



THE PROPAGATOR

8 Donner St.
Holmdel, NJ 07733
Editor: Bob Buus, W2OD

APRIL 2012

UPCOMING GSARA MEETINGS

The next regular meeting of the GSARA will be held on **Wednesday, April 4 at 7:30 PM** and it will feature Frank, W2XYZ and Howard, W2HTS describing Winlink and WINMORE at W2GSA. They'll not only tell us what these programs are but also how to use them. As usual, light refreshments will be served and guests are always welcome.

The second meeting in April will be held on **Wednesday, April 18 at 7:30 PM** at the Red Cross. This will be our regular business meeting for April. Guests are always welcome and refreshments will be served.

W2GSA STATION OPEN SATURDAYS

The GSARA radio room at the Red Cross will be open Saturday afternoons for those wishing to operate or just "hang out". Go around the building to the back door for entrance. If you want to check to be sure that someone is there, call 732-493-9100 ext. 1252 which is the phone in the radio room.

WELCOME NEW MEMBER

Please welcome Jim McEowen, WA2HPD to the GSARA. First licensed in 1954, Jim holds a General class license and is active on the Central Jersey Traffic net, serving as net control on Monday nights. Retired from Bell Labs, he now does consulting work. He is also musical and plays both the piano and organ. Please add to your roster:

WA2HPD, Jim McEowen
11 W. Parkway Place
Holmdel, NJ 07733
732-946-8910
jmceowen@verizon.net

Welcome to GSARA, Jim!

GSARA HOMEPAGE

<http://www.gardenstateara.org>

BATTLESHIP NEW JERSEY APRIL 27

Friday, April 27 is the day that many GSARA members will be traveling down to Camden to take a first-class tour of the Battleship New Jersey. We'll even have a chance to operate amateur station NJ2BB from the radio room so bring a copy of your amateur license. You can sign up to go at either of the April meetings of GSARA. The modest costs include a ticket to get on the ship, the cost of lunch (on the ship) and any gas and tolls to get there. We will car pool to minimize the latter costs. For more details, contact Frank, W2XYZ.

OMARC HAMFEST APRIL 21

OMARC will be conducting another tailgate Hamfest on Saturday, April 21 at the Diana Test Site on Marconi Road in Wall, NJ. Admission is \$5 (tailgating is \$10 per space) and the gate opens at 7 am. There will be a VE session and refreshments will be available for sale. For more information, contact Jeff Harshman, N2LXM at 732-996-0637 or n2lxm@juno.com.

WINLINK 2000 & WINMOR APRIL 4

Winlink2000 and WINMOR are programs that link internet e-mail to amateur radio. To find out more about what these programs can do and how to use them, please attend the April 4 GSARA meeting where Frank, W2XYZ and Howard, W2HTS will go over all of the capabilities that we have at W2GSA and how you can make use of them. Don't miss it!

CHANGE OF ADDRESS

Please change the address of WA2DND to:

WA2DND, Bill Ryan
2 Pershing Ct.
Elkton, MD 21921
wa2dnd@earthlink.net

GSARA OFFICERS

President	W2XYZ	Frank Wroblewski	942-7705
Vice Pres.	W2HTS	Howard Suffill	460-1885
Secretary	W2OD	Bob Buus	946-8615
Treasurer	K2QXW	Bruce McLeod	946-4368
Engineer	N2LXM	Jeff Harshman	922-0816
Webmaster	KC2TKK	Josh Gluck	
Publicity	NJ2H	Bill Shockley	207-4466
Trustees	W2KQ	Joe Dreifuss	493-4236
	W2OD	Bob Buus	946-8615
	W2HAM	Lou Russo	842-6431

DX MEETING EACH LAST MONDAY

For those interested in DX or learning about how to chase DX, there is a meeting of DXers on the last Monday of each month at 7:30 PM at the Red Cross. The last Monday of April is on the 26th so mark your calendars if you would like to attend.

BADGES AND PATCHES

If you would like a GSARA name badge, you may order one by getting a Badge Order Form from our Secretary, **Bob Buus, W2OD**, filling it out and turning it in to Bob with your \$7.00 payment.

We also now have patches available at all meetings and they cost \$3.

OUTGOING QSL CARDS

If any GSARA members wish to combine their QSL cards that are going through the outgoing ARRL Bureau, please bring them to the next GSARA meeting along with the label from a recent QST Magazine (you must be an ARRL member to participate in this program). We then send them as a group at no charge to GSARA members. It couldn't be much easier than that to QSL. You are registered at the W2 incoming bureau, aren't you?

PROPAGATOR NOW ON THE WEB

The *Propagator* is available as a PDF file at:

<http://www.gardenstateara.org>

Click on "The Propagator" and then select the month you want.

EDITOR'S NOTES

The annual White Elephant sale on March 7 was reasonably successful with a number of non-members participating. As far as I could tell, those participating got some good bargains and the club made a few dollars in the process. Thanks to Joe, W2KQ for coordinating this event.

Please note that our Hamfest is coming up on May 12 so mark your calendars accordingly. It looks like we will have some neat radios to raffle this time and we expect KJI Electronics to show up with lots of merchandise. Don't miss it!

I've been having fun learning about how to program the PIC microprocessor and have succeeded in getting a little 14-pin dip to send "What Hath God Wrought" in American Morse code every time one of the pins is grounded. Plans are to use it at Infoage for the Morse Code exhibit.

Participation in the tubular capacitor problem was not impressive with only 3 people submitting answers. This month's puzzle, with 1-ohm resistors, should be simpler and I encourage you to send me your solutions. If participation continues at such a low level, I am seriously considering dropping the puzzles to make room for material of more interest. One idea is to resurrect the "Getting to Know You" column of many years ago which would feature a different GSARA member each month. This would be about a one-page write-up giving some history and background of the member. What do you think? Would this be a good replacement for the monthly puzzles?

If you are interested in obtaining a gardenstateara.org email address which will give you webmail and POP3/SMTP access, please send an email to Josh at kc2tkk@gardenstateara.org with your First Name, Last Name, and Call Sign. Your email address call_sign@gardenstateara.org will be created and the login information sent back to the email address your request came from.

As always, I appreciate feedback or material for *The Propagator*. The deadline for the May issue is April 15.

73 de Bob, w2od@arrl.net

MINUTES OF MARCH 7 MEETING

By Bob Buus, W2OD, Secretary

Instead of a meeting on February 1, GSARA conducted its annual White Elephant sale at the Red Cross. Seventeen GSARA members and at least 8 guests (not all signed our attendance sheet) were present and many good bargains were found.

MINUTES OF MARCH 21 MEETING

By Bob Buus, W2OD, Secretary

President Frank Wroblewski, W2XYZ called the meeting to order at 7:30 PM at the Red Cross. There were 14 members and one guest present. The guest was Hunter Suffill, harmonic of Howard, W2HTS. After the pledge to the flag, all members introduced themselves.

Secretary's Report

A motion was made by Howard, W2HTS and seconded by Jeff, N2LXM to accept the minutes as published in the March Propagator. The motion passed unanimously.

Treasurer's Report

Treasurer Bruce, K2QXW gave his report. We started at the end of January with a balance of \$4723.06. Income was \$183 from dues, \$30 from 50/50, and \$233 from the White Elephant sale. Expenditures were \$13.09 for refreshments. This left a closing balance on March 21 of \$5155.97. A motion was made by Ralph, KC2YNL and seconded by Jeff, N2LXM to accept the treasurer's report. The motion passed unanimously.

New Member

An application for membership was received from Jim McEowen, WA2HPD from Holmdel. Jim has been licensed since 1954 and serves as net control for the Central Jersey Traffic net every Monday night. He is retired from Bell Labs and still does consulting work. A motion to accept Jim into GSARA was made and passed unanimously.

Old Business

The White Elephant sale on March 7 was successful with \$233 taken in at the sale and an additional \$25 received at the meeting.

The Technician class conducted by Jeff, N2LXM was successful. Ten students participated in the class and all 10 passed the exam at the end of the day. Special thanks to the VEs Kevin, W2FA, Steve, N2WLH, and Joe, W2KQ.

The GSARA equipment insurance policy with Marsh came due in March. After some investigation, it was found that we could get better coverage for about the same cost by changing insurance carriers to Hays (the one supported by the ARRL). A motion was made by Howard, W2HTS and seconded by Ted, N2KPS to change our insurance carrier to Hays. The motion passed unanimously.

Likewise, our liability insurance was also changed to Hays for a cost saving.

Dues are past due so all who haven't paid by March 21 are in arrears and will be dropped from our mailing list.

Hamfest

We would like to raffle a dual-band HT at our May 12 Hamfest. There is a Boefeng UV-5R dual-band radio available for only \$57.50. A motion was made by Jeff, N2LXM and seconded by Martin, N2BMK to authorize up to \$160 to buy up to two of these radios. The motion passed unanimously.

Field Day

The Field Day packet from ARRL is now available on-line. Frank, W2XYZ suggested that we again run from the radio room at the Red Cross as category 2F but use our linear amplifiers to run high power. Comments from members pro or con would be appreciated.

New Business

We would like to purchase an automatic antenna tuner for the W2GSA ham shack. The LDG AT-200 would work well and costs about \$200. A motion was made by Ralph, KC2YNL and seconded by Ted, N2KPS to purchase this antenna tuner. The motion passed unanimously.

There is also a need to purchase a narrow-band CW filter for the IC-718 rig in the W2GSA shack. A motion was made by Joe, W2KQ and seconded by Ralph, KC2YNL to purchase such a filter at as low a cost as possible. The motion passed unanimously.

International Lighthouse weekend is coming up on August 18-19. The former JCDXA has previously operated from the Sea Girt lighthouse. It was suggested we take that over. Sea Girt was rejected with Twin Lights voted as a better location. A motion was made by Jeff, N2LXM and seconded by Martin, N2BMK to look into operating from Twin Lights in August instead of Sea Girt. The motion passed unanimously.

Jeff, N2LXM suggested we have Rebecca Mercuri, KA3IAX talk about "Weird Antennas of New Jersey." Jeff has heard the talk and thinks it would be of interest to GSARA. Frank, W2XYZ agreed to look into scheduling this talk.

A trip to the Battleship New Jersey was proposed for April 19 (subsequently rescheduled to April 27). Frank, W2XYZ will contact Dave Burgess and formally set this up.

Announcements

JSARS is holding an auction on Thursday, March 29 at Riverwood Park in Toms River. GSARA members are encouraged to support this activity as JSARS members were very supportive of our White Elephant sale.

Martin Flynn, W2RWJ wants to put up a digital gateway.

Frank, W2XYZ sent for and received a QSL card from the TV show "Last Man Standing" and passed it around to the members.

There have been some changes in the rules for operating on 60 meters. Basically, one channel was changed, the power limit was increased to 100 watts, and PSK-31, Pactor, and CW are now allowed – one station per channel.

There will be a Skywarn class in Toms River sponsored by the Ocean County OEM on May 23 at 7 pm.

Close

The door prize of \$11 was won by Tony, KA2ZSI. A second prize of a coffee mug was won by Martin, N2BMK. There being no further business, a motion was made to adjourn by Jeff, N2LXM and seconded by Joe, W2KQ. With unanimous vote, the meeting was adjourned at 8:45 pm.

NEW ARRL MEMBER BENEFITS

The ARRL is excited to announce two new membership benefits that will be introduced in June 2012. In addition to the print copy of QST, all members will have access to an online digital edition of QST -- at no extra cost. You will be able to access QST from anywhere -- on nearly any computer, laptop, mobile device, smartphone and tablet (including Apple iPad, iPhone, iTouch and devices using the Android operating system). Members will also gain access to archived issues of QST from December 1915 to the present; previously, only issues through 2007 were available to members. If you are familiar with the current periodicals archive, that platform will be expanded to include all of QST from December 1915 through December 2011. A second, new archive will be introduced for issues beginning January 2012, featuring enhanced functionality including full-text search. Read more [here](#).

From *The ARRL Letter*, March 22, 2012

BOGUS E-MAIL@ARRL.NET

Some ARRL members with arrl.net e-mail accounts have recently received bogus e-mails, notifying them of a bill that supposedly needs to be paid. The e-mail instructs the reader to click on a link to view the bill; clicking on the link could release a virus that can infect your computer. Please be aware that these e-mails are not coming from the ARRL. "If you receive an e-mail like this and it looks like it originated from ARRL, please do not respond," explained ARRL IT Manager Michael Keane, K1MK. "The best thing you can do when receiving bogus e-mails is to simply add them to the spam list in your computer's e-mail program and delete it. Please don't forward it to ARRL HQ -- we will have already seen it and are already responding to it."



From *The ARRL Letter*, March 15, 2012

HUDSON DIVISION HOME PAGE

<http://www.hudson.arrl.org>

CHANGES ON 60 METER BAND

On March 5, radio amateurs were granted new privileges on the 60 meter band. The effective radiated power level was increased from 50 to 100 W, along with the ability to use CW and the digital modes PACTOR III and PSK31.

"CW operators seem to have little problem figuring how where they need to transmit, but some PSK31 operators are reading the text of the FCC's Report & Order and coming away a bit confused," said ARRL Regulatory Information Manager Dan Henderson, N1ND. "The R&O states: 'We adopt a modified instruction for PSK31 channel use to correct an error introduced in the NPRM. To have a PSK31 signal transmitted on the center frequency, the control operator should not set the carrier frequency to the center frequency but should instead set the carrier frequency 1.5 kHz below the center frequency (i.e., the same as for phone and data emissions).'

"The word 'carrier' in this context means the suppressed carrier frequency of a transceiver when operated in the USB mode, but some have taken it to mean the PSK31 signal itself," Henderson noted. "They read this text and come to the conclusion that the PSK31 signal should be 1.5 kHz below the channel center. They are mistaken. The PSK31 signal must be in the center of the channel." Read more [here](#).

From *The ARRL Letter*, March 15, 2012

FOUR NEW APPROVALS FOR DXCC

ARRL DXCC Manager Bill Moore, NC1L, reports that four operations -- the current VK0TH and AX/VK0TH (Macquarie Island) operation, the current T6BP (Afghanistan) operation, the 2011 600M (Somalia) operation and the December 2011-January 2012 9U3TMM (Burundi) operation -- have been approved for DXCC credit. "If you have had these operations rejected in a recent application, please send an [e-mail](#) to the ARRL DXCC Desk," Moore said. "Please note that due to heavy e-mail volume, you may not receive a reply. Once updated, results will appear in Logbook of The World ([LoTW](#)) accounts, as well as online in the [daily listings](#)."

From *The ARRL Letter*, March 8, 2012

NEW DXCC FEE STRUCTURE



The DX Century Club (DXCC) is the premier Amateur Radio operating award. Available to hams around the world, tens of thousands of awards have been issued since 1945 under the modern award program. In 2012, the DXCC program is not only still thriving, but it is growing, both in participation and in numbers of award options. The addition of Logbook of the World and soon, the addition of an Online DXCC Application utility, will continue to help the program grow. Effective Monday, April 2, the way DXCC fees are assessed will change. These changes will include both rate increases and rate decreases. Read more [here](#).

From *The ARRL Letter*, March 22, 2012

TIME FOR THE SPRING FMT

The Frequency Measuring Test (FMT) continues its successful "round-table" format when it takes to the airwaves on the evening of April 19 (April 20 UTC). The test moves to Thursday from the November FMT's usual Wednesday evening, giving everyone an opportunity to participate. Recognizing the higher solar flux, the FMT will lead off with a 20 meter segment -- one transmission beaming east, and the other west from Connie Marshall, K5CM, in Oklahoma -- with both transmissions on the same frequency. The sponsors are particularly interested in your comments on frequency differences observed between the directions due to propagation-related effects. Read more [here](#).

From *The ARRL Letter*, March 15, 2012

If people from Poland are called Poles, then why aren't people from Holland called Holes?

If Fed Ex and UPS were to merge, would they call it Fed UP??

Do Lipton Tea employees take 'coffee breaks'?

W1AW VIDEO TOUR ON WEB

In case you missed the [live web tour of W1AW](#), the Hiram Percy Maxim Station at ARRL Headquarters, you can now watch the 18 minute video on the ARRL website. On February 12, W1AW Station Manager Joe Carcia, NJ1Q, led Emmy Award-winning meteorologist Geoff Fox, K1GF, on a tour of the famed station. Al Petrunti, KA1TCH, of the [New Day Group](#) followed Carcia as he led Fox and viewers through the station, recording it for viewers to watch.



W1AW Station Manager Joe Carcia, NJ1Q (left), guides Geoff Fox, K1GF, through the station during the video tour.

"We wanted viewers of this live Internet tour to feel as if they are actually at W1AW," Carcia explained. "If you came to W1AW in person, you would see the same things that we showed on the virtual tour: The three operating stations, the transmitter racks that we use to send out our bulletins and use for the code practice transmission, the control console and 'Old Betsy,' Hiram Percy Maxim's personal spark gap transmitter."

You can view the [video of the tour](#) on the ARRL website (scroll to the bottom of the page).

From *The ARRL Letter*, February 23, 2012

As income tax time approaches, did you ever notice: When you put the two words 'The' and 'IRS' together, it spells 'THEIRS'?

If lawyers are disbarred and clergymen defrocked, then doesn't it follow that electricians can be delighted, musicians denoted, cowboys deranged, models deposed, tree surgeons debarked, and dry cleaners depressed?

STATE POLICE AND EMCOMM

West Trenton, N.J. -- New Jersey residents will now be able to receive critical information from the New Jersey State Police (NJSP) and the New Jersey Office of Emergency Management (NJOEM) on their cell phones and PDA's with the use of a free, web-based service.

More info from NJSP is at: <http://www.njsp.org/news/pr031912.html>

George Sabbi

KC2GLG

ARRL NNJ Section Emergency Coordinator

Email: KC2GLG@arrl.net

NNJ ARES on Twitter: [@nnjARES](https://twitter.com/nnjARES)
(www.twitter.com/nnjARES)

Website: www.hudson.arrl.org/nnj/ares

TEN YEARS AGO

From the April 2002 Propagator: Guest speaker at the April 3 meeting was Marlo Montanaro, KA2IRQ talking about ARES, RACES and Public Service. New member Bill Ryan, WA2DND joined GSARA. OMARC is planning a hidden transmitter (Fox) hunt on May 18. Eric, KK2ED and Jeff, K2RFI have created a linked repeater system covering most of New Jersey. A much anticipated DX-pedition to North Korea had to be aborted.

FIFTEEN YEARS AGO

From the April 1997 Propagator: As of March, 110 GSARA members had paid their dues and renewed for 1997. Roy Edwards, KB2LUO is the new NNJ Section Manager. The paper copy of the Callbook has been discontinued and replaced by a CD-ROM version. Eimac has sold their glass tube division to Triton of Pennsylvania. Tom, N2VFK reports that 7 Public Service events have been scheduled for April and May. Hudson Director Frank Fallon, N2FF was the guest speaker at the April 16 meeting.

10 years ago the USA had Steve Jobs, Bob Hope and Johnny CashNow we have no Jobs, no Hope and no Cash.

Is it true that you never really learn to swear until you learn to drive?

FREE STEREO SYSTEM



I am trying to give away a working stereo system in a glass front cabinet (see picture above). The components from top to bottom are:

Hitachi HTA-35F stereo Tuner-Amplifier which is a digital AM-FM radio with 35 watt per channel stereo amplifier. Includes AM and FM antennas and instruction manual.

Sanyo CP791 CD disc player. No manual.

Sansui D-505R Audio Cassette Recorder/Player with instruction manual.

The system worked the last time I turned it on and includes interconnecting cables but no speakers. If interested, contact Bob at 732-946-8615 or w2od@aol.com. It can either be picked up in Holmdel or I can bring it to the April 4 GSARA meeting.

TWENTY YEARS AGO

From the April 1992 Propagator: Al Schnabolk, W2OIB was featured in "Getting to Know You". Rich DiFiore, KB2NXA (SK) suggested we include member's birthdays in each month's Propagator. Bruce, K2QXW extracted birth dates from a CD ROM and forwarded it to

W2OD so birthdays could be listed starting with the April 1992 Propagator. (Birth dates are no longer part of the public record at the FCC so we now ask for your birth month and day on the GSARA membership application.) A history of Field Day written by John King, KA2F in 1982 was included in The Propagator.

TWENTY-FIVE YEARS AGO

From the April 1987 Propagator: The ARRL bus trip planned by Ken Hampton, KY2S for April 22 will cost \$18 per person. JSARS will be running a special event station at Lakehurst to commemorate the 50th anniversary of the Hindenburg disaster. Ron Olender, WA2HZZ wrote an article about "Elmers" who have helped many of us get started in amateur radio. The 1987 Roster was published with 105 members.

THIRTY YEARS AGO

From the April 1982 GSARA Newsletter (it was not yet called The Propagator): The 10-meter was quite active on non-meeting Wednesdays and Ken Hampton, KA2KKB (now KY2S) was drumming up interest in a 2-meter net on 146.55 simplex. The April 21, 1982 meeting featured Gerry Kersus, W2GD discussing Contests and Contest Operations. This was followed by Jerry Havel, W2RRX (SK) showing slides of his recent trip on a Navy Destroyer. A tour of radio station WADB was scheduled for April 14, 1982.

PUZZLE #18 – FOUR RESISTORS

You have four identical 1-ohm resistors. How many different resistance values can you make by connecting them four at a time in various series-parallel combinations? Submit your set of 6? 8? or 10? combinations. Hint: It's none of those values.

If you want to be a show-off, calculate the resistance of each combination. Values will be between $\frac{1}{4}$ ohm (all resistors in parallel) and 4 ohms (all resistors in series).

How many additional resistance combinations can you get if you are allowed to use fewer than all 4 resistors at a time?

Send you answers to w2od@aol.com to win fame and fortune.

2012 FIELD DAY PACKET AVAILABLE

It's that time of year again -- time to start gearing up for ARRL Field Day, June 23-24, 2012! ARRL's flagship operating event -- always held the fourth full weekend in June -- brings together new and experienced hams for 24 hours of operating fun. Field Day packets are now [available for download](#) and include the complete rules, as well as other reference items such as forms, ARRL Section abbreviation list, entry submission instructions, a Frequently Asked Questions section, guidelines for getting bonus points, instructions for GOTA stations and a kit to publicize your event with the local press. A brief one-page flyer with basic "What is Field Day" information has also been included in this year's Field Day packet. Amateur Radio clubs and individuals are encouraged to reproduce this flyer as a handout for information tables.

From *The ARRL Letter*, February 9, 2012

AREA AMATEUR EXAM SESSIONS

Area exam sessions follow but please check with the contact person before going.

Wall Township, Camp Evans Area on Marconi Road: Exams in April are at the OMARC Hamfest on April 21 at 10 AM. Contact Pat Brannick, N2BZD at 732-267-0308 or e-mail to pbrannick@gmail.com.

Middletown, Croyden Hall on Leonardo Road: Exams are on the second Tuesday of every month at 7 PM. Contact Mario Sellitti, N2PVP 732-787-7184 or e-mail to n2pvp@n2pvp.com.

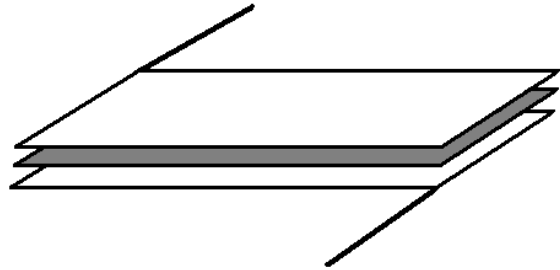
Toms River, Riverview Park Recreation Building: Exams are held on the third Thursday of every month at 7:30 PM. Contact Ed Genoio, WA2NDA at 609-971-2792, wa2nda@aol.com.

Toms River, Holiday City South Clubhouse, Meeting Room #1, Mule Road at the corner of Santiago Drive on the second Wednesday of every month at 7 PM. Contact Larry Puccio, K2QDY, 732-349-2950 or lpuccio1@comcast.net. Directions at the HCARC website www.hcArc.us.

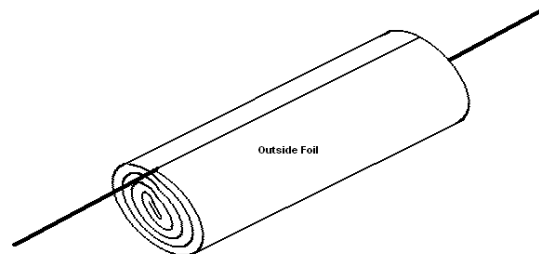
In all cases, the fee is \$15 and you should bring the original and a copy of any amateur license presently held and original and one copy of any credit (CSCE) forms you have. Also bring 2 forms of ID with one being a picture ID.

SOLUTION TO CAPACITOR PROBLEM

Given two strips of metal foil 2" by 18" separated by a paper dielectric .004 inches thick with relative dielectric constant $\epsilon_r = 2.6$, the capacitance $C = 0.225 \epsilon_r A/d$ picofarads with $A = 36$ square inches and $d = .004$ inches. Plugging in the numbers gives $C = 5265$ pF for the capacitance between the two plates.



Now when we add another piece of paper dielectric on top of the stack and proceed to tightly roll the entire assembly clockwise starting from the left, the bottom foil becomes the outside foil and the top foil has paper dielectric on both sides of it followed by the two sides of the outside foil (one side on each side of the inside foil). This effectively doubles the capacitance to approximately 10,500 pF. Note that the first roll has the inside foil doubled over so the capacitance will be a bit less than 10,500 pF. The capacitor would probably be marked .01 mFD.



The importance of knowing which terminal is the outside foil has to do with the fact that the outside foil will have stray capacitance to ground. To minimize any deleterious effect of this, the outside foil is connected to ground in bypass applications and to the lower impedance side of the circuit in coupling applications.

Congratulations to Bruce, K2QXW, Matt, W2AOJ; and Frank, W2XYZ for correctly solving this puzzle. Bruce also gets extra credit as he was the only one who commented on the outside foil subtlety with stray capacitance.

NOTES ON CALENDAR (see next page)

Large Call letters denote birthdays e.g. **KE2V** on April 8. All times are EDST. Contests are listed in the April QST, p. 83.

April 1 and every Sunday – **InfoAge Marconi Hotel** open from 1 to 5 pm on Marconi Road in Wall.

April 2 - **Monmouth County ARES Net** meets on 147.045 +600, PL=67.0 at 7:30 pm.

April 3 – **Middletown Pancake House Luncheon** at noon at left rear table. All are welcome.

April 3 – **Old Barney VE Session** at 6:30 pm in Manahawkin. Contact Urb Lejune, W2DEC at 609-296-5785 or urb@usats.com

April 3 – **Old Barney ARC Meeting** at 7:30 pm at Ocean Acres Community Center in Manahawkin, NJ. See <http://www.obarc.org>

April 3 and every following Tuesday – **QCWA News Net** on 147.045 PL=67 at 9:00 pm.

April 4 – **GSARA Meeting, 7:30 PM** at the Red Cross, West Park Ave. & Shafto Road, Tinton Falls. Frank, W2XYZ and Howard, W2HTS will talk about Winlink 2000 and WINMORE.

April 5 - **Holiday City ARC meeting** at 7 pm at Holiday City South Clubhouse in Toms River.

April 6-7 – **Montana QSO Party**, all modes from 8 pm Friday to 8 pm Saturday. See <http://www.fvarc.org>

April 9 – **2-Meter VHF Sprint**, all modes from 7 to 11 pm. See sites.google.com/site/springvhfupsprints

April 9 - **Monmouth County RACES Net** meets on 147.045 +600, PL=67.0 at 7:30 pm.

April 10 – **VE Test Session** at Croyden Hall, Leonardo section of Middletown at 7:00 pm. For more information, contact Mario Sellitti, N2PVP at 732-787-7184 or n2pvp@n2pvp.com

April 11 – **Holiday City VE Session** at 7 pm in Toms River. Contact is Larry Puccio, K2QDY at 732-349-2950 or e-mail at lpuccio1@comcast.net

April 12 – **JSARS meeting** in Riverwood Park Recreation Building, Rt. 527 and Riverwood Drive in Toms River at 7:30 pm.

April 12 - **WIAW Qualifying Run** at 9 am (10-35 wpm). See www.arrl.org/qualifying-run-schedule

April 14 – **OMARC Meeting**, 9:00 am at the Diana Site on Marconi Road, Wall, NJ. Guests are welcome.

April 14-15 – **QCWA QSO Party**, all modes from 2 pm Saturday to 2 pm Sunday. See <http://www.qcwa.org/qso-party.htm>

April 15 – **ARRL Rookie Roundup**, SSB from 2 pm to 7:59 pm. See <http://www.arrl.org/contests>

April 16 - **Monmouth County ARES Net** meets on 147.045 +600, PL=67.0 at 7:30 pm.

April 17 – **222 Mhz VHF Sprint**, all modes from 7 to 11 pm. See sites.google.com/site/springvhfupsprints

April 17 – **JSARS VE Test Session** at 7:30 pm Riverview Park Recreation Bldg., Rt. 527 and Riverwood Drive in Toms River. Contact Ed Genoio, WA2NDA at 609-971-2792 or wa2nda@comcast.net.

April 18 – **GSARA Meeting** at 7:30 pm at the Red Cross in Tinton Falls. Regular business meeting.

April 21 – **OMARC Tailgate Hamfest** at the Diana Site on Marconi Road in Wall from 7 am to 2 pm. See <http://www.omarc.org>

April 25 - **432 Mhz Sprint**, all modes from 7 to 11 pm. See sites.google.com/site/springvhfupsprints

April 26 – **WIAW Qualifying Run** at 4 pm (35-10 wpm). See <http://www.arrl.org/qualifying-run-schedule>

April 27-29 – **Ten-Ten Digital Contest**, 10 meters from 8:01 pm Friday to 7:59 pm Sunday. See <http://ten-ten.org>

April 28 – **Neptune Amateur Radio Club Meeting** at 9 am at the American Legion on Gully Road.

April 30 - **Monmouth County RACES Net** meets on 147.045 +600, PL=67.0 at 7:30 pm.

April 30 – **GSARA DX Interest Group** at 7:30 at the Red Cross

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 InfoAge	2 ARES/RACES 7:30	3 Pancake House Old Barney ARC QCWA News 9 PM	4 GSARA Mtg	5 Hol. City Mtg.	6 Good Friday Montana QSO	7 Montana QSO
8 KE2V EASTER InfoAge	9 2 Mtr Sprint RACES Net 7:30	10 Croyden VE 7 PM QCWA News 9 PM	11 Hol. City VE	12 CW Qual. Run JSARS Mtg.	13	OMARC Mtg 14 W2AOJ QCWA QSO
15 QCWA QSO InfoAge Rookie Rndup	16 ARES/RACES 7:30	17 222 Sprint QCWA News 9 PM	18 KD2ACJ GSARA Mtg.	19 JSARS VE	20	21 OMARC Hmfst W2SHS
22 N2HGI InfoAge	23 ARES/RACES 7:30	24 QCWA News 9 PM	25 W2OD 432 Sprint	26 CW Qual. Run	27 10-10 Digital	Neptune Mtg 28 10-10 Digital
29 JSARS Hmfst 10-10 Digital InfoAge	30 RACES Net 7:30 DX Mtg 7:30					