



THE PROPAGATOR

Holmdel, NJ 07733
Editor: Bob Buus, W2OD

APRIL 2014

UPCOMING GSARA MEETINGS

The first GSARA meeting for April will be held on **Wednesday, April 2 at 7:30 PM** at the Red Cross. It's going to be an evening at the movies--amateur radio cinema W2GSA--showing academy award quality films and perhaps even a short, just like in the old days. Movie style snacks will be available; jugyfruits, popcorn, crackerjax. Beware: Blowing on empty candy boxes can get you put out.

The second meeting in April will be held on **Wednesday, April 16 at 7:30 PM** at the Red Cross. This will be a regular business meeting. As always, refreshments will be served and guests are always welcome.

GSARA NET 8:30 PM TUESDAYS

Did you know that there is a get-together of GSARA members on the Asbury Park repeater every Tuesday at 8:30 pm? In the three sessions in March, we have had 18 check-ins for an average of 6 per session – a big improvement over February. The following 9 members checked into this net at least once (number of check-ins in parenthesis):

KA2F (3), N2HGI (3), N2LXM (3), W2OD (3), K2QXW (2), N2BMK (1), K2CYS (1), K2EI (1), and KC2YNL (1).

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

GSARA E-MAIL ADDRESS

Although our old e-mail address still works, we have arranged with the ARRL to forward any mail to w2gsa@arrl.net to us. Many of you will find this easier to remember.

WELCOME NEW MEMBER

Please welcome Charlie Williams, KB2YTM to the GSARA. Licensed since 1996, Charlie holds an Extra Class license and works in electronics. He is active in CW and digital modes with his Icom IC-706MKIIG. A member of the ARRL, he is also interested in radio-controlled airplanes. Please add to your roster:

KB2YTM, Charlie Williams
28 Hogan Lane
Red Bank, NJ 07701
717-824-2097
cwwytm@gmail.com

VE TEST SESSION APRIL 19

The GSARA monthly test session will be held on Saturday, April 19 at 11 am at the Red Cross in Tinton Falls. 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@aol.com.

GSARA HOMEPAGE

<http://www.gardenstateara.org>

HUDSON DIVISION HOME PAGE

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

A vulture boards an airplane, carrying two dead raccoons. The stewardess looks at him and says, "I'm sorry, sir, only one carrion allowed per passenger."

GSARA OFFICERS

President	KA2F	John King	942-7705
Vice Pres.	W2HTS	Howard Suffill	460-1885
Secretary	W2OD	Bob Buus	946-8615
Treasurer	K2QXW	Bruce McLeod	946-4368
Engineer	W2EPD	George Graulich	255-7916
Webmaster	KE2V	Vince Rosati	229-3283
Publicity	NJ2H	Bill Shockley	207-4466
Repeater	N2LXM	Jeff Harshman	922-0816
Radio Room Phone		732-493-9100, X1252	
Trustees	W2KQ	Joe Dreifuss	493-4236
	W2OD	Bob Buus	946-8615
	W2HAM	Lou Russo	842-6431

DX MEETINGS UP IN THE AIR

The DX meetings on the last Monday of each month have become a bit sporadic due to lack of interest. If you would like to meet, please contact Joe, W2KQ to find if the meeting will take place and whether it will be at the Red Cross or at the Blue Swan Diner. The last Monday of April is on the 24th.

PATCHES

We have GSARA 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). Ray, WA1FFT 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?

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.

2000 mockingbirds = 2 kilomockingbirds

EDITOR'S NOTES

Some of you have not yet renewed your dues for 2014. Per our Constitution, those not paid by March are dropped from the Roster and no longer receive *The Propagator*. Thanks to all who have renewed their membership.

I have decided to list the upcoming operations of W1AW from the various states so each week's activities are listed on page 9. John, KA2F has been very good about giving us a heads up each week when new states come on but I thought some of you might like to look ahead to see what's coming up. Operations change at 8 pm every Tuesday and continue for a week.

The get-together of GSARA members on the repeater every Tuesday night at 8:30 seems to be picking up a little steam with the number of check-ins hitting a new high in March (page 1). By the way, there is no need to wait for me to show up to get the conversation going. Just get on the repeater and ask if anyone is listening. I had a bad coax connector and couldn't key the repeater on March 15 but no one got on so I mistakenly assumed that the repeater was inoperable. Actually, everyone was just listening.

I hope many of you find the history of the car radio (starting on page 6) interesting. Vince and I were a little skeptical about the idea coming from a date at a lookout point but it does make a good story. In searching the internet, I found several instances in the 1920s where someone put a radio in a car but these early implementations were crude and dangerous at best.

It's sad to see that Radio Shack is closing over 1000 stores (page 8) but I'm not surprised. It has been getting increasingly more difficult to find parts to build electronic projects at the Radio Shack stores and I have had to turn to ordering from internet suppliers instead.

I'm still waiting to hear from MetroCor authorizing us to change to call of the Asbury Park repeater to W2GSA. Hopefully, it should happen soon.

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 5 MEETING

By Bob Buus, W2OD, Secretary

The meeting was called to order by President John King, KA2F at 7:30 PM at the Red Cross. There were 16 members and 1 guest present. The guest was Charlie Williams, KB2YTM from Red Bank. After the pledge to the flag, all present introduced themselves.

Health and Welfare

Ralph, KC2YNL is home recovering from back surgery and is doing well but can't yet come to the meetings for several more weeks.

Reports and Business

Since this was a meeting with a program, all reports and business was postponed until the next meeting on March 19.

New Member

An application for membership was received with initiation fee and first year's dues from Charlie Williams, KB2YTM from Red Bank. He holds an Extra class license and has been licensed since 1996. Charlie is active in the digital and CW modes with his IC-706MKIIG and works in the electronics field. He is also interested in radio-controlled airplanes and is a member of the ARRL. A motion was made to accept Charlie, KB2YTM as an active member of the GSARA. The motion passed unanimously.

Announcements

Jeff, N2LXM will be demonstrating amateur radio to Girl Scouts on Saturday, March 8. He asked members to listen for him on 146.52 or the repeaters from noon until about 2 pm so he can demonstrate amateur communications.

Mike, KC2Q is looking for candidates to take his bus trip to Dayton in May. This will probably be the last year he will be running a bus trip.

Jeff, N2LXM announced that the New Jersey Antique Radio Club is having Joe Taylor, K1JT give a talk about his WSJT suite of programs for weak signal work. The talk will be on Friday, March 14 at 7 pm at the InfoAge Learning Center and up to 10 GSARA members are invited to attend as guests.

Program

John, KA2F gave an interesting and entertaining presentation of the use of humor in amateur radio. He showed several cartoons which were entertaining but also had a message about good operating practice. Many of the cartoons were by Phil "Gil" Gildersleeve, W1CJD who drew more than 1500 cartoons for the ARRL, many of them appearing on the pages of QST.

Close

The 50-50 door prize of \$16 was won by Blair, KD2EPA. There being no further business, a motion was made by Jeff, N2LXM and seconded by Blair, KD2EPA to close the meeting which was adjourned at 9:05 pm.

MINUTES OF MARCH 19 MEETING

By Bob Buus, W2OD, Secretary

President John King, KA2F called the meeting to order at 7:32 PM at the Red Cross. There were 16 members present. After the pledge to the flag, all present introduced themselves.

Health and Welfare

Ralph, KC2YNL is slowly recovering from his back treatment. He is on the air but still can't travel any distance.

Secretary's Report

A motion was made by Joe, W2KQ and seconded by Jeff, N2LXM to accept the secretary's report from the last meeting as it will be published in the April Propagator. The motion passed unanimously.

Treasurer's Report

The treasurer's report was presented by Treasurer Bruce, K2QXW. A motion was made to accept the report and it passed unanimously.

Bruce was asked how much our equipment was insured for and it was \$13,200 which is the replacement cost. John, KA2F announced that anyone desiring the detailed breakdown can request the list from Bruce.

VE Program

Rich, N3RB reported that we have a full crew of VEs signed up for the VE session on March 22 and for the one on April 19. We are trying to

clarify with ARRL that the sessions on the Sunday following our regular sessions are only to be used by those having a religious conflict. Some have registered for Sunday just because they thought it more convenient.

Hamfest

The GSARA Hamfest is coming up on Saturday, May 3 and we need volunteers to help make it a success. Ray, WA1FFT and Cy, K2CYS volunteered to staff the club table. Bill, NJ2H and Rich, N3RB volunteered to sell the 50-50. Bruce, K2QXW and Bob, W2OD will again manage the gate. Bill, NJ2H will handle the publicity. Jeff, N2LXM will do the signs. We still need volunteers to set up tables and to take care of refreshments. John, KA2F will be out of town at that time and unavailable to help out.

Field Day

Field Day is coming on June 28-29. Cy, K2CYS suggested we put a station on the front lawn of the Red Cross and all thought it a good idea. We have a tent. Ray, WA1FFT has an R7 antenna and a support for an inverted vee. We will need Red Cross permission to set up on the front lawn and it was suggested that we invite the Red Cross to share in the publicity prior to the event. John, KA2F suggested we get better food than Pizza. There was discussion about ordering Field Day t-shirts but it was decided to use the GSARA yellow shirts instead. For those who do not have a shirt, we will order about 10 shirts with the logo but no name that can be used on Field Day. With the extra transmitter, we critically need more operators and coordinate their activity. A special invitation will be extended to the newer members of GSARA to encourage them to participate.

ARRL Centennial Convention

John, KA2F has about a dozen GSARA members interested in going to the Hartford convention on Saturday, July 19. It looks like transportation will cost about \$50 per person. A motion was made by Marty, N2BMK and seconded by Bill, NJ2H to advance John, KA2F \$500 to cover miscellaneous expenses that may be incurred for this trip.

NJ 350 Anniversary

On June 21-22, GSARA will celebrate the 350th anniversary of the state of New Jersey by operating special event station N2J from the Red Cross. Anyone wishing to operate the stations is encouraged to do so. Members may also operate N2J from their homes but logs must be submitted to the club which will take care of QSLing.

Girl Scouts

Jeff, N2LXM reported that the Girl Scout event at Camp Sacagawea went well and several girls got a chance to talk on the 2-meter radio through the Asbury Park repeater. The location and antennas did not permit simplex operation.

Announcements

Volunteers are needed for the NJ Marathon in April. This is being coordinated by Holger, W2HES.

Jeff, N2LXM reported that an interesting talk was given by Joe Taylor, K1JT at the InfoAge on Friday, March 14. He thinks we can get Joe to give the talk to GSARA in the future.

Close

The door prize of \$14.50 was won by Rich, N3RB. There being no further business, a motion was made by Bill, NJ2H and seconded by Rich, N3RB to close the meeting which was adjourned at 8:45 pm.

HAM RADIO AND MISSING AIRLINER

Following the disappearance on March 8 of the Malaysian Airline jetliner, the airline at Kuala Lumpur Airport provided hotel accommodations for passengers' next of kin. The Malaysian Amateur Radio Transmitters' Society (**MARTS**) was asked to provide a link between the airport and the hotel which was quickly set up with a cross-band VHF/UHF link to avoid any unnecessary interference to and from public service communications, and later added an HF link. During the callout, 11 Amateur Radio volunteers were at the airport, and 23 volunteers were at the hotel. -- Thanks to Jim Linton, VK3PC, Chairman IARU Region 3 Disaster Communications Committee From *The ARRL Letter*, March 13, 2014

RADIO ROOM OPEN SATURDAYS

The GSARA radio room in the back of the Red Cross is open most Saturday afternoons. Simply drive all the way around to the back, where the antennas are located, to the RED DOOR. Your have a choice of ways to gain entry (in order of preference):

1. Call W2GSA on the repeater 147.045 (pl 67)
2. Call on the telephone 732-493-9100 ext. 1252
3. Ring the door bell (CW preferred)
4. Bang on the door until either someone opens or your fist gets sore.

Hopefully, someone will let you in where you can operate or kibitz with others as you choose.

SPARK GAP MORSE ON NPR

As part of its series of vignettes exploring a "counterfactual" history, "What if World War I had never happened?" NPR afternoon news magazine "All Things Considered" aired a segment on March 11 to explore how history would have unfurled, if the assassination of Archduke Franz Ferdinand had not been not successful.

"They needed a sound of a telegraph relaying the message of the failed assassination attempt," said ARRL Media and Public Relations Manager Sean Kutzko, KX9X. "They wanted it to be as authentic as possible, so we explained that in 1914, it would have been relayed via spark."

The ARRL Lab has a working spark transmitter, so Kutzko got the desired text from NPR, which he sent by hand and recorded. "They said it was 'perfect,'" he reported. "It was a real thrill being able to help NPR; I used to work at NPR affiliates in Illinois and Indiana in the 1990s, so being able to help the network was exciting."

The final result? Well, if you wanted to hear the spark Morse code on the air, you had to listen closely and quickly; it was soon voiced over by a faux voice dispatch relating the faux news. NPR's "All Things Considered" segments are [available](#) on the NPR website.

From *The ARRL Letter*, March 13, 2014

GSARA LIBRARY UPDATE

The GSARA library continues to grow with the following donations since the list was published in the February *Propagator*. (Names and call signs in parenthesis indicate donors.)

ARRL Repeater Directory 2006-2007 large print desk edition (Richard, N3RB)

Get on the Air with HF Digital, the Beginner's Guide to PSK-31, RTTY, and More (Bill, NJ2H)

ARRL 2000 Handbook (Len, WA1PCY)

FCC CITES NJ CB SHOP

The FCC has issued a [Citation](#) to a New Jersey Citizens Band radio shop for marketing unauthorized RF devices to consumers in violation of the Communications Act of 1934 and FCC Part 2 rules. The Citation to Thomas Wilson, doing business as [Redman CB Stop](#), in Absecon, New Jersey, was issued March 5.

"Redman CB Stop should take immediate steps to discontinue the marketing of unauthorized radio frequency devices, and to avoid any recurrence of the misconduct described herein," the FCC Citation directed.

Last October an agent from the FCC Enforcement Bureau's Philadelphia office browsed the website of the online retailer of CB and Amateur Radio gear. The agent "observed for sale 16 makes and models of non-certified RF power amplifiers" capable of operation on both the 11 meter Citizens Band and the 10 meter ham band. The FCC said such devices may not be offered for sale prior to FCC certification. In addition, FCC rules prohibit marketing or selling external RF amplifiers capable of amplification between 26 MHz and 28 MHz.

The FCC gave Redman CB Stop 30 days to respond to the Citation. The Commission said it will use "all relevant material information before it," including information the retailer may disclose, to determine what, if any, enforcement action may be necessary "to ensure your compliance with the Communications Act and the Commission's rules."

From *The ARRL Letter*, March 13, 2014

SHORT HISTORY OF THE CAR RADIO

Seems like cars have always had radios, but they didn't.

Here's the story:

One evening, in 1929, two young men named William Lear and Elmer Wavering drove their girlfriends to a lookout point high above the Mississippi River town of Quincy, Illinois, to watch the sunset. It was a romantic night to be sure, but one of the women observed that it would be even nicer if they could listen to music in the car.

Lear and Wavering liked the idea. Both men had tinkered with radios (Lear served as a radio operator in the U.S. Navy during World War I) and it wasn't long before they were taking apart a home radio and trying to get it to work in a car. But it wasn't easy: automobiles have ignition switches, generators, spark plugs, and other electrical equipment that generate noisy static interference, making it nearly impossible to listen to the radio when the engine was running.

One by one, Lear and Wavering identified and eliminated each source of electrical interference. When they finally got their radio to work, they took it to a radio convention in Chicago. There they met Paul Galvin, owner of Galvin Manufacturing Corporation. He made a product called a "battery eliminator", a device that allowed battery-powered radios to run on household AC current.

But as more homes were wired for electricity, more radio manufacturers made AC-powered radios. Galvin needed a new product to manufacture. When he met Lear and Wavering at the radio convention, he found it. He believed that mass-produced, affordable car radios had the potential to become a huge business.

Lear and Wavering set up shop in Galvin's factory, and when they perfected their first radio, they installed it in his Studebaker.

Then Galvin went to a local banker to apply for a loan. Thinking it might sweeten the deal, he had his men install a radio in the banker's Packard. Good idea, but it didn't work – Half an hour after the installation, the banker's Packard caught on fire. (They didn't get the loan.)

Galvin didn't give up. He drove his Studebaker nearly 800 miles to Atlantic City to show off the radio at the 1930 Radio Manufacturers Association convention. Too broke to afford a booth, he parked the car outside the convention hall and cranked up the radio so that passing conventioners could hear it. That idea worked -- He got enough orders to put the radio into production.

WHAT'S IN A NAME

That first production model was called the 5T71. Galvin decided he needed to come up with something a little catchier. In those days many companies in the phonograph and radio businesses used the suffix "ola" for their names - Radiola, Columbiola, and Victrola were three of the biggest.

Galvin decided to do the same thing, and since his radio was intended for use in a motor vehicle, he decided to call it the Motorola.

But even with the name change, the radio still had problems: When Motorola went on sale in 1930, it cost about \$110 uninstalled, at a time when you could buy a brand-new car for \$650, and the country was sliding into the Great Depression. (By that measure, a radio for a new car would cost about \$3,000 today.)

In 1930, it took two men several days to put in a car radio -- The dashboard had to be taken apart so that the receiver and a single speaker could be installed, and the ceiling had to be cut open to install the antenna.

These early radios ran on their own batteries, not on the car battery, so holes had to be cut into the floorboard to accommodate them.

The installation manual had eight complete diagrams and 28 pages of instructions. Selling complicated car radios that cost 20 percent of the price of a brand-new car wouldn't have been easy in the best of times, let alone during the Great Depression.

Galvin lost money in 1930 and struggled for a couple of years after that. But things picked up in 1933 when Ford began offering Motorola's pre-installed at the factory. In 1934 they got another boost when Galvin struck a deal with B.F. Goodrich Tire Company to sell and install them in its chain of tire stores.

By then the price of the radio, with installation included, had dropped to \$55. The Motorola car radio was off and running. (The name of the company would be officially changed from Galvin Manufacturing to "Motorola" in 1947.)

In the meantime, Galvin continued to develop new uses for car radios. In 1936, the same year that it introduced push-button tuning; it also introduced the Motorola Police Cruiser, a standard car radio that was factory preset to a single frequency to pick up police broadcasts.

In 1940 he developed the first handheld two-way radio -- The Handy-Talkie -- for the U. S. Army. A lot of the communications technologies that we take for granted today were born in Motorola labs in the years that followed World War II.

In 1947 they came out with the first television for under \$200.

In 1956 the company introduced the world's first pager; in 1969 came the radio and television equipment that was used to televise Neil Armstrong's first steps on the Moon.

In 1973 it invented the world's first handheld cellular phone. Today Motorola is one of the largest cell phone manufacturers in the world.

And it all started with the car radio.

WHATEVER HAPPENED to the two men who installed the first radio in Paul Galvin's car? Elmer Wavering and William Lear ended up taking very different paths in life.

Wavering stayed with Motorola. In the 1950's he helped change the automobile experience again when he developed the first automotive alternator, replacing inefficient and unreliable generators. The invention led to such luxuries as power windows, power seats, and, eventually, air-conditioning.

Lear also continued inventing. He holds more than 150 patents. Remember eight-track tape players? Lear invented that.

But what he's really famous for are his contributions to the field of aviation. He invented radio direction finders for planes, aided in the invention of the autopilot, designed the first fully automatic aircraft landing system, and in 1963 introduced his most famous invention of all, the

Lear Jet, the world's first mass-produced, affordable business jet. (Not bad for a guy who dropped out of school after the eighth grade.)

Sometimes it is fun to find out how some of the many things that we take for granted actually came into being!

AND, It all started with a woman's suggestion!!

Thanks to Vince, KE2V for submitting this

Editor's Note: Although the contributions of Wavering, Lear, and Galvin seem to be factual, the inspiration at a lookout point in Quincy, IL seems too neat to be true but there seems no way to find out for sure. Both Motorola (Galvin) and Philco have claimed to be the first to mass produce a car radio. There is ample evidence on the internet that several different people put a radio receiver in a car starting in the early 1920s. One early installation consisted of a large wooden box (containing the receiver and batteries) sitting on the dashboard and a large loop antenna mounted on the front hood of a 1920s vintage automobile. With spark coil ignition and no automatic volume control on the radio, the results must have been rather poor. Also, the early receivers were tuned rf or regenerative and required several adjustment knobs that made tuning while driving highly dangerous if not impossible.

The production Motorola unit seems to have been a superhet with only two knobs -- volume and tuning. The radio itself was mounted under the front seat and the controls remoted to a tuning head mounted on the steering column and connected to the radio tuning and volume knobs by encased steel wire similar to the old analog speedometer cable. The radio had its own batteries for powering the tubes.

Later developments included tubes with 6.3 volt heaters that could be powered directly from the 6-volt car battery and a vibrator power supply that stepped up the 6 volts to the higher voltage required on the plates of the tubes. Car radios were made to be highly sensitive so that a short whip antenna was sufficient to pick up AM broadcast stations. Finally, very powerful automatic volume control was developed so the audio output stayed nearly constant although the

radio signal strength varied over a wide range as the car moved about.

As I was growing up, our family never had a car radio until I installed one in my Dad's car around 1952 and it was still considered quite a novelty even at that time.

RADIOSHACK CLOSING 1100 STORES

Once a staple of electronics retailing and a ready source of small parts for ham radio homebrewers and electronics enthusiasts, [Radio Shack](#) has fallen on tough times. In the wake of a substantial drop in holiday sales and a big fourth-quarter loss, the Fort Worth, Texas-based retailer has announced that it is closing 1100 of its outlets, leaving it with some 4000 stores, including more than 900 dealer franchises. Radio Shack's stock has fallen by nearly 28 percent on the news.



Reported weak customer traffic at electronics retailers in general over the holiday season was reflected in a 19 percent drop in sales at Radio Shack. Now market analysts have begun sounding the death knell for Radio Shack, with some comparing the retailer's numbers to those of Circuit City before it went under in 2008.

Radio Shack once offered entry-level short-wave receivers, Citizens Band gear, and a wide array of discrete components -- including transistors, resistors, and capacitors. For a time, Radio Shack marketed a fairly popular 2 meter hand-held transceiver, as well as two different models of 10 meter single-band transceivers. It failed, however, in its effort to market a dual band VHF/UHF hand-held radio. Over the years, Radio Shack has offered fewer discrete components in its brick-and-mortar stores, moving that stock and other products to its online outlet, as it shifted its marketing focus to cell phones, consumer electronics, and various battery-operated gadgets. -- Thanks to Reuters, Yahoo! Finance

From The ARRL Letter, March 6, 2014

TEN YEARS AGO

From the April 2004 Propagator: Marty, WN2DX agreed to fill the vacant position of Chief Engineer. Rich DiFiore, KB2NXA became a silent key on March 7, 2004 at the age of 62. Tom Swift, W2BD moved to Somerset County and Rich Cardwell, AA2BY moved to Tennessee. Mike Doelger, WB2GXP moved to North Carolina. There was an article "My Introduction to Ham Radio" by Bob Buus, W2OD. (*Perhaps I'll clean the article up a bit and send it to John, KA2F as he has requested from all of us.*)

FIFTEEN YEARS AGO

From the April 1999 Propagator: Secretary Jack Petro, KB2GJU became a silent key on March 9, 1999 at the age of 39. Geoff Bullock, KC2AMA volunteered to take his place. The vanity fee is going up from \$13 to \$14.20 for 10 years. Roy Edwards, AB2RE resigned as NNJ Section Manager and is being replaced by Jeff Friedman, K3JF. Russia is launching Sputnik 99 (to be known as RS-19) to commemorate 40 years since the original Sputnik.

TWENTY YEARS AGO

The-April 1994 was combined with March and summarized last month.

TWENTY- FIVE YEARS AGO

I have no Propagators in my file from April 1989 through August 1989. If anyone has any of these, I would appreciate obtaining a copy -- Ed.

THIRTY YEARS AGO

From the April 1984 Propagator: At the March meeting, Mike, W1OD gave an interesting talk about a DX-pedition to St. Paul Island off the coast of Nova Scotia. At ARRL, Mike is revising the Handbook. Harry Landau, W2IX (SK) described a super-gain velocity antenna for VHF/UHF. The compact dual-band antenna is easy to build and at 146 MHz has a gain of 53 dBD with a F/B ratio of 78 dB. On 445 MHz, it has a gain of 64 dBD and a F/B of 88 dB. Unfortunately, it is very directional so has to be aimed carefully. Note that this was the April issue of the Propagator.

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. 82.

March 25-April 1 – **W1AW/0 (Iowa) and W1AW/1 (Vermont)** from 8 pm Tuesday to 8 pm Tuesday.

April 1 – **Old Barney VE Session** at 6:30 pm in Manahawkin. Contact Urb Le Jeune, W1UL at 609-296-5856 or urb@w2dec.com

April 1 – **Old Barney ARC Meeting** at 7:30 pm in Manahawkin, NJ. See <http://www.obarc.org>

April 1-April 8 – **W1AW/3 (Pennsylvania) and W1AW/7 (Oregon)** from 8 pm Tuesday to 8 pm Tuesday.

April 1 and every following Tuesday – **GSARA Net** on 147.045 PL=67 at 8:30 pm.

April 1 and every following Tuesday – **QCWA News Net** on 147.045 PL=67 at 9:00 pm.

April 2 – **GSARA Meeting** at 7:30 pm at the Red Cross in Tinton Falls. Program features movie night.

April 3 - **W1AW Qualifying Run** at 9 am (10-35 wpm). See www.arrl.org/qualifying-run-schedule

April 3 - **HCARC meeting** at 7 pm at Holiday City South Clubhouse in Toms River.

April 6 and every Sunday – **InfoAge Marconi Hotel** open from 1 to 5 pm on Marconi Road in Wall.

April 7 – **144 MHz Spring Sprint**, all modes from 7 pm to 11 pm. See sites.google.com/site/springvhfupsprints

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

April 8-April 15 – **W1AW/4 (Virginia), W1AW/1 (Massachusetts) and W1AW/KP4 (Puerto Rico)** from 8 pm Tuesday to 8 pm Tuesday.

April 9 – **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 10 – **JSARS meeting** in Riverwood Park Rec. Building, Rt. 527 and Riverwood Drive at 7:30 pm.

April 12 – **OMARC Meeting** at 9:00 am at the Diana Site on Marconi Road in Wall. Guests welcome.

April 14 -. **Monmouth County RACES Net** meets on 147.045 +600, PL=67.0 at 7:30 pm.

April 15 – **222 MHz Spring Sprint**, all modes from 7 pm to 11 pm. See sites.google.com/site/springvhfupsprints

April 15-April 22 – **W1AW/5 (Mississippi) and W1AW/0 (North Dakota)** from 8 pm Tues. to 8 pm Tues.

April 16 – **GSARA Meeting** at 7:30 pm at the Red Cross in Tinton Falls. Regular business meeting.

April 17 – **W1AW Qualifying Run** at 4 pm (10-35 wpm). See <http://www.arrl.org/qualifying-run-schedule>

April 17 – **JSARS VE Test Session** at 7:00 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 19 – **VE Test Session** at 11 am at the Red Cross in Tinton Falls. Contact Rich Bilon, N3RB at 732-972-1397 or e-mail at n3rb@aol.com

April 20 – **ARRL Rookie Roundup**, Phone on all HF bands from 2 pm to 7:59 pm. See <http://www.arrl.org/contests>

April 21 - **Monmouth County ARES Net** meets on 147.045 +600, PL=67.0 at 7:30 pm

April 22-April 29 – **W1AW/2 (N. Jersey) and W1AW/1 (New Hampshire)** from 8 pm Tues. to 8 pm Tues.

April 23 – **432 MHz Spring Sprint**, all modes from 7 pm to 11 pm. See sites.google.com/site/springvhfupsprints

April 28 -. **Monmouth County RACES Net** meets on 147.045 +600, PL=67.0 at 7:30 pm.

April 28 – **DX Interest Group**, Check with Joe, W2KQ as to time and place. See page 2.

April 29-May 6 – **W1AW/1 (Connecticut) and W1AW/71 (Nevada)** from 8 pm Tuesday to 8 pm Tuesday.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 OBARC GSARA Net 8:30 QCWA News 9 PM	2 GSARA Mtg.	3 CW Qual. Run Hol. City Mtg.	4	5
6 InfoAge	7 144 MHz Sprint ARES/RACES 7:30	8 KE2V GSARA Net 8:30 QCWA News 9 PM	9 Hol. City VE	10 JSARS Mtg.	11	12 OMARC Mtg
13 InfoAge	14 W2AOJ RACES Net 7:30	15 222 MHz Sprint GSARA Net 8:30 QCWA News 9 PM	16 GSARA Mtg.	17 CW Qual. Run JSARS VE	18	19 GSARA VE 11am
20 Rookie Rndup InfoAge	21 W2SHS ARES/RACES 7:30	22 N2HGI GSARA Net 8:30 QCWA News 9 PM	23 KD2EPA 432 MHz Sprint	24	25 W2OD	26
27 CQ WPX SSB InfoAge	28 DX Mtg. RACES Net 7:30	29	30			



G.S.A.R.A.

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