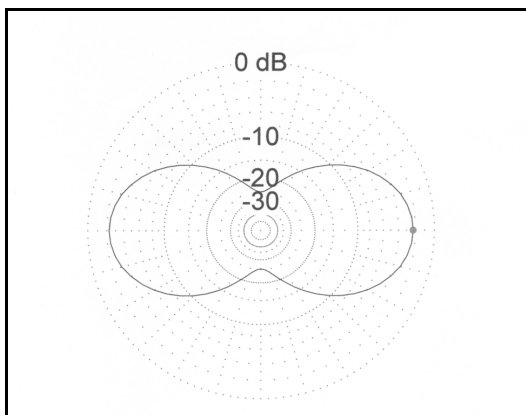


Figure 2, Azimuth Pattern at 40 Meters

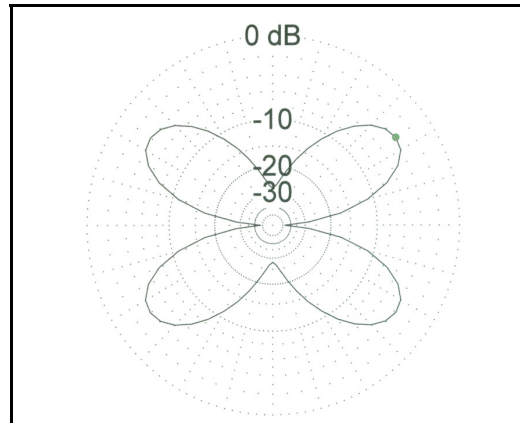


Fig. 3 Azimuth Pattern at 20 Meters

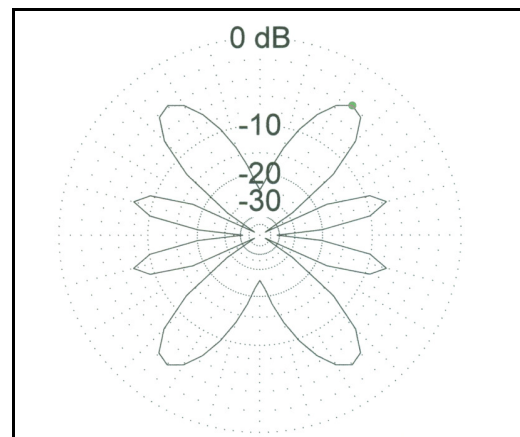


Figure 4, Azimuth Pattern at 10 Meters

Clearly is you align this antenna on Europe at 40 meters it will put a null there on 20 and 10 meters. If this is a serious problem for your application you will have to build two antennas with one of 118 feet resonant at 4 MHz and covering 80, 60, 40 and 30 meters with stable broadside patterns. A second dipole of 33.75 feet and resonant at 14 MHz will cover 20, 17, 15, 12 and 10 meters.

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(SJRA Presidents, 1947-1965 from page 1)

Sponsor - P. Catona. Card No. 2 is not dated. Call - W2FGY. Address - 310 White Birch Drive, Cinnaminson, NJ.

Alan Grossman: 1974. Call WB2BNE.

Two cards are in membership file. Card No. 1 is dated 20 December 1962. License class - Tech. Call - WB2BNE. Address - 113 Spring House Court, Cherry Hill, NJ. Age - 16. Occupation - Student. Sponsor - Earnest B. Mays - K2KTI(?). Card No. 2 is not dated. Call - KB2BNE. Address - 37 Coopers Run Drive, Cherry Hill, NJ.

Frederick W. Holler: 1975. Call W2EKB.

Card in membership file is dated 2 January 1970. License class - Advanced. Call - W2EKB. Address - 348 Bortons Mill Road, Cherry Hill, NJ. Age - 42. Occupation - Engineer. Sponsor - Tony Slapkowski - WB2MTU.

Frank W. Widmann: 1976. Call - WA2YSW

Card in membership file is dated 22 May 1969. License class - Novice, Tech. Call - WN2YSW and WA2YSW. Address - 328 Farwood Road, Haddonfield, NJ. Age - 47. Occupation - Manager, Combat electronic systems programs. Sponsor - Joe Duffin - W2ORA.

Simpson B. Adler: 1977. Call - K2KA.

Two cards are in membership file. Card No. 1 is dated 9 April 1973. License class - Advanced. Call - W2GEY. Address - 765 Mt. Vernon Avenue, Haddonfield, NJ. Age - 58. Occupation - Physicist. Sponsor - Joe Duffin - W2ORA. Card No. 2 is not dated. License class - Extra. Call - K2KA, Address - 1308 Heartwood Drive, Cherry Hill, NJ.

Al D. Abercrombie: 1978. Call W2GJS

Card in membership file is dated 30 December 1971. Call - W2GJS. Address - 10814

Brookwood Avenue, Upper Marlboro, MD. Age - 41. Sponsor - A. Slapkowski, WB2MTU.

Edward J. Ramming: 1979 - 1980. Call AB2Y. Also President in 1982 - 1983, 1988, and 1992 - 1993.

Card in membership file is dated July 1977 (However, I believe his membership predates this card). License class - Novice upgraded to Extra. Call WB2IMU upgraded to AB2Y. Address - 4500 Westfield Avenue, Pennsauken, NJ. Occupation - Insurance agent.

Bruce Eichmann: 1981. Calls W2BE former WA2NBM, and KE2OP.

Card in membership file is dated 23 March (no year). Call - no call yet, updated to WA2NBM. Address - 204 E. Lake Blvd. Lake Pine, Marlton, NJ. Age - 46. Occupation - Superintendent water pollution control.

Edward J. Ramming: 1982 - 1983. Call AB2Y (see 1979 - 1980, 1988, and 1992 - 1993).

Rawlins Eastwick: 1984. Call N2AWC.

Card in membership file is dated 20 January 1979. License class - Tech upgraded to General. Call - KA2DHM upgraded to N2AWC. Address - 224 Chestnut Street, Haddonfield, NJ. Age - 61. Occupation - Retired. Sponsor - Bruce Eichmann, WA2NBM.

Frank L. Widmann: 1985 - 1986. Call WA2VYA.

Two cards are in membership file. Card No. 1 is dated 29 March 1969. License class Novice and Tech. Call - WN2VYA and WA2VYA. Address 328 Farwood Road, Haddonfield, NJ. Age - 14. Occupation - Student HMHS 9th grade. Sponsor - Edward

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(SJRA Presidents, 1947-1965 from page 6)

Braddock, W2BAY (Wow). Card No. 2 is not dated.. Call - WA2VYA. Address - 248 Washington Road, Princeton, NJ. Occupation - Lawyer.

Joseph P. Lameiras: 1987. Call K2WJL former WA2WJL.

Card in membership file is dated 25 September 1974. License class - Novice upgraded to Advanced. Call - WN2WJL upgraded to WA2WJL. Address - 213 Willow Street, Delanco, NJ. Age - 30. Occupation - Salesman. Sponsor - Mary (unable to make out last name), WB2EIB. Joe rejoined SJRA on 23 February 2011. License class - Advanced. Call WA2WJL. Sponsor - Ken Botterbrodt, K2WB.

These presidents launched SJRA from her Golden Anniversary into the future with dedication, determination, drive, and of course the famous humor that has always been part of our great radio club.

73 to all and I am History Mary, KV2M

The SJRA congratulates the following on their recent achievements:

David Ritchie
193 Mill St.
Mount Holly, NJ 08060
Earned his Tech.

Matthew Prescott
173 Blackburn Ave
Langdowne, PA 19050
Earned his Tech.

Thomas Humbert
1852 US Highway 1
Lawrence Twp, NJ 08648
Earned his Tech.

	Tech	General	Extra	Total
To Date	82	32	14	128

Monthly Puzzle

Don – WA2DUE, wa2due at arrl dot net

The puzzles for February were:

Railroad stations A and B are 500 miles apart and connected with twin rails. Train number 512 leaves station A at 8 AM and Train 513 leaves station B at 9 AM. Both trains average speed is 75 miles per hour. At what time will they pass each other and at what distance each train will have traveled during that time?

Answer: After one hour train 512 has traveled 75 miles with 425 miles to go to station B. Since both trains travel at the same speed they will meet half way along that 425 mile stretch or 212.5 miles. Therefore traveling at 75 MPH it will take 212.5 divided by 75 or 2.83 hours or 2 hours and 50 minutes. They then meet at 11:50 AM and train 512 has covered 75 plus 212.5 or 287.5 miles and train 513 has traveled 212.5 miles.

A hair dryer with a resistance of 12 Ohms and a lamp whose resistance is 125 Ohms are connected in parallel to a voltage source of 125 Volts through a 1.5 Ohms resistor in series. What is the current through the lamp when the dryer is running?

Answer: First we determine the total resistance in the circuit which is $1.5 + 1/(1/12 + 1/125) = 12.45$ Ohms. Then we find the total current which by Ohms law is $125/12.45 = 10.04$ Amperes. Next we find the voltage drop across the 1.5 Ohms series resistor 1.5 times 10.04 which equals 15.06 Volts. Subtracting that value from 125 Volts we get 109.94 Volts which lies across the parallel combination of the

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With Just A WSPR from page 3)

meeting were approved as printed in harmonics on a motion by N2HQL/N3AVT.

Treasurer Ray, N3RG, reported 95 paid up members and eight others. The report was approved on a motion by W2MC/KV2R.

New members by Mary, KV2M: Robert Haworth, W2PUA, sponsored by Witt, our oldest member. He was accepted on a motion by KV2M/W2JAZ.

Corresponding Sec. report: we received an e-mail from Bob, K2UT, regarding scouting activities. It was forwarded to W2MC.

Repeaters by Joe, KC2TN: all are working great. There was much discussion regarding digital capabilities of the repeaters, discussion tabled until repeaters are relocated.

Contests June VHF, June 13-15: Field day June 27 and 28th.

Club stuff; by Joe, KC2TN: Sales of patches etc. has almost reached the break-even point. Stuff is still available with both old and new logos.

Programs: April - QRP; May- Storm Robotics Team.

Health and Welfare; by Roy WB2EOD: April cards out, get well card sent to Frank, WA2VYA.

VE Team by Al N3AVT: 125 tested so far.

Centennial membership applications: W0DHB, from Colorado; W5RKN, from Texas; KB1JEY from Pennsylvania. Motion to accept by Ken, K2WB/Rick, W2JAZ. All were accepted. Applications are being submitted to work the ISS during the 100TH Anniversary.

Old business: Nominating committee - Report read at March meeting will open

nominations again at April meeting.

Historian: Mary, KV2M presented the oldest application she has so far found, which was dated November 1932.

New business: Request for Rice school demo to be handled by Ken, K2WB.

President's Message

Ken - K2WB

March Madness is now over and the Spring Weather brings flowers, rain and thunderstorms. Remember to keep all of your antennas and gear lightening safe.

And finally Field Day will be here before we know it. The club needs your help to succeed. Contact a band captain or myself if you want to help and be part of the success of the SJRA!!

We have 4 Centennial members of the SJRA, giving us representation in 6 states, 3 continents, and 3 countries. Hopefully many more to follow. There will be a lot of things to do in 2016. So don't wait. As usual I will be bringing coffee cups to the SJRA meeting, one can be yours for a small \$10.00 donation.

100th Anniversary Happenings

So far the 100th anniversary committee has had 7 meetings (many more to come). Just to keep everyone up to date here is where we are.

Over 48 coffee cups have been sold. There are plenty more to go. Mugs may be acquired to SJRA members by a minimum donation of \$10.00. There will be coffee mugs available at the General Membership Meeting on April 23th, 2015.

The first of the fund raising raffles is still in the planning stages.

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Should We Weep For Amateur Radio?

By Dan Romanchik, KB6NU

On an amateur radio mailing list that I subscribe to, one fellow wrote, "I weep for the state of amateur radio in the US, since this dispatch is apparently necessary..." He then pointed to an article on the ARRL website that reminded hams that while their local time may be switching to daylight time, Universal Coordinated Time did not change (<http://www.arrl.org/news/view/change-local-clocks-this-weekend-but-not-utc>).

The implication, of course, was that we have dumbed down ham radio so much that a reminder like this was necessary.

This thread went on and on, eventually garnering 17 different replies. Before it morphed into a discussion of whether or not DST is a good idea in the first place, the replies echoed the sentiment in the original e-mail:

"It's become a push button, nanny state world, what do you expect, competence?"

"We are truly in a time of appliance operating, not only in ham radio, but in practically every aspect of our lives. :-("

At first, I had the same reaction. I thought to myself, "How dumb are we getting in ham radio, if guys have to be reminded that UTC doesn't change when we switch to daylight savings time?" After thinking about this for a while, though, I've completely change my mind on this.

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(Monthly Puzzle from page 7)

lamp and hair dryer. Using 109.94 divided by 125 we get the result of 0.88 Amperes as the current running through the lamp.

Art, N2CPR submitted a correct solution to one of the puzzles. Thank you Arthur.

For April let us work on these puzzles:

The polar form of Voltage across a circuit is $161(\cos 337 + j\sin 337)$ Volts. The polar form of the impedance is $32(\cos 300 + j\sin 300)$ Ohms. Find the polar form of the current.

Here is a problem that requires no more mathematics than the arithmetic that is taught in 4th grade. This problem was found in "The Mensa Puzzle Calendar" for March 19, 2015. Find a six-digit number containing no zeros and no repeated digits that satisfies the following conditions: the first and fourth digits sum to the last digit, as do the third and fifth digits; the first and second digits when read as a two-digit number equal one-quarter the fourth and fifth digits when they are also read as a two-digits number; and the last digit is four times the third digit.

Please submit solutions and/or comments to [wa2due at arrl dot net](mailto:wa2due@arrl.net).

(100th Anniversary Happenings from page 8)

We now have four more centennial members. Our goal would be to have at least two members in each of the States. At least one member in each of the ARRL sections and at least one member in 100 countries. This will make some of radio sport events planned very exciting.

There is still a lot to do and we need your help. Please contact me if you are interested in helping with the 100th.

Ham Tech from page 5)

Freq. MHz	Z (Ant)	Z (TL Input)
3.5	58.3 +j0.2	98.3 -j318
7.0	4885 -j1216	36.6 +j90
10.1	106 -j335	66.5 +j38
14.0	3354 +j1578	335 -j990
21.0	2238 +j1453	75.3 +j226
28.0	1484 +j1326	128.6 -j439

Table 1, Antenna Feed and Transmission Line Input Impedances for 6 of the 9 HF Bands.

Feed them with separate transmission lines from a switch.

Impedance - The feed impedance of the model dipole varies from 58 ohms to about 5000 ohms over the bands mandating a very low loss 400 to 600 ohm transmission line impedance to minimize total losses. The 400

ohm window line was selected due to availability. Table 1 gives the calculated complex impedance at the antenna and at the input to the 100 foot transmission line for each band.

The 100 foot 400 ohm window line does a good job of bringing down the wide variation in antenna feed impedance to levels that can be handled by today's tuners with a 1:1 or 4:1 current balun at the transmission line input. A selectable ratio balun is recommended using 1:1 on 40 and 30 meters and 4:1 on all other bands.

Conclusion - This simple antenna offers good multiband performance including azimuth pattern stability over a 2.5 to 1 frequency range, 80 to 30 meters or 20 to 10 meters, and is still usable over all Ham HF bands if you don't care where your signal is going. The feed system described is reasonably low loss and wide band.

Next Month - HAM TECH explores the G5RV, a multiband close cousin of the dipole described this month.

(Weep for Amateur Radio? from page 9)

I work with a lot of newcomers to amateur radio, and many of them just don't know how UTC works. This is not their fault--they just haven't had the opportunity to deal with UTC. What these old timers (old farts?) didn't realize is that the ARRL article is not directed at them, but at the newcomers to ham radio.

I'll even go one step further. It's easy for us old-timers to be dismissive of newcomers' lack of knowledge, and then complain that amateur radio is getting dumber, but knee-jerk reactions don't usually help anyone involved. A much better approach would be to roll up your sleeves and teach

them something. The only way newcomers are going to get to be old timers like us is if we help them learn stuff like this.



When not teaching newbies about UTC, you'll find KB6NU working on updates to his "No Nonsense" study guides, teaching one-day Tech classes, or blogging about amateur radio at www.kb6nu.com.

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

Email Ted, W2TAG, with your listing, [ted.w2tag at gmail dot com](mailto:ted.w2tag@gmail.com)

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 \$20 (*New Lower Price*, one size fits all)
Name and Call Sign embroidery included....Larger sizes slightly more!
Email Joe, KC2TN, with orders or additional info: *kc2tn at comcast dot net*

Amateur Radio FCC License Testing

The SJRA sponsors *FREE* Amateur Radio FCC License testing on the second Wednesday of each month. The location is: 443 Commerce Lane, Suite 5, West Berlin, NJ 08091. Registration is at 7:00 PM and testing begins at 7:30PM. Walk-ins are accepted.

VE team members can be reached at VE *at* SJRA *dot* org. A calendar and more information can be found on the SJRA web site.

April Meeting:**Fourth Wednesday, April 22, 2015**

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 April:

Joe Everhart, N2CX, from the NJQRP club will discuss the *Elmer 101* project as a way to learn circuit theory and troubleshooting techniques, while building Dave Benson's SW40+ QRP transceiver.

SJRA Members Health and Welfare

May Birthdays: John Foglebach, WY2J; Rick Lawn, W2JAZ; Kathy Edwards, KM2KME; Joe DeMarco Jr., KC2SGV.

Health and Welfare: I Spoke with Joe Lameiras, K2WJL, on Saturday April 4th. He was glad to hear from SJRA. Joe reports that the latest CAT scan is clean and that he hopes to make the next meeting.

Health and Welfare Co-chairpersons: Roy, WB2EOD, and Dara, KC2THQ

First Class Mail

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