

THE Propagator



Garden State Amateur Radio Association



W2GSA
NOVEMBER 2018

8 Donner St.,
Holmdel, NJ 07733



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www.gsara.club
www.w2gsa.org

Please visit the club website
and feel free to use our open
repeater.



A Very Successful Fall Hamfest



Art, N2AJO, reports on a very successful Hamfest at the last GSARA Meeting in October

The GSARA hamfest held on September 22, 2018 was a great success. The weather was perfect which brought out 100 plus buyers and sellers for the event. Club volunteers hosted club sale and food concession tables that contributed to the overall financial success of the event. Raffle and 50/50 tickets were sold throughout the morning with raffle winners receiving gift certificates and a 50/50 winner receiving \$70.00. The club extends it thanks to the compa-

nies who provided gift certificates for our hamfest. Denis Commette and I, as co-chairs want to thank all of the volunteers and participants that contributed to a successful 2018 hamfest: ARRL, Cheapham, RF Adapter Guy, N3FPJ, DX Engineering, West Mountain Radio Ham Test Online - Financial Info: Sales \$ 1,109.00: Expenses \$515.93: Net Profit \$593.07

GSARA wishes all its members and
your families a Happy Thanksgiving



GSARA MEETINGS



The next GSARA meeting will be on Wednesday, November 7 at 7:30 PM at the Red Cross. This will be a program meeting and the program will feature Bob, W2OD who will talk about the different types of baluns and when you should use them. Guests are welcome and refreshments will be served.

The second meeting in November will be held on Wednesday, November 21 at 7:30 PM at the Red Cross. This will be a regular business meeting and will include the election of officers for 2019. Be there! Guests are always welcome and refreshments will be served.

VE SESSIONS

The GSARA monthly test session will be held at the Red Cross Regional Headquarters in Tinton Falls on Saturday, November 24 at 11 am.

The fee is \$15 and you should bring the original and a copy of any amateur license presently held and the original and one copy of any credit (CSCE) forms that you have (copies will be sent in with your test results). Also bring 2 forms of ID with one being a photo ID. For more information, contact Rich Bilon, N3RB at 732-972-1397 or n3rb@arrl.net.



Get your ham radio license this month!



From the Editor

Bob Buus, W2OD

I was impressed with the excellent job that the Nominating Committee did in finding a slate of candidates to run for offices for GSARA for 2019. All candidates are well-qualified

and I am confident that they will do a very good job. The only incumbent is our Treasurer, John, KC2YWL but the others also have the experience necessary to competently serve in their leadership roles.

The GSARA is in a healthy position thanks to the efforts of the outgoing officers. Both Howard, W2HTS and I have been in our present positions for many years so perhaps it is time to get some new blood into the organization. Our new Fusion repeater was successfully installed but we have to move the Wires-X to the Red Cross as soon as proper internet access is available in our radio room.

Some time ago, Arek, K2KP proposed acquiring an IC-7300 so that it could be remotely controlled through the internet. The transceiver has been purchased but many details have to be worked out to permit members to access the station from their homes. Again, proper internet access is required in the radio room.

By the way, I think that having an operating HF station readily available to the members should be a strong incentive to get more amateurs to join GSARA. For \$100 worth of software, a member will have access to a first-class HF station which would

cost far more to have in your own home. This is even more enticing to those in deed-restricted



communities where amateur antennas are not allowed. Hopefully, the remote capability will be expanded in the future to allow antenna switching and rotation of the beam antenna through the internet. Such access is well worth the annual GSARA dues.

Speaking of dues, the members voted at the October 17 meeting to increase the dues from \$15 to \$20 per year. I was surprised at how readily most members were willing to increase their dues. In fact, I have been surprised at how willing members have been to spend money this year on the Fusion repeater and the IC-7300. It will be a

responsibility of the new officers to conserve our funds.

It is important to keep a fairly large surplus in our treasury to cover any unforeseen problems with our repeater antenna since professional riggers are expensive.

As always, I appreciate feedback or material for The Propagator. The deadline for the December issue is November 15.

THIS IS YOUR CLUB. GET INVOLVED!



OFFICERS NOMINATED FOR 2019

At the October 17 GSARA meeting, the nominating committee consisting of Denis, K2NPT (chairman); Art, W2NAZ and Mike, W2MJP presented the following slate of officers to serve GSARA for 2019:



President – Art Olson, N2AJO



Vice President – Denis Commette, K2NPT



Secretary – John King, KA2F



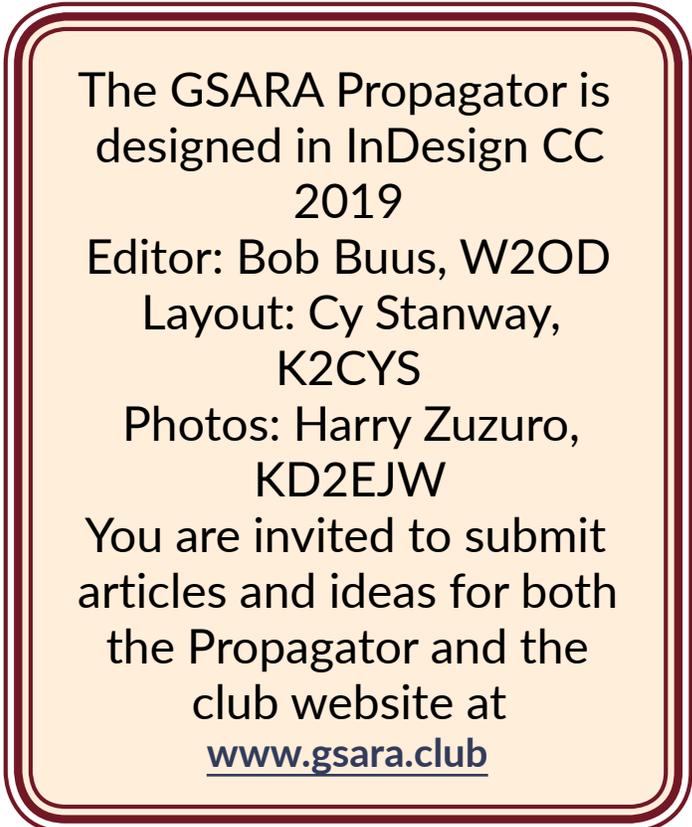
Treasurer – John Chunga, KC2YWL



Engineer – Phil Festa, N2EDX

The formal election will take place at the November 21 GSARA meeting and the installation of the elected officers will take place at the December 19 meeting. Come to the meetings and support these new officers!

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Now You Know!

MARKETING THE SUPERHETERODYNE RECEIVER

By Bob Buus, W20D

On June 18, 1920, the Board of Directors of RCA authorized \$2500 to develop a simple radio music box. David Sarnoff then approached his friend, Dr. Alfred Goldsmith, who was a professor at City College of NY, and asked him to develop a simple, easy to use radio. Goldsmith developed a line of simple radios from a low-end crystal set, through a one-tube regenerative receiver, up to a three tube receiver capable of driving a loudspeaker. These radios, called "Radiolas" then went into production at GE and Westinghouse and were sold by RCA under the RCA Radiola label.

To promote the sales of the Radiolas, Sarnoff arranged to broadcast the upcoming fight between Jack Dempsey and Georges Carpentier taking place on July 2, 1921 in Newark. RCA installed a temporary transmitter and antenna on the roof of the Lackawana railroad station in Newark and transmitted a blow-by-blow description of the fight (Dempsey won after 4 rounds). The broadcast was heard by thousands of people and demand for Radiolas soared. RCA sold about \$11 million worth of Radiolas in 1922. Business was good!

In 1921, while preparing for his court case with De Forest, Armstrong serendipitously invented the superregenerative receiver. This stoked great publicity for Armstrong but Sarnoff was determined not to let Armstrong sell this idea to a competitor. Negotiations were held directly between Sarnoff and Armstrong (who were friends at the time) and on June 30, 1922, Armstrong received \$200,000 cash and 60,000 shares of RCA for his superregenerative patent

In January of 1923, AT&T introduced their 4A superheterodyne receiver manufactured by Western Electric. The 4A used seven tubes and was complicated and expensive but it dramatically outperformed the best of the Radiolas. The management of RCA was in a panic as to what to do. If AT&T markets the 4A, sales of Radiolas would plummet. The manufacturers of the Radiola line wanted to stay the course. Their radios were much easier to use than the 4A and could be



produced much more cheaply. The decision then was to stick with the Radiola designs and if AT&T starts selling to the public, RCA would respond with a marketing blitz pointing out the easier use and lower price of the Radiola line.

When Armstrong heard of this decision, he decided to pay a visit to Sarnoff and propose that RCA add a superheterodyne radio to their Radiola line. Armstrong argued that the superheterodyne could be made simple to operate by performing all of the critical alignment in the factory and that the number of tubes used could be decreased through the use of reflex circuits that used the same tube to amplify both RF and IF signals. RCA and GE bought into Armstrong's proposal (Westinghouse passed) and proceeded to develop a four-tube superheterodyne receiver for the 1923 Christmas season. Although the superheterodyne circuit looked simple, it developed many manufacturing problems. When it became clear that the new Radiola would not be available in time for the Christmas selling season, Sarnoff and the GE engineers were stumped as to what to do. In one such hand-wringing meeting, Sarnoff's secretary, Marion MacInnis, who was being courted by Armstrong, suggested that they call in Armstrong to solve their problems.

Armstrong and his associate, Harry Houck, came in and solved all of the problems plaguing the superhet Radiola. For this consulting service, Armstrong was paid an additional 18,900 shares of RCA stock making him the largest individual stockholder in RCA.

The new table model Radiola VII was announced in February, 1924 for the bargain price of \$286 followed by a console model Radiola VIII (for \$425) with 2 additional audio amplifier tubes to drive a built-in loudspeaker and a built-in loop antenna. Sales took off and the sale of superheterodyne Radiolas was the most profitable product line for RCA until the late 1920's. A total of 148,300 superhet Radiolas were sold. RCA refused to license the superheterodyne patent to others until 1930. What a business! What a monopoly!

(continued on next page)

Incidentally, Armstrong married Marion MacInnis on December 1, 1923. David Sarnoff and his wife Lizette attended the wedding held at Marion's parent's house in Merrimac. For their honeymoon, the new couple planned to drive to Palm Beach, Florida but Marion got ill when they reached Trenton and was hospitalized at Johns Hopkins University in Baltimore where she underwent a hysterectomy so the couple would never have children. They finally did get to Palm Beach where the famous picture was taken showing the couple on the beach with the superheterodyne "portable" receiver that Armstrong had built for his new wife as a wedding present.

So, now you know!



Welcome Mike, N2YBB, Candidate for Regional Director of ARRL



Welcome to Mike, N2YBB who presented his candidacy for regional director of the ARRL on October 3 at our regular meeting. Mike was our very special guest. His remarks were well-received and it was our pleasure hosting him for this presentation. Good luck, Mike!

Projects by our members

Setting Up a Shack and Some Lessons Learned

by Alan W2NIR

This past summer Chris, W2NOB and I assembled a 24 foot high Hustler Vertical 6BTV Antenna covering 80-10 meters with a factory add-on kit for 17 meter operation. This vertical replaced a previous one which had seen its better days and now is in the hands of another owner. It is a quarter wave trapped vertical design and weighs approximately 20 pounds with the one add-on kit. There were some who said we did not need radials because it was mounted about a foot off the ground but that proved to be a fallacy. I should add that there were no obstructions in my back yard, no trees or houses within 100 feet.

The radial solution came from DX Engineering, a flat radial plate with pre-punched holes along with plastic staples for securing the radial wire. The wire used was 12 gauge bare copper and we planted 24 wires broken into 24 foot lengths for the higher bands and 32 foot lengths for the lower bands. The wire was purchased from Home Depot. In the beginning we measured and cut the wire ourselves but when I needed more radials. The Home Depot worker obliged me by cutting the wires to the above dimensions. This turned out to be a big time saver because of the heat of the day putting down the wires when the temperature was in the low 90's was a chore. Chris crimped and soldered each ground radial wire to a ring terminal which was screwed to the outer circumference

of the plate (Photo 1). The 17 meter ap-
pliqué is shown
at Photo 2. Once



completed, we raised the antenna and started the regimen of checking the SWR for each band by checking numerous frequencies with an SWR antenna analyzer. Chris called off the frequency and I recorded the data. We did this until we were satisfied we had the best reading(s).

Before we raised the antenna to the vertical position, we applied some anti seizing paste around each section so that we could adjust the antenna if the occasion ever called for it. Also while the antenna was down, we attached three parachute cords (550 cord has 7 internal nylon strands) for guying purposes. From previous experience, I purchased one rebar from Home Depot and asked them to cut the piece in three. They then bent them for me in a U shape. I used these three pieces as anchors for the guying. Believe me when I say this but it works much better than any tent peg.

In order to tighten or loosen the guys, Chris attached campers' clips Aluminum Rope Adjuster (Photo 3) which works very well for adjusting the parachute guy cords. Once the antenna was raised and all nuts and bolts tightened the ground radials were held in place using plastic staples (also from DX Engineering) so that the rotary mower would not cut the radi-

Working on a project you want to share with the club?

Send it to k2cys@arrl.net with a description and picture and we will get it into the Propagator.

Share the joy! Share the pride!



amplifier by reading the frequency information or data from my ICOM 7000. To make it compatible with this device we had to slightly modify (ICOM recommended) the radio with a simple solder joint. Lastly the ARI-500 had to be adjusted for 10 meters and as luck would have it, I had to buy a mod kit for 10 meters for the amplifier. Ironically, I have found 10 meters to be a dead band most of the time. With the improvements being

als. Staples were pounded down with a small mallet so the staple was well into the dirt. Three lightning rods had been previously set in the ground just outside the shack. Once inside the shack, Chris noticed a ground loop with the transceiver, antenna tuner and amplifier and corrected it using single leads and establishing a bus strip with the 12 gauge wire to each component in the shack. Each ground wire was set in place with strip's screw terminals. It is a very neat looking design. Once everything was in place, Chris checked the SWR's using a new computer program he had just acquired, a USB dongle with BNC connector from Fox Delta. The program sweeps across the entire amateur HF band or specific start and stop frequencies. The results are displayed as a graph (Photo 4) Most of the measurements we did outside using a manual analyzer did compare favorably with his findings. It's always refreshing when results agree using different methods.

made to my station, I had to purchase the MEJ 994B automatic antenna tuner. This tuner is rated to handle 600 watts Peak SSB, but only 300 watts in CW



When I turned age 80 my family knew that I always wanted an amplifier. To my great pleasure they bought me a 600 watt Ameritron ALS-600, accompanying power supply and an ARI-500 automatic band switch for the amplifier. This little device automatically selects the correct frequency range on the

mode. This is fine as in truth I likely will not run the amplifier at maximum.



Finally, and perhaps most important is the fact that I had to upgrade the electric outlet service for my ham radio outlet from 15 to 20 amps to handle the increased load. Before that I shared the same circuit with our microwave oven which was in the kitchen just above the shack and the rest would be history. The results so far have been dramatic. International contacts have been made to Italy, Aruba, Slovenia all on 20 meters and then domestically Florida and Texas. And this is when band conditions are at a historic low. The rest of the time I just listened to see who might be out there. All signal reports so far were great.

I personally want to thank Chris who without his great help and intuitive knowledge I would not have been able to foresee many of the problems that could have evolved.

Lessons Learned

1. The advice that ground radials for a multiband vertical seemed to be wrong, at least in central NJ with ground soil that is low in moisture. Had this been an installation in or near a swamp, perhaps no radials would have been necessary.

2. Careful reading and understanding of the instructions are necessary. Ameritron was rather vague about setting a jumper in the ARI-500 for 10 meter operation.

3. Marking the U shaped rebar used to hold the guy ropes with bright color paint or fasten a bright color ribbon to it to find it when threading the guy rope through it. Otherwise it gets lost in the blades of grass and consumes much time in trying to find it without a metal detector!

73 Alan, W2NIR



Photo legend:

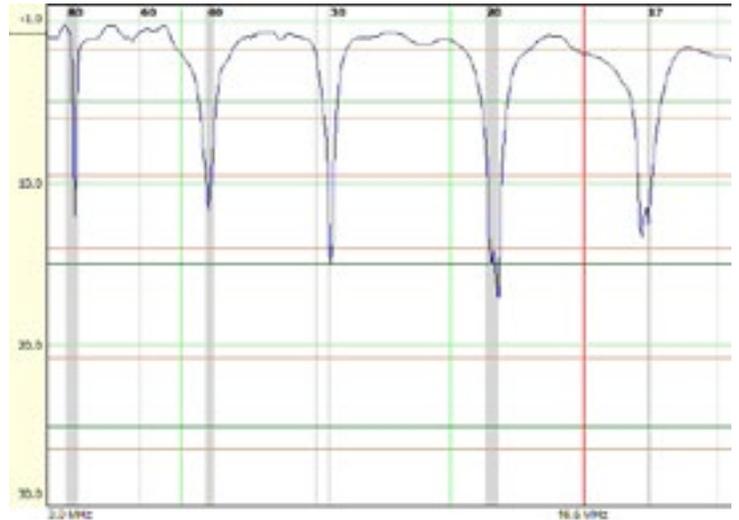
(antenna1.jpg) Photo 1 (page 8) – Pictured is the stainless steel radial ground plate from DX Engineering. Notice the plate can be added to the mast section and has ample room for adding many ground radials and grounding/connecting the coax. The grass is quick to grow over the plate.

(antenna2.jpg) Photo 2 – (first picture on previous page) Close up picture of the 17 meter appliqué for the Hustler antenna. The thin wire elements with the balls are the 17 meter fine tuning adjusters.

(antenna3.jpg) Photo 3 – (page 7) Close up picture of the aluminum rope tension adjuster from Home Depot. Paracord 550 is routed through the adjuster. While sun faded now, the adjuster comes with printed instructions on how to route the cord. In this installation, the cord originates from the antenna, through the aluminum adjuster (loop), to the rebar in the ground and back to the adjuster for final wrapping around the “teeth”. Excess cord is looped around into slip knots to be out of the way from the lawn mower.

(antenna4.jpg) Photo 4 (above graph) – Shown is the Standing Wave Ratio (SWR) graph of the antenna using the Fox Delta Analyzer. The sweep shown is the 80-10 meter plot, but the analyzer has the ability to focus on a specific band using specific start and stop frequencies.

(shack1.jpg) Photo 5 (page 6) – Pictured is W2NIR's shack. Starting from the left is the ICOM 7000 HF/VHF/UHF Transceiver on top of the MFJ -994B antenna tuner, next is the Ameritron ALS-600, and lastly on the far right is the Ameritron dedicated power supply. The small hand held sized box on the Ameritron power supply is the ARI-500. The ARI-500 “talks to” the ICOM radio to tell the Ameritron amplifier which frequency to tune. Also notice the ground strip mounted on the wall. It has extra connections in case additional components are added in the shack. A carpenter has been commissioned to assemble a two tier shelf unit to make better use of the table top as a writing surface.



Tuesday Net Report

The Tuesday night net meets every Tuesday on W2GSA repeater at 8:30 PM. Everyone is most welcome and you don't need to be a member of the club.

In the 5 sessions in October, we had 75 check-ins for an average of 15 per session. The following 25 members checked into this net (number of check-ins in parenthesis):

KA2F (5), N2MEP (5), W2NAZ (5), W2OD (5), WB2RPW (5), N2BMK (4), KD2EJW (4), AD7I (4), KD2PYO (4), KC2YNL (4), N2FSB (3), WA2JOE (3), N2HGI (3), AC2MB (3), W2MJP (3), K2NPT (3), KG2CM (2), N2JFL/KZ2G (2), K2RLF (2), WC2A (1), N2BCS (1), NF3E (1), KD2EPA (1), KB2MAB (1), and KD2MGE (1).

Mark your calendar so you remember to participate. The more participation, the more fun!

RADIO ASTRONOMER RUBY PAYNE-SCOTT

By Rebecca Halleck

Every so often our sun emits an invisible burst of energy. This energy ripples through space as electromagnetic waves and then crashes into planets and meteors and space debris and one another, causing a great cacophony above and around us. A cacophony that was inaudible, until Ruby Payne-Scott entered a laboratory.

In the 1940s, Payne-Scott helped lay the foundation for a new field of science called radio astronomy. Her work led to the discovery of deep-space phenomena like black holes and pulsars and later helped astronauts understand how solar storms disrupt weather in space and electrical grids on Earth.

Yet as a married woman she was denied equal employment status and compensation. She challenged the scientific establishment in her native Australia and fought for the rights of women in the workplace, but ultimately left science to raise her children full time.

World War II opened the door to Payne-Scott's scientific career. The Australian armed forces needed physicists, and men were joining the military to fight instead.

Bored with her job at Amalgamated Wireless (Australasia), where she cataloged and calibrated equipment for radio technicians, Payne-Scott applied for a government posting seeking a physicist. Her experience piqued the interest of the government's

Council for Scientific and Industrial Research. There she became one of two women working as research scientists in the division of radio physics, a laboratory with a top-secret mission: to enable radar systems to track incoming Japanese fighter planes.

Radar was already in use on the European front, but the same systems were not working properly in the Southern Hemisphere, leaving Allied forces and Australian citizens vulnerable.



Payne-Scott determined that tropical weather in the Pacific was to blame. She created a device called an S-band noise tube to check the sensitivity of receivers and measure the intensity of incoming signals.

"She understood the hardware, but she also understood the physics, which is incredible," said Miller Goss, astronomer emeritus at the National Radio Astronomy Observatory and the author of "Making Waves," a biography of Payne-Scott. "No radio astronomer in the 21st century could do something like that."

Payne-Scott became an expert at distinguishing Japanese aircraft from other sources of radio static, like ships, lighthouses, buildings and cliffs. This enabled scientists to track planes from farther away, even at night and during storms – a vast improvement over relying on the naked eye to spot the enemy.

By 1944, with the war turning in the Allies' favor, Payne-Scott and other scientists began searching for postwar applications for their research. A British

physicist, James Stanley Hey, wrote a classified report that was circulated among just a few Allied scientists, including Payne-Scott. It hypothesized that a mysterious radio noise was coming not from aircraft or signal jamming, but rather from the sun.

Hey's report inspired Payne-Scott to join the race to legitimize a new branch of science: radio astronomy.

Ruby Violet Payne-Scott was born in South Grafton, New South Wales, on May 28, 1912, to Cyril and Amy (Neale) Payne-Scott. Home-schooled until age 11, she ultimately landed a spot at the prestigious Sydney Girls High School, graduating at 16. She earned bachelor's and master's degrees in physics from the University of Sydney – only the third woman to do so, Goss said in an interview.

But there were few opportunities for physicists or women when Payne-Scott earned her graduate degree in 1936, so she became a schoolteacher and then took the job at Amalgamated Wireless.

She married William Hall in 1944. They shared political views that were fairly radical; they were feminists, environmental conservationists, atheists and communists. Some of Payne-Scott's colleagues called her "Red Ruby."

But her marriage would present a problem: Women in public service were expected to resign when they wed. Her colleagues at the government research center considered her so integral to their work that they helped keep her marriage a secret; she wore her wedding band on a necklace.

Her boss, J.L. Pawsey, "valued her judgment and experience so highly that when she was absent from a meeting, he would often not make a final decision until she had been consulted," Goss wrote in "Making Waves."

She maintained her secret for several years, during which she helped Pawsey discover what would become

known as Type I solar bursts. Their work, published in the journal *Nature* in February 1946, demonstrated that electromagnetic waves were spewing from the sun. Unlike solar flares, which were visible during eclipses using traditional telescopes, these spontaneous emissions were now detectable using radios.

Payne-Scott would later discover two more types of solar bursts and help create a device called the swept-lobe interferometer, which panned the sky dozens of times per second, allowing radio astronomers to identify and zoom in on single wave formations.

Her final contribution "predicted the whole future of radio astronomy," Goss said. Like watching an instant replay from multiple camera angles at the same time, her method gave radio astronomers a more complete picture of the frequency and shape of waves emanating from space. Martin Ryle shared the 1974 Nobel Prize in Physics using this method.

Then, in 1950, the department was restructured, and in the process Payne-Scott's marriage was uncovered by regulators.

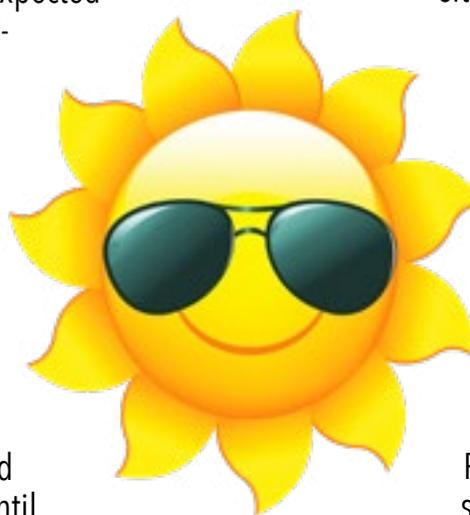
"There were many men who were very unsympathetic to the notion that women would continue to work after they were married," said Claire Hooker, senior lecturer in health and medical humanities at the University of Sydney.

"You didn't have two breadwinners in the family," she continued. "And it was just assumed that it was the man's job to win the bread."

Payne-Scott challenged the rule, taking her fight to the head of the department in a series of contentious letters. But she was forced to resign and give up her pension.

Pawsey hired her back on "temporary" status and gave her a raise, but she decided to leave the lab a year later, five months pregnant and excited to become a mother.

Her son, Peter Gavin Hall, became an influential statistician. Her daughter, Fiona Margaret Hall, born in 1953,



is a prominent Australian artist currently working on a war memorial.

Payne-Scott died of complications of dementia on May 25, 1981. She was 68.

Hall said in an interview that while her mother was known publicly for being outspoken, she lived a relatively quiet family life in the suburbs of Sydney – except for the occasional trip to protest the Vietnam War.

But sometimes, she said, “as a child you’d ask her a question, a classic childhood question like ‘Why does the sun come up in the morning,’ and my mum would always have a very complicated answer.”

Special thanks to **Phil Festa, N2EDX** for pointing me to this unreported NYTimes obituary.

ARES/RACES NET

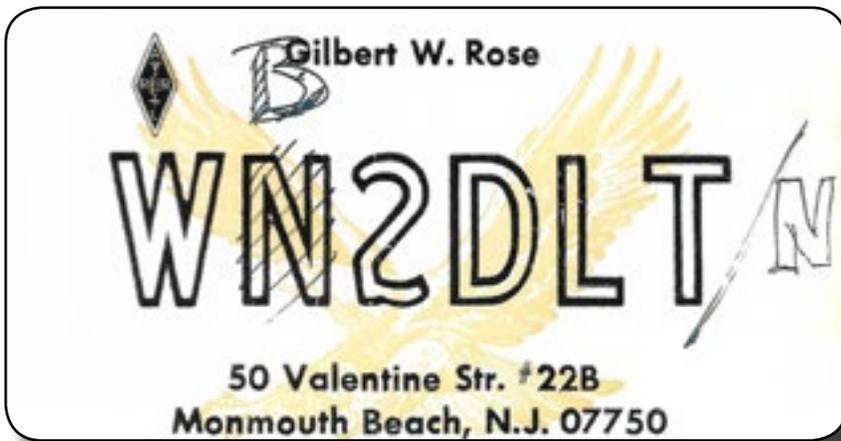
Did you know that there is an ARES/RACES net on the W2GSA repeater on the first and third Mondays of each month at 8 PM local time? You don’t have to be a member of ARES or RACES to check into the net. We all should be comfortable with checking into a formal net as we never know when we might be called upon to help with communications in an emergency. All are welcome. Check it out!



A Little Thanksgiving Dessert



NEW FEATURE COLUMN: My Favorite QSL Card



It is important to my personal ham radio history going back to my very first QSO, on September 9, 1976. As a Novice (WN2HDJ) I was running a homebrew 6L6 transmitter, controlled on the 40 meter band with a crystal on 7.141 (which I still have) with a dipole antenna some 15 feet in the air and an old National NC-173 general coverage receiver. I was calling CQ and was blasted off my seat by Gil Rose in Monmouth Beach two towns from my Little Silver QTH. I may or may not have sent

him 599 for my fist was shaking so much it could have been nonsense to him. He gave me 349 (readability 3/5; signal strength 4/9; tone 9/9), poor readability due no doubt to my frenzied straight key sending. By 8:30 P.M. (not UTC or GMT) the QSO was finished.

When I looked at my note pad all I could read was Gil's call sign WB2DLT--which he sent at least eight times, for my benefit--the rest was utter gibberish!

My code ability became better over the years but nothing is better than having this first QSL card on my wall!

John KA2F

DO YOU HAVE A
QSL CARD WITH A
SPECIAL STORY?
SEND IT TO CY,
K2CYS AT K2CYS@
ARRL.NET!



Please welcome Ed Engel, KD2PTB to the GSARA. (Picture on left of page.) Ed lives in Brick and was first licensed in 1987. He is active on 2 meters and 70 cm chasing DX repeaters. A member of ARRL, Ed also is interested in Military History and Amateur Astronomy. He is a comedian and states on his application a "part time pain in the ass."

Please add to your Roster:

Ed Engel, KD2PTB
461 Mantoloking Rd.
Brick, NJ 08723
732-920-3646
edengel123@yahoo.com

Also welcome John Gazzara from Red Bank. John is an electrical engineering student who is interested in virtual reality and building of computers. He is a former Eagle Scout and is getting ready to take his Technician license.

Please add to your Roster:

John Gazzara
451 Buchanan Blvd.
Red Bank, NJ 07701
908-770-5553
johnmariogazzara@gmail.com

Also welcome Suzan Colon from Old Bridge. Suzan does not yet hold an amateur license and requests Associate membership. She is retired. Please add to your Roster:

Suzan Colon
P. O. Box 951
Old Bridge, NJ 08857
732-991-0379
suzanvwbus@gmail.com

Great to have you

IRENE BOULLE, XYL OF W2OKM PASSES AWAY

We sadly report the passing of Irene Boule, the wife of Honorary member Bob Boule, W2OKM. She was 88 and married to Bob for 69 years. Surviving are her sons Robert M. Boule of Tinton Falls and John R. Boule and his wife Patricia of Greenfield, NH. Irene was born in Pleasant Mount, PA and will be buried in the family cemetery there. Bob is at the top of the DXCC honor roll and will turn 94 on November 7. In lieu of flowers, please consider a contribution in Irene's name to the Alzheimer's Association. We extend our deepest sympathy to the family.

FOR SALE

Yaesu FT-8800 with remote mount kit. 2m/440 dual receiver mobile - \$225
Yaesu FT-1500 2m mobile - \$ 85
Mirage 2m SSB/FM power Amp w Pre-amp 10 w in 160 w out - \$250
Yaesu VX-5 2m/440 HT with fast charger and remote mike - \$150

All of the above are working and include manuals, boxes and all accessories included in box. I am open to reasonable offers.

Joe, WA2SFF wa2sff.one@gmail.com

GSARA at the Twin Lights Bike Tour



Paul, AD7I, Art, W2NAZ, Shannon KD2PUJ, Dave, KD-2KOA, Denis, W2NPT, John, KC2YNL, Andy KA2VXA, Harry, KD2EJW, all participating as check points for the Twin Lights Bike Ride. Thanks to their volunteer efforts, good communications was held throughout the event.

There are several events that request GSARA participation throughout the year. You can see them reported in the Propagator this month. For the next one, plan to operate. They are fun, good training, and an excellent way to get outdoors.

Straight Key Night



I ♥ CW

Did you know there is a 'contest' - which is really not a contest in the usual sense - on New Year's Day? That's right: break out

your old gear and your straight key to operate on the ARRL's Straight Key Night on January 1st. QSOs are leisurely and fun and there is no reason to rush through. For all the info, go to this link: <http://www.arrl.org/straight-key-night>. Mark your calendar.



More moments of levity at the last meeting in October

Seen on the JDRF walk. Apparently he is a rock! Does this make him a rock star? Anyway, we are not sure of his callsign. Maybe it is STONE! (Get it?!)



FIVE YEARS AGO

From the November 2013 Propagator: Blair Hearth, KD2EPA joined GSARA. The newly-formed GSARA Net on Tuesday nights averaged 4 check-ins per session in October. A special meeting at Schneider's in Avon was called and Frank W2XYZ was voted in as an Honorary/Life member of GSARA. Bill Shockley, NJ2H shared personal remembrances of Wayne Green, N2NSD-SK. Ralph, KC2YNL refinished the GSARA gavel. A Roster was published showing 66 members.

TEN YEARS AGO

From the November 2008 Propagator: www.gardenstateara.org went live. Dave Mutterer, KC2H from Middletown was named Amateur of the Year for the Hudson Division. There was an article about Desecheo Island which is being activated in early 2009. The nominating committee could not find a candidate for President so Jeff, N2LXM agreed to run for a fourth term.

FIFTEEN YEARS AGO

From the November 2003 Propagator: After completing 43 years of publication, Wayne Green's 73 Amateur Radio Today magazine ceased publishing. The September 2003 issue was the last. The first month of Logbook of the World (LoTW) has been a success with 2200 registered participants and another 2400 pending applications. Rohn Industries in Indiana, manufacturer of radio towers, filed for Chapter 11 bankruptcy.

TWENTY YEARS AGO

From the November 1998 Propagator: Past GSARA President (1993) Don Venberg, W2GEZ became a silent key. The Fort Monmouth station K2USA was visited by 74 Boy Scouts for the Jamboree on the Air. Ron Parham, K2SST is moving to North Carolina. Jordan's King Hussein, JY1 was on 20 meters during his visits to the US for treatment of lymphoma.

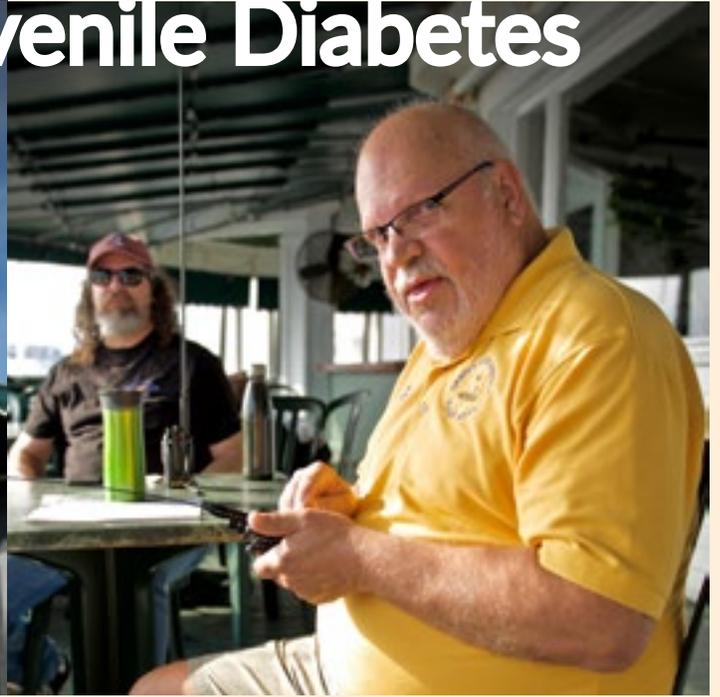
TWENTY-FIVE YEARS AGO

From the November 1993 Propagator: The Shore Area Hamfest at Allaire Airport was a success with 850 tickets sold at the gate. 48 people passed the various VE exams given at the Hamfest. Avid DXer Craig Harvey, W2CH became an SK. There were 129 members of GSARA.

THIRTY YEARS AGO

From the November 1988 Propagator: The VE Test Session at the Shore Area Hamfest had 35 candidates sit for exams and 20 of them successfully passed for a new license or upgrade. WADB started broadcasting "The World of Amateur Radio" by Phil Petersen, W2DME-SK on a regular basis. The MS-150 was held in September and ran from Monmouth Battleground to Hammonton and return. Many GSARA members helped provide communications. A Roster was published and showed 131 members.

GSARA at the Juvenile Diabetes Foundation Walk



GSARA provided communications for the Juvenile Diabetes Research Foundation Walk in October. It was a good showing by our club members.

From top left clockwise: Tom, N2VFK, arrives at the half way/turnaround point. Art, W2NAZ, programs in the frequencies while Shannon, KD2PUJ, watches. Art, W2NAZ, chats with one of the participants. Art and Shannon were unexpected arrivals and came when they heard we were short handed, even though they both did duty last week on the Bike tour.

GSARA at the

Red Bank

Crop Walk



GSARA continued its very busy month of public service events finishing off October with the Crop Walk, a walk against hunger and want. Several GSARA members - W2HT, KC2YWL, KD2PUJ, KD2EPA, KA2VXA, W2NOB, KD2MGI and N2VFK - provided communication for the walk at GSARA was highly visible, especially Tom's (N2VFK) antenna which was buffeted around in the wind. As well, GSARA President, Howard, W2HTS, (above) staffed one of the checkpoints as did Shannon, KD-2PUJ (right). It was wonderful day to be outside and a wonderful way for the GSARA to provide a public service for a worthy event.



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GSARA Swag 'n Such

GSARA Patches

We have GSARA patches available at all meetings and they are \$3. Show your GSARA pride!

GSARA News

Keep up with GSARA news at the GSARA website:

www.gsara.club

www.w2gsa.org

Blue Swan Diner Eyeball QSO!

A number of local radio amateurs meet each Friday at the Blue Swan Diner on Highway 35 south in Ocean Township at noon. Anyone interested in amateur radio is welcome to join us in the back left corner of the diner.



GSARA at the Jamboree on the Air



There was some good GSARA representation at the Jamboree on the Air, the Boy Scout and Amateur Radio Weekend. Many of the Scouts had a great time making new friendships with each other and, of course on the air. Congratulations to all the Scouts who made new friends by ham radio!



Home of the W2GSA open repeater - FM and Fusion (WIRES-X)
(Analog FM) 147.045 +.600 -
(C4FM) Node 43360 PL 67 Hz

Club Benefits



GSARA.CLUB
W2GSA.ORG

Have you seen the GSARA website lately at <https://www.gsara.club/>? Check it out often for updates, news, announcements and general club information. If you have not yet done so, send us a picture of your shack and a selfie for the Members; Shacks and Our Members page. There is a Members Only Page which will contain important links viewable by GSARA members only including the most current roster and the previous month's minutes from the meeting. Send your selfies to Cy, K2CYS at k2cys@arrl.org. Do you have any other great ideas for the site? Let Cy know.

W2GSA CLUB NET

The GSARA weekly net meets each Tuesday evening at 8:30 on the GSARA repeater. Everyone is welcome to hear news of upcoming club events and activities, reports of the latest club news and everyone can share what they have been up to. Please join us. The more participation, the more fun!



QSL BUREAU

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). Either John, KA2F or Len, WA1PCY will then send them on to ARRL 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?

W2GSA Garden State Amateur Radio Association			
		Founded May 10, 1950 ARRL Affiliated January 22, 1951 Monmouth County/Grid Square FN20 W2GSA Repeater 147.045 PL 67 More info on QRZ.com & GSARA Website at www.gardenstateara.org 8 Donner St Holmdel, NJ USA 07733	
CONFIRMING QSO WITH	DAY	MONTH	YEAR
UTC	BAND	RST	MODE
<input type="checkbox"/> PSE <input type="checkbox"/> QSL <input type="checkbox"/> TNX <input type="checkbox"/>			

The GSARA Propagator is designed in Adobe InDesign and InCopy CC 2019 Editor, Contributor, Net Controller, Now You Know: **Bob Buus, W2OD** Layout, Creative Design, Publishing: **Cy Stanway, K2CYS** Photos: **Harry Zuzuro, KD2EJW**

You are invited to submit articles and ideas

NOTES ON CALENDAR (see next page)

Large Call letters denote birthdays e.g. **W2UTR** November 3. All times before November 4 are EDST and after are in EST. Contests are listed in the November QST, p. 90.

November 1 - **HCARC Meeting** 7 pm at Holiday City South Clubhouse in Toms River.

November 2 and every Friday – **Lunch at the Blue Swan Diner** in Ocean at noon. Table at back left.

Nov. 3-4 – **ARRL CW Sweepstakes Contest** from 5 pm Fri. to 10 pm Sun. See <http://www.arrl.org/sweepsta>

November 6 – **Old Barney VE Test Session** at 6:30 pm in Manahawkin. Contact Urb Le Jeune, W1UL at 609 5856 or urb@w2dec.com

November 6 – **Old Barney ARC Meeting** at 7:30 pm in Manahawkin, NJ. See <http://www.obarc.org>

November 6 and every following Tuesday – **GSARA Net** on 147.045 PL=67 at 8:30 pm.

November 6 and every following Tuesday – **QCWA News Net** on 147.045 PL=67 at 9:00 pm.

November 7- **WIAW Qualifying Run** at 9 am (10-35 wpm). See November 2018 QST page 100 www.arrl.org/qualifying-run-schedule

November 7 – **GSARA Program Meeting**. The program will feature Bob, W2OD who will describe the various types of baluns and when you should use them. Refreshments will be served. Don't miss it!

November 8 – **JSARS meeting** in Riverwood Park Rec. Building, Rt. 527 and Riverwood Drive at 7:30 pm.

November 8 - **Monmouth County ARES/RACES Net** meets on 147.045 +600, PL=67.0 at 8:00 pm

November 9-11 – **10-10 International Digital Contest** from 7:01 PM Friday to 6:59 pm Sunday. <http://www.ten-ten.org>

November 10-11 – **CQ Western Electric Contest**, all modes from 2 pm Saturday to midnight Sunday. <http://www.cqwe.cboh.org>

November 10 – **OMARC Meeting** at 9:00 am at the Firehouse on 600 Sixth Ave. in Spring Lake Heights. Cops are always welcome.

November 12 – **Veterans Day**. Please honor those who have served our country with great sacrifice.

November 14– **Holiday City VE Session** at 7 pm in Toms River. Contact is Larry Puccio, K2QDY at 732-349- or e-mail at lpuccio1@comcast.net

November 15 – **JSARS VE Test Session** at 7:00 pm Riverview Park Recreation Bldg., Rt. 527 and Riverwood in Toms River. Contact Ed Genoio, WA2NDA at 609-971-2792 or wa2nda@comcast.net.

November 15- **Monmouth County ARES/RACES Net** meets on 147.045 +600, PL=67.0 at 8:00 pm

Nov. 17-18 – **ARRL SSB Sweepstakes Contest** from 5 pm Fri. to 10 pm Sun. See <http://www.arrl.org/sweepsta>

November 21 – **WIAW Qualifying Run** at 7 pm (10-35 wpm). See November 2018 QST page 100 <http://www.arrl.org/qualifying-run-schedule>

November 21 – **GSARA Meeting** at 7:30 pm at the Red Cross in Tinton Falls. Regular business meeting election of officers for 2019. Refreshments will be served.

November 22 – **Thanksgiving Holiday. Enjoy!**

November 23-25 – **CQ Worldwide CW DX Contest** from 7 pm Fri. to 6:59 pm Sun. See <http://www.cqww.com>

November 24 – **GSARA VE Test Session** at 11 am at the Red Cross in Tinton Falls. See page 1.

November 30-December 2 – **ARRL 160-Meter CW Contest** from 5 pm Friday to 11 am Sunday. <http://www.arrl.org/160-meter>

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 HCARC Mtg	2 Blue Swan lunch	3 W2UTR CW Sweepstakes Set Clocks Back
4 N2JNG CW Sweepstakes	5 ARES/RACES 8 pm	6 Old Barney GSARA Net 8:30 QCWA News 9 PM	7 N2CUG W2OKM K2SOG CW Qual. Run GSARA Mtg	8 KG2NV JSARS Mtg	9 Blue Swan lunch 10-10 Digital	10 OMARC Mtg. 10-10 Digital CQ WE
11 10-10 Digital CQ WE	12 Veterans Day	13 Old Barney GSARA Net 8:30 QCWA News 9 PM	14 Hol. City VE	15 JSARS VE	16 KB2USF Blue Swan lunch	17 SSB Sweepstakes
18 W2TBD SSB Sweepstakes	19 ARES/RACES 8 pm	20 Old Barney GSARA Net 8:30 QCWA News 9 PM	21 KD2OXR CW Qual. Run GSARA Mtg	22 Thanksgiving	23 Blue Swan lunch CQWW CW DX	24 GSARA VE CQWW CW DX
25 KD2OBV KC2VIN CQWW CW DX	26 W2KQ	27 Old Barney GSARA Net 8:30 QCWA News 9 PM	28	29	30 Blue Swan lunch 160 Mtr CW	1 160 Mtr CW



8 DONNER STREET
HOLMDEL, NJ 07733

First Class