

The Propagator

Garden State Amateur Radio Association

8 DONNER ST.
HOLMDEL, NJ 07733
EDITOR: BOB BUUS, W2OD
PUBLISHER AND DESIGN: CY STANWAY, K2CYS

July 2017



From the Editor

Bob Buus

June was a busy month for GSARA. First, we had the BitX40 build in Cy's - K2CYS - back yard on Sunday, June 4. The weather cooperated (it started raining just as the last

rigs were built and all were cleaning up) and all who participated had a good time. Now we just have to get those rigs on the air!

The next Sunday, June 11, we had our spring Hamfest organized by Rem, K2REM with participation by many GSARA members. We made a little profit and all had a good time.

Finally, on the last full weekend of June was our Field Day outing. As of this writing, Field Day has just been completed and we did very well on phone with 840 QSOs – much better than last year. CW didn't fare as well as past years with only 103 QSOs but our few crack CW operators only operated for an hour each. The good news is that many more GSARA members operated this Field Day and experienced the thrill of operating in such challenging conditions.

I had hoped to participate in Field Day this year but family obligations prevented it. I did volunteer to copy the CW Field Day Bulletin and almost failed at that. I turned on my

Continued on page 3

Next GSARA Meeting

The next GSARA meeting will be on Wednesday, July 5 at 7:30 PM at the Red Cross. The program will be presented by Blair, KD2EPA to test to see if we are collectively smarter than a 5th grader. Don't miss it! Light refreshments will be served and guests are welcome.

The second meeting in July will be held on Wednesday, July 19 at 7:30 PM at the Red Cross. This will be a regular business meeting. Refreshments will be served.

VE Test Session; July 22

The GSARA monthly test session will be held at the Red Cross on Saturday, July 22 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.

Our Own Blair Hearth, KD2EPA Receives International Astronomical League's Gold Certification - Congratulations!

Blair Hearth, KD2EPA, of Oceanport, New Jersey, has joined the select group of individuals who have received Gold certification in the Radio Astronomy Observation program of the International Astronomical League for making at least 10 galactic observations.



Hearth, who already had qualified for Silver certification, used the InfoAge Science History Museum's TLM-18 dish for a few of his observations, but most were accomplished by using Amateur Radio equipment to scan the void. A member of the Garden State Amateur Radio Association and the Society of Amateur Radio Astronomers, Hearth was the recipient of the ARRL Hudson Division Technical Achievement Award in 2015 for his work in radio astronomy and RFI. As Hearth explains on his QRZ.com profile:

"I use a low-frequency receiver to collect data that indicates sudden ionospheric disturbances. My venerable Kenwood R-600 receiver is dedicated to receiving Jovian radiation at 20.1 MHz.

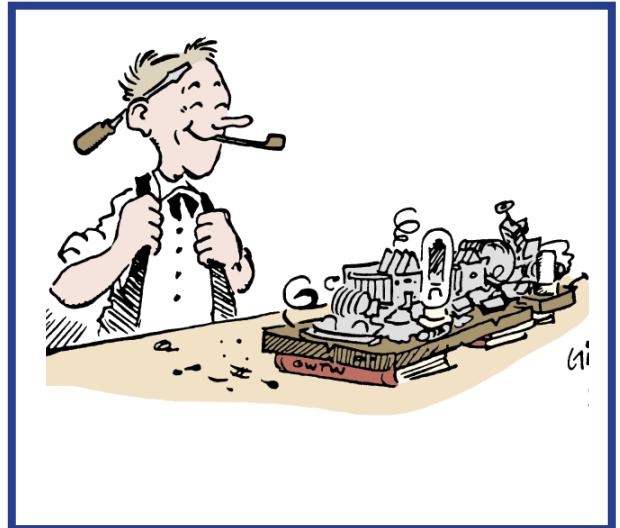
I also monitor and count meteors via radio reflection using a NooElec 2 dongle, SDR#, and HDRFFT software. I attempt observations of extra-solar radio objects in the 408 MHz 'band' using GNU Radio, an excellent LNA, and a DB8 bow-tie antenna."

Hearth said he uses the TLM-18 60-foot dish for research into "the velocity of the sun with respect to the Local Standard of Rest." He also will take part in data-gathering during the August solar eclipse. Hearth will deliver a presentation, "How to Use Ham Radio Gear to Do Radio Astronomy," at the International Astronomical League's 2018 international meeting. He enjoys QRP operating and has a WSPR beacon on 20 meters.



June 8 ARRL Letter

60 Seconds with the ARRL



A Perfect Day for a Radio Build



It was a beautiful day at the QTH of K2CYS as a group of GSARA members got together to socialize, eat and, most importantly, to build the BitX40 under the watchful eye of Bob, W2OD and Art N2AJO. Bob brought his homemade cabinets and all the fixings for a few extras to those that wanted it we began to build. When the day was over, all the radios were built and everyone got a lot of experience, had tons of food and fun (Roberto's flan was amazing) and the club had a great program bring people together in a shared hobby.

What's in the future? There are people who have some ideas and some of the ideas being rolled around are: a club operating picnic, a

SOTA activation in NJ, and a satellite workshop/picnic. Watch the Propagator and the website for details.

(Continued from page 1)

rig at 8 pm Friday night and tuned to the 80-meter frequency to hear W1AW calling up the Bulletin transmission. I noticed that the signal was very weak and I could hardly copy it. I thought of switching to 40 to see if that would be better but the Bulletin was starting and I didn't want to miss any of it so I just started copying as best I could. There were a few quick fades where I lost a letter or two but I basically got the message and filled in the missing letters. When I went to turn off the rig, I discovered that it was connected to the dummy load instead of an antenna! No wonder the signal was so weak. It doesn't say much for my station's grounding and shielding when I can copy W1AW on the dummy load!

Hearty Congratulations to Blair, KC2EPA for winning the Astronomy award (see article in this issue). Blair has also volunteered to present the July 5 program to test our knowledge of Geography. Surely, we are collectively smarter than a 5th grader, aren't we? I'm looking forward to finding out at the next meeting.

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

73 de Bob, w2od@arrl.net



SILENT KEYS

GSARA extends its deepest condolences to the families of these amateurs who have become silent keys:

TONY TARANTINO, KA2ZSI - SK



GSARA member Anthony (Tony) P. Tarantino, KA2ZSI of Neptune, died Tuesday, May 30, 2017 at his home. He was 80 years old.

Tony was very active with the GSARA Ham Radio Club (KA2ZSI), and the Neptune-Wall Elks. He was an avid photographer and a 300 bowler. Tony also served his country in the US Air Force.

His funeral Mass was on June 8 at the Church of St. Denis in Manasquan. Entombment followed at St. Catharine Mausoleum in Wall. In lieu of flowers, donations can be made to the American Diabetes Association.

DAVID NOYES, K2AZY - SK

David Martin Noyes, 81, of Tinton Falls, New Jersey, passed away on May 3, 2017. He was born in Mineola, NY and grew up in Great Neck, NY where his Father was a high school Biology Teacher and Principal. David obtained a Bachelor's Degree in Electrical Engineering from the University of Vermont and a Master's Degree in Science from Fairleigh Dickenson University.

David received an InfoAge Wall of Honor award in 2009 for "Exceptional contributions to the defense of the United States." (<http://infoage.org/david-noyes/>).

His hobbies were ham radio (K2AZY), wood carving and fishing, gardening, and telling bad puns. He loved teaching his children Morse code and codebreaking and making, and about the basics of science, especially electronics and biology.

JOE BAILIS, K2AJG - SK

Joseph A. Bailis, K2AJG from Holmdel passed away on June 12th surrounded by family and friends. He was 95 years old. Joseph was a World War II veteran, who served his country in the U.S. Army Air Corps.

Joe was a member of the Marconi Chapter 138 of the Quarter Century Wireless Association and participated in their meetings and weekly net/ In addition to amateur radio, Joe raised and raced homing pigeons up until the last years of his life.

In lieu of flowers, contributions to the Wounded Warrior Project can be made in remembrance of Joe through the following website – www.woundedwarriorproject.org, or by mail at The Wounded Warrior Project, P.O.Box 758517, Topeka, Kansas 66675-8517.

ELVIS HENDERSON, WA2IGT - SK

Elvis Ray Henderson, WA2IGT of Neptune passed away on Monday, June 12, 2017. He was 88. Elvis served in the Army Air Corp from 1946-1949. He was an Amateur Radio Operator WA2IGT (Costa Rica portable TI8).

MINUTES OF JUNE 7 MEETING

By Bob Buus, W2OD



President Howard Suffill, W2HTS called the meeting to order at 7:31 pm. There were 24 members and one guest present. The guest was Alfred Piombino, KB1MAM from Toms River. Alfred works for the Red Cross. After the pledge to the flag, all present introduced themselves.

Health and Welfare

Tony, KA2ZSI became a silent key on May 30 at the age of 80. He was a graduate of Manasquan High School and worked as a service representative at Suburban Business Machines in Union, NJ. He was active in the GSARA and the Neptune-Wall Elks. He was also an avid photographer and a 300 bowler. Tony served his country in the US Air Force. He was pre-deceased by his wife and is survived by two sisters and several nieces and nephews. Visitation was on Wednesday, June 7 with a funeral Mass on Thursday, June 8. Entombment was at St. Catharine Mausoleum in Wall. In lieu of flowers, donations can be made to the American Diabetes Association. A moment of silence was observed for Tony, KA2ZSI. May he rest in peace.

New Member

An application for membership with payment of \$17 was received from former member Paul Newland, AD7I from Middletown. Licensed since 1971, Paul holds an Extra class license and is a life member of the ARRL. He is a retired electrical engineer from Bell Labs and is interested in data communication. Other interest includes Photographing fashion shows in NYC.

A motion was made by Joe, KB2FSH and seconded by Art, W2NAZ to accept Paul as an active member of GSARA. The motion passed unanimously.

Old Business

Rem, K2REM reported that he is still waiting to hear from the Manasquan lighthouse regarding its use during Lighthouse Weekend in the fall.

BitX40 Build

Cy, K2CYS reported that the build of the BitX40 transceiver went very well at his house the previous Sunday. Seven builders showed up as well as Chris, W2NQB who took pictures (which will be posted on our web site) and John, KA2F who supported the builders. Most participants successfully completed the build and had their transceivers working by the end of the day. The food provided by Cy and his wife was terrific and all who participated enjoyed the day.

Field Day

Jim, K2EI reported that there are still a lot of CW slots open. If they don't fill soon, they will be opened for phone or digital modes as well. Jim distributed a page of tips for Field Day phone operation and recommended an article in QST by Bruce Draper regarding Sweepstakes operation.

Arek, K2KP pointed out that we need a better laptop for logging on Field day and recommended a moderate-priced unit. A motion was made by Jim, K2EI and seconded by Denis, K2NPT to authorize up to \$400 for Arek to purchase a new laptop for GSARA. The motion passed unanimously.

Hamfest

Rem, K2REM needs more volunteers to help out with the Hamfest coming up on Sunday, June 11. OMARC has the Hamfest signs and Matthew, N2UG will get them and consult with Jeff, N2LXM as to where to put them up.

John, KA2F will pick up the hard rolls from Grossman's Deli on Saturday.

Several members volunteered to arrive at 6 am Sunday to help out so we should be covered.

Close

The door prize of \$22 was won by Syd, KG2CM. There being no further business, a motion was made by Rem, K2REM to adjourn the meeting which was closed at 8:24 pm.

MINUTES OF JUNE 21 MEETING

By Bob Buus, W2OD, Secretary

President Howard Suffill, W2HTS was absent so the meeting was called to order at 7:36 pm at the Red Cross by Vice President Rem, K2REM. There were 16 members present. After the pledge to the flag, all present introduced themselves.

Treasurer's Report

Treasurer John King, KA2F gave his report for the past month. A motion was made by Ralph, KC2YNL and seconded by Chris, W2NQB to accept the report as read. The motion passed unanimously.

Secretary's Report

A motion was made by Joe, W2KQ and seconded by Alan, W2NIR to accept the Minutes as they will be published in the July Propagator. The motion passed unanimously.

Health and Welfare

Bob, W2OD reported the passing of fellow amateur Joe Bailis, K2AJG from Holmdel who died on June 12. Joe was 95 and had been active in the Marconi Chapter 138 of the QCWA. He was a World War II veteran

of the Army Air Corps and retired from Ft. Monmouth. Besides amateur radio, he raised and raced homing pigeons. Holmdel Funeral Home is in charge of the arrangements. A moment of silence was observed for Joe, K2AJG.

John, KA2F reported that Len, WA1PCY has improved to the extent that he can now go up and down stairs. He is expected to be back in circulation soon.

Field Day

Joe, W2KQ reported that there are still operating slots available so we will run only a single transmitter for Field Day. Although most of the open slots are for CW, they can be filled by anyone operating in whatever mode they prefer.

Jim, K2EI reported that we need more volunteers to help set up and take down. The needs are particularly acute on Saturday morning to set up tents and Sunday afternoon to take everything down. Some of the Saturday morning volunteers are planning on meeting at the Blue Swan Diner at 7 am for breakfast prior to going to the site at Ft. Monmouth.

Hamfest

Rem, K2REM gave his report on the Hamfest held on June 11. We lost a little on the food service but took in \$545 at the gate and sold \$400 worth of equipment at the Club table. The door prize of \$100 gift certificate at Cheap Ham was won by Gary, N2SCL. Our net profit was \$603.63. A motion was made by Joe, W2KQ and seconded by Art, W2NAZ to accept the report as presented.

New Business

Chris from the Red Cross requested that GSARA buy a Yaesu FTM-400 dual-band, 50 watt mobile transceiver to give us digital voice capability with Fusion. The Red Cross hopes to link all of their offices in the region on a digital network. This transceiver regularly costs \$650 but is on sale for \$499. A motion was made by Blair, KD2EPA and seconded by Joe, W2KQ to purchase this rig. The motion passed unanimously. Art, W2NAZ will be going to HRO in the next two weeks and agreed to purchase the radio for GSARA.

Since the first meeting in July is the day after the 4th of July Holiday, a motion was made by Joe, W2KQ and seconded by Alan, W2NIR to cancel the July 5 meeting. By a show of hands, the motion was not approved.

The family of Tony Tarantino, KA2ZSI-SK requested that in lieu of flowers, a donation be made to the American Diabetes Association. A motion was made by John, KA2F and seconded by Blair, KD2EPA to donate \$100 in Tony's memory to the ADA. The motion passed unanimously.

Query and Announcement

John, KA2F is planning on putting a 6-meter beam on his roof just under his tri-band beam. The 6-meter beam will be only about 4 feet below the tri-band beam. Should he orient the 6-meter beam at right angles to the tri-bander to minimize coupling between the two beam antennas? The members said to align both beams in the same direction. The interaction of the booms with the driven elements would be greater if the active elements of one antenna are parallel to the boom of the other antenna.

The family of silent key Tony, KA2ZSI donated all of Tony's amateur equipment to GSARA. Joe took an

inventory of the equipment and brought it to the Red Cross. Arek, K2KP went over the list of equipment and recommended we keep some of it and sell the rest.

The program for the July 5 meeting will be presented by Blair, KD2EPA with a series of geography questions from a 5th grade geography book. Are we smarter than a 5th grader?

Close

The door prize of \$16 was won by Syd, KG2CM. A second drawing among the workers at the Hamfest for an ARRL \$50 gift certificate was won by Bob, W2OD. There being no further business, a motion was made by Joe, W2KQ and seconded by Chris, W2NQB to close the meeting. The meeting was adjourned at 8:44 pm.

GSARA FIELD DAY in 21st CENTURY

By John King, KA2F

This Field Day information (see chart) comes from ARRL QST results and from the official record of GSARA, the Propagator with articles written by Bob, W2OD and generously shared.

In 16 years of Field Day activity, there were an average of 937 QSOs per year, with an average of 39 QSOs/hr., on an average of 2 transmitters, by an average of 19 participants (not all of whom were operators/loggers)

Several uncontrollable factors affect the success of Field Day, such as rain, electrical storms, and band conditions; however, the most difficult to manage is the number of members who volunteer to participate and most important is the number of members who actually operate during the event.

Membership participation is the one factor which the club should have control over; however, year after year FD reports lament the low and sometimes pathetically low number of actual radio operators, whether Phone or CW.

In 2001 GSARA had the greatest number of participants, 41 members; 2007 was the worst with only 12 participants, of whom 9 were members and in 2006 only 10% of members took part, with 14.



Various reasons have been suggested for poor participation without effecting any change the following year, even after some "training" sessions and one or two special events to ease operator anxieties and increase operator participation.

Training in "contest-style" HF operating must not wait until Field Day is almost upon the club. Rather, it should begin a couple of months later and continue on a regular basis throughout the year until the next Field Day. It should be made clear that such training is for all members, experienced old-timers included and not just for new licensees and infrequent HF operators. The old-timers might set a good example and become "Elmers," (a term not frequently heard these days) to new comers. Training should cover CW, SSB and Digital modes, and use of Logging programs using CW and Voice memories.

Operating events to consider are August RTTY Rookie Roundup; September NJ QSO Party CW and Phone; November Sweepstakes CW and Phone; December CW Rookie Roundup; February School Club Roundup Phone; March International DX Phone; April Rookie Roundup Phone.

Many hams derive great personal satisfaction

from achieving WAS or DXCC in one or more modes, meeting personal Field Day QSO goals, and building sophisticated QRP gear. Even greater satisfaction can come from sharing these activities with other hams and helping them to feel the same good feelings.

The club's "Build Your Own 40m Xcvr" activity, supported by Art N2AJO, Cy K2CYS, and Bob W2OD, might serve as an example of what, in a similar way, could be done for HF Operating, in a member's back yard, in a park, or at the W2GSA station.

GSARA Field Day Summary 2016-2001

YEAR Call Sign	LOCATION Operation Info	CATEGORY	QSOs	HAMS	SCORE	PLACEMENT IN CATEGORY
2016 W2GSA	Red Cross Tent & Inside	3F	847	26	3,982	7 th of 55
2015 W2GSA	Red Cross Tent & Inside	4F	1,289	30	5,650	4 th of 25
2014 W2GSA	Red Cross inside	3F	1,530	34	5,964	5 th of 45
2013 W2GSA	Red Cross inside	2F	744	22	3,100	9 th of 72
2012 W2GSA	Red Cross inside	2F	1,360	21	3,011	11 th of 65
2011 W2GSA	Red Cross inside Double End-Fed Zepp	2F	476	17	1,918	23 rd of 74
2010 W2GSA	Ft. Monmouth Inside MARS building 80/160 dipole at 35' 40 meter Vertical Tri-band Beam on bucket, NVIS inverted V	1A	630	18	3,008	30 th of 166
2009 K2USA	Dean Ball Field Ft. Monmouth 1,000' loop at 60+ feet	1A	664	20	3,070	28 TH of 173
2008 K2USA	Dean Field Ft. Monmouth 1,000' loop at 60+ feet	1A	653	22	2,686	30 th of 166
2007 K2USA	Dean Field Ft. Monmouth 1,000' loop at 60+ feet	1A	1,025	12	3,380	22 nd of 191
2006 K2USA	Dean Field Ft. Monmouth 1,000' loop at 60+ feet	1A	774	14	2,782	24 th of 177
2005 K2USA	Inside MARS station Ft. Monmouth MARS Amateur Radio Assoc.	1F	305	17	1,466	7 th of 35
2005 W2GSA	QRP Ft. Monmouth Football Stadium	1A Battery	228	17	2,680	9 th of 19
2004 W2GSA	Inside MARS station Ft. Monmouth	2F	581	22	1,648	25 th of 56
2003 W2GSA	Tatum Park, Middletown	3A	1,107	27	4,696	43 rd /
2002 W2GSA	Tatum Park, Middletown	3A	910	17	3,708	88 th of 333
2001 W2GSA	Tatum Park, Middletown	3A	1,867	41	5,948	61 st of 360

NEW GSARA MEMBER

Please welcome the following member to GSARA:

Paul Newland, AD7I from Middletown holds an Extra Class license and has been licensed since 1971. He is a retired electrical engineer. Paul did a lot of early work with HF digital modes and is returning to that type of activity again. He is a life member of ARRL. Other interests include photographing fashion shows in New York City. Please add to your Roster:

Paul Newland, AD7I
35 Barrister Lane
Middletown, NJ 07748
732-309-7807

ad7i@ad7i.net

Welcome to GSARA, Paul!

K2CYS WANTS TO HEAR FROM YOU

Cy, K2CYS is continually updating the club website at gsara.club. He wants YOUR projects to show (and show off) to everyone who comes to the site. What are you working on? What great ham radio story can you tell? Send him your text and maybe a picture or two for uploading the website.

Also, send him a picture of you in your shack (and show it off a bit). You may choose to be in the picture, if you wish, but it is not necessary.

We are also collecting pictures of each member of GSARA so we will recognize and know what the other person we talk to on the radio looks like. Send your .jpg to Cy, as well.

Send everything to **k2cys@arrl.net**

Ham Radio Aviator Set to Depart on Round-the-World Flight



Brian Lloyd, WB6RQN, took off from Miami, Florida, on June 1 on a solo, round-the-world flight to commemorate Amelia Earhart's attempt to circumnavigate the globe 80 years ago. Lloyd will be on the air from Spirit, his single-engine Mooney 231 aircraft, during the course of his journey, expected to take 2 months. He will follow Earhart's historic route to fly around the globe at the equator, starting in Miami, skirting the Caribbean islands, then passing along the coast of South America before heading across the Atlantic.

"I am driven by the spirit of historic flights," Lloyd said before leaving his Texas airstrip for Miami. "It is important to remember the aviation pioneers like Amelia Earhart and their contributions to aviation. Their bold actions made today's air travel possible for all of us."

Lloyd will be on the air using HF SSB on or about 14,210.0 kHz, 14,346.0 kHz, 18,117.5 kHz, or 7,130.0 kHz. On board, he has a Mobat Micom-3 transceiver, which puts out about 125 W. His antenna is under the fuselage. He also will utilize ALE (automatic link establishment) on the Amateur Radio HFLINK frequencies.



By Bob Buus, W2OD

James Clerk Maxwell was born on June 13, 1831 in Edinburgh, Scotland to wealthy parents who married late. His mother was nearly 40 and had born a daughter earlier who died in infancy. James Clerk was an inquisitive child and always asking “what’s the go o’ that?” His mother, Frances, took responsibility for his early education. By age 8 he could recite Milton and knew most of the Bible.

His mother developed abdominal cancer at age 48 and died from it in December, 1839 while James was only 8. To continue his education, his father sent James off to Edinburgh Academy where he did not fit in. He soon earned the nickname “Daftie” and put up with considerable teasing but didn’t seem to mind it.

By age 13, James had won the school’s mathematics medal and first prize for English and poetry. By age 14, he wrote his first scientific paper on “Oval Curves” which was presented to the Royal Society of Edinburgh by an Edinburgh University Professor because Maxwell was thought to be too young to present a paper.

By age 16, Maxwell started attending classes at the University of Edinburgh. At age 18, he had two papers published in the Transactions of the Royal Society of Edinburgh. He was still considered too young to present the papers himself so they were delivered by his tutor instead.

In 1850, he moved to Cambridge, England. Maxwell graduated from Trinity College at Cambridge in 1854 with a degree in mathematics. In 1856, he accepted the Chair of Natural Philosophy at Marischal College in Aberdeen. At only 25, he was at least 15 years younger than the other professors. In 1859, he won the Adams Prize for correctly deducing the composition of Saturn’s rings. His prediction was confirmed by the Voyager flybys in the 1980s. In 1860, Maxwell was granted the Chair of Natural Philosophy at King’s College in London. It was there that he did his most important work.

Maxwell worked with light and color and made the first color photograph. He attended lectures at the Royal Institution where he met Michael Faraday for whom he had a lot of respect. He confirmed Faraday’s observation of the rotation of polarized light in a magnetic field and studied both electric and magnetic fields. He realized that light was a form of electromagnetic radiation and in 1864 published his famous equations relating the electric and magnetic fields in electromagnetic waves. These equations resulted in a radical change in our understanding of physics not seen since Isaac Newton.

In 1871, Maxwell became the first Cavendish Professor of Physics at Cambridge and developed the Cavendish Laboratory. He edited and reviewed all of Henry Cavendish’s papers and found that Cavendish had discovered

Ohm's law long before Ohm did.

Maxwell died in Cambridge in 1879 of abdominal cancer (the same as his mother) at the age of 48 (the same age his mother died). He is known in Physics as "the man who changed everything".

So now you know.

ARE YOU SMARTER 5TH THAN A 5 GRADER

Program By Blair Hearth, KD2EPA - July 5 Meeting

Hams get to know a lot about the world, especially things like names of countries and their locations. I've put together a fun version of the game show with 20 questions that a room-full of hams (and a bright 5th grader who has studied his or her Geography book) should be able to answer. But, can 15 or 20 of us do as well as a typical 5th grader? Come and see. We particularly need our DXers to come to this meeting!



Canada C3 Sesquicentennial Voyage May be Tracked via WSPR Beacon

An Amateur Radio WSPR (Weak Signal Propagation Reporter) beacon has been installed and activated onboard the Canada C3 vessel. The ship departed Toronto, Ontario, on June 1 on a 150-day expedition to Victoria, British Columbia, via the Northwest Passage as part of the Canadian Sesquicentennial celebration. Sponsors are calling it an "epic journey to celebrate Canada and connect Canadians." According to Radio Amateurs of Canada (RAC), Canada C3 organizers permitted a group of enthusiasts under the leadership of Barrie Cramp-ton, VE3BSB, to install the WSPR beacon on the C3 vessel.

The Canada C3 departed Toronto on June 1. It's trackable via the WSPR network.

"This provides a unique opportunity to track the vessel on its 150-day sailing voyage around the Canadian coast -- the longest coastline in the world," an RAC bulletin said. The WSPR beacon identifies as CG3EXP (this page also includes WSPR Amateur Radio frequencies). A live tracking link, generated by QRP Labs, the supplier of the tracking hardware, has been activated, hosted by Jeff Milne, VE3EFF. It generates a series of dots -- one for each Maidenhead grid square the vessel traverses.

Stopping at a different location every day, Canada C3 will visit 50 coastal communities, 36 indigenous com-

Scenes from Field Day

munities, 13 national parks, and 20 migratory bird sanctuaries. The WSPR project is part of the science experiments and research to be carried out during the voyage.

"Many of the locations to be visited by Canada C3 lie in areas where radio communication is difficult," RAC said.

Visit the RAC website for additional information.



Hamvention Reports Second-Largest Attendance Ever for 2017 Show

The tally is in, and Hamvention 2017, at its new venue in Xenia, Ohio, attracted 29,296 attendees, official spokesperson Mike Kalter, W8C1, told ARRL. That is the second-largest attendance in the history of the event. Hamvention attendance peaked in 1993 at 33,669, before the 1996 change in date from April to May, when the show was still being held at Hara Arena. Attendance in 2016 for the show's final year at Hara was 25,364. Hamvention relocated to the Greene County Fairgrounds and Expo Center this year, after Hara Arena closed last summer. Hamvention General Chair Ron Cramer, KD8ENJ, called 2017 "a most successful year."

"We knew this would be a big year, but this was even beyond our expectations," Cramer said. "The challenge was great to reinvent Hamvention at a new venue in a very short time period. From all the e-mails, letters, and calls I have received over the last few weeks, we have accomplished it successfully." Cramer expressed appreciation for all constructive criticisms and said each idea is being evaluated.

Held May 19-21, Hamvention 2017 has received largely positive reviews, despite traffic problems



on opening day and heavy rain during the weekend.

"We all recognize the traffic, rain, mud, and parking issues, but part of those issues were corrected even before show weekend was over,"

Cramer said. "Other issues are being worked on already for next year's show."

He and Kalter said the Hamvention Committee has joined Greene County, municipal officials, and the Greene County Fairgrounds and Expo Center Advisory Board in addressing improvements for 2018. Kalter and Cramer also thanked the 657 volunteers who put in long hours to make Hamvention 2017 a reality. The Dayton Amateur Radio Association (DARA) sponsors Hamvention.

"We can't control the rain, but we promise there will not be some of the other issues next year," Cramer said. "There may even be some new surprises in store," he added, pointing out that Hamvention has 3 more months to plan for the 2018 event than it did for this year's.

From ARRL Letter June 22

GSARA NET

GSARA members meet on the Asbury Park repeater every Tuesday at 8:30 pm. In the 4 sessions in June we had 37 check-ins for an average of 9.25 per session. The following 17 members checked into this net (number of check-ins in parenthesis):

N2HGI (4), W2OD (4), W2LAF (3), W2MJP (3), K2NPT (3), KC2YNL (3), N2AJO (2), N2BMK (2), K2CYS (2), AD7I (2), N2JNG (2), W2NAZ (2), KA2F (1), K2KDC (1), AC2MB (1), WB2RPW (1) and W2ZIM (1).

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

ARES/RACES NET CHANGES

The ARES/RACES net which used to meet on the W2GSA repeater every Monday at 7:30 pm is now meeting on the first and third Mondays of each month at 8 pm. All are welcome to check in.

OUR GSARA HISTORY

FIVE YEARS AGO

From the July 2012 Propagator: GSARA made 2 ½ times as many Field Day contacts as last year but by running high power, our power multiplier of 2 was lost. The first Wednesday in July was the July 4th holiday so the meeting was cancelled.

TEN YEARS AGO

From the July 2007 Propagator: Chief Engineer Jeff, N2LXM reported a very successful Field Day at the Fort Monmouth baseball field using the loop antenna provided by Jim, K2EI. We made 1024 contacts. Several pictures of Field Day were published. Bob, W2OD converted from dial-up internet to FIOS and the speed is amazing. Harold, WB2CJE-SK and Laura, N2HGI celebrated their 59th wedding anniversary.

FIFTEEN YEARS AGO

From the July 2002 Propagator: Past Treasurer Clarence Kastner, KA2OZA became a silent key. Steve Hajducek, N2CKH spoke at the June meeting about IRLP. Field Day participation at Tatum Park was not very good so we had trouble keeping 3 stations on the air. President Bush sent greetings to all Radio Amateurs for Amateur Radio Week and Field Day.

TWENTY YEARS AGO

From the July 1997 Propagator: Phil Petersen, W2DME-SK was made a Fellow of the Radio Club of America. Earl Korf, K2IC-SK received the Marconi Gold Medal from the Veteran Wireless Operators Association. Don Pingitore, KC2BTF (now KG2NV) joined GSARA. The June Program had Keith Sproul, WU2Z discuss APRS. Joe, W2KQ sent a packet message to the Russian Space Station R0MIR and received a reply. The Big Brothers Bike-a-thon at Brookdale College had communications support provided by 18 GSARA members.

TWENTY-FIVE YEARS AGO

From the July 1992 Propagator: Jerry Sevick, W2FMI-SK gave a talk at the June meeting about baluns. Dave Kelly, WA2B became a silent key. Bob Girling, KB2ERX-SK is in a Philadelphia hospital awaiting a heart transplant. Al Allen, K2LG-SK is undergoing radiation therapy on his throat cancer. Kevin McCall, KB2OXR just received his license. Jeff Harshman, N2LXM joined GSARA.

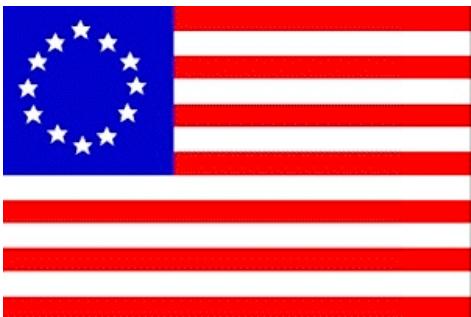
THIRTY YEARS AGO

From the July 1987 Propagator: Net control of the 10-meter W2GSA net has been taken over by Joe Cotignola, KB2AYK. Harry, KN2B was net control for about 7 years. A study guide for amateur radio exams is available on the Commodore 64 computer. Cost is \$12.95 for Technician or General and \$14.95 for Advanced or Extra. Menu options allow you to take a typical FCC exam or practice Morse code. A print-out at the end of each sample test tells you how you did.

THIRTY-FIVE YEARS AGO

The program for the July 7, 1982 meeting featured Jeff Azoy, W2XZ-SK discussing the early spark days and his listening to the Carpathia when the Titanic sank. New members to GSARA included Pat Moran, W2EM-SK; Dan

13 Colonies Special Event Returns July 1-7



The ninth annual "13 Colonies Special Event" will take place July 1-7, with activity starting at 1300 UTC on July 1 and continuing until 0400 on July 7 (the evening of July 6 in US time zones). Participating stations try to contact all 13 Colony Stations plus two Bonus Stations -- a clean sweep, a la ARRL November Sweepstakes. Stations in each of the original 13 colonies will be on the air using 1 X 1 special event call signs. The bonus stations will be WM3PEN in Philadelphia and GB13COL in Durham, England. Call signs and their respective states are K2A, New York; K2B, Virginia; K2C, Rhode Island; K2D, Connecticut; K2E, Delaware; K2F, Maryland; K2G, Georgia; K2H, Massachusetts; K2I, New Jersey; K2J, North Carolina; K2K, New Hampshire; K2L, South Carolina, and K2M, Pennsylvania. **Additional information** is on the 13 Colonies website.

From ARRL Newsletter: June 22

GSARA Officers

President W2HTS, Howard Suffill 732-460-1885 w2hts@arrl.net

Vice Pres. K2REM, Rem Hunnewell 732-889-6692 rh@thetraindoctor.com

Secretary W2OD, Bob Buus 732-946-8615 w2od@arrl.net

Treasurer KA2F, John King 732-542-1822 ka2fwb2hdj@gmail.com

Engineer K2KP, Arek Tarniowy 201-370-2537 tarniowy@yahoo.com

* * *

Webmaster K2CYS, Cy Stanway 732-768-7773 k2cys@arrl.net

Radio Room Phone, 732-493-9100, X1252

Trustees

W2KQ Joe Dreifuss 732-493-4236 jdreifuss@optimum.net

W2OD Bob Buus, 732-946-8615 w2od@arrl.net

W2HAM Lou Russo, 732-842-6431 russo62@verizon.net

* * *

Propagator Editor: Bob Buus w2od@aol.com

Publisher: Cy Stanway k2cys@arrl.net

gsara.club

w2gsa.org



NOTES ON CALENDAR (see next page)

Large Call letters denote birthdays e.g. **W2FLK** July 1. All times are EDST. Contests are listed in the July QST, p. 82.

June 30-July1 – **Canada Day Contest**, CW and Phone from 8 pm Friday to 7:59 pm Saturday. See <http://wp.rac.ca/canada-day-contest-rules>

July 3 - **Monmouth County ARES/RACES Net** meets on 147.045 +600, PL=67.0 at 8:00 pm

July 4 – **Independence Day Holiday**, all Tuesday events cancelled.

July 4 – **Old Barney ARC Meeting** at 7:30 pm in Manahawkin, NJ. See <http://www.obarc.org>

July 5 – **GSARA Program Meeting** at 7:30 pm at the Red Cross. The program by Blair, KD2EPA will test to see if we are smarter than a 5th grader. Refreshments will be served.

July 5 - **W1AW Qualifying Run** at 10 pm (40-10 wpm). See July 2017 QST page 99 and www.arrl.org/qualifying-run-schedule

July 6 - **HCARC Meeting** 7 pm at Holiday City South Clubhouse in Toms River.

July 7 and every Friday – **Lunch at the Blue Swan Diner** in Ocean at noon. Table at back left.

July 8 – **OMARC Meeting** at 9:00 am at the Firehouse on 600 Sixth Ave. in Spring Lake Heights. Guests are always welcome.

July 8-9 – **IARU HF World Championship**, CW and phone from 8 am Saturday to 8 am Sunday. See <http://www.arrl.org/iaru-hf-championship>

July 11 and every following Tuesday – **GSARA Net** on 147.045 PL=67 at 8:30 pm.

July 11 and every following Tuesday – **QCWA News Net** on 147.045 PL=67 at 9:00 pm.

July 12– **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

July 13 – **JSARS meeting** in Riverwood Park Rec. Building, Rt. 527 and Riverwood Drive at 7:30 pm.

July 15-16 – **North American QSO Party, RTTY** from 2 pm Saturday to 1:59 am Sunday. See <http://www.ncjweb.com>

July 15-16 – **CQ Worldwide VHF Contest**, all modes on 6 and 2 meters. See <http://www.cqww-vhf.com>

July 17 - **Monmouth County ARES/RACES Net** meets on 147.045 +600, PL=67.0 at 8:00 pm

July 19 – **GSARA Meeting** at 7:30 pm at the Red Cross in Tinton Falls. Regular business meeting.

July 20 – **JSARS VE Test Session** at 7:00 pm Riverview Park Recreation Bldg., Rt. 527 and Riverwood Drive in Toms River. Contact Ed Genoino, WA2NDA at 609-971-2792 or wa2nda@comcast.net.

July 21 – **W1AW Qualifying Run** at 7 pm (40-10 wpm). See July 2017 QST page 99 and <http://www.arrl.org/qualifying-run-schedule>

July 22 – **GSARA VE Test Session** at 11 am at the Red Cross in Tinton Falls. See page 1.

JULY 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 Canada Day  W2FLK Canada Day
2	3 ARES/RACES 7:30	4 Holiday	5 GSARA Mtg CW Qual. Run	6 HCARC Mtg	7 Blue Swan lunch	8 OMARC Mtg K2QXW IARU Champ.
9 IARU Champ.	10	11 GSARA Net 8:30 QCWA News 9 PM	12 Hol. City VE	13 JSARS Mtg	14 KD2MTK Blue Swan lunch	15 NA QSO RTTY CQ WW VHF
16 NA QSO RTTY CQ WW VHF	17 ARES/RACES 7:30	18 GSARA Net 8:30 QCWA News 9 PM	19 K2KP GSARA Mtg	20 JSARS VE.	21 Blue Swan lunch CW Qual. Run	22 GSARA VE
23	24	25 GSARA Net 8:30 QCWA News 9 PM	26 AC2MV	27 KB2FSH	28 Blue Swan lunch	29
30	31



G.S.A.R.A.
8 DONNER STREET
HOLMDEL, NJ 07733

First Class