SARA NEWS

SCHENECTADY AMATEUR RADIO ASSOCIATION, INC.

"SERVICE THROUGH AMATEUR RADIO"

FOUNDED 1930 K2AE REPEATERS

http://www.k2ae.org/ ©2011-2012 SARA saranews@k2ae.org March, 2012

General Meeting, March 5th, 2012 at 7 PM, Niskayuna High School Little Theatre

Titanic's tragic 100th anniversary

with Phil Barker

This year marks the 100'th anniversary of the sinking of the Titanic on the night of April 14, 1912. Radio was a part in the rescue effort, and lessons learned led to requirements for radio monitoring to ensure nearby ships would receive distress calls in a timely manner. The March meeting topic will be the sinking of the Titanic and radio on the ship by Phil Barker.

Phil is a former SARA member. He gave a talk to the club on solar power at the November 2009 meeting. While professionally Phil works in the area of solar power, he has long had an interest in the Titanic and done considerable study on the ship itself and events leading to its demise.

The SARA meeting will be held Monday, March 5th, 2012 at 7 PM in the Little Theatre of the Niskayuna High School on Balltown Road. Attendees should enter the school through the cafeteria entrance located on the side of the school, adjacent to the Nott Street Extension school parking lot.

Phil Bradway, KB2HQ, SK

Philip Bradway, 75, of Niskayuna, passed away February 25, 2012, at his home.

He was born in Jamaica, New York on March 27, 1936. He was the son of Clinton Philip and Ina Adele (Schellinger) Bradway. He grew up in Floral Park and spent summers with his grandmother Schellinger, in East Marion, Long Island, New York.

A 1954 graduate of Sewanhaka High School in Floral Park, he later attended the State University of New York, Agricultural and Technical College at Farmingdale, NY, major-

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SARA NEWS

Board Meeting

SARA Board Meeting, February 8th 2012

Attendees:
President, Hal Post, AK2E
Vice President James Stewart, K2PK
Secretary, Dan Fiorillo, KC2MER
Board - Craig Wood, W2XAD,
Ken Day, K2DAY
Called to order at 7:05 PM by President Post

Secretary's Report: given by Dan Fiorillo accepted as published
Treasurer's Report: No Report
Repeater: Occasional Interference was reported on repeaters located around our transmitter site, may be caused by current propagation changes.
Programs: Vice Pres. Jim Stewart continues to arrange and schedule program presenters for the coming months. The March meeting speaker will be Phil Barker discussing the 100 year anniversary of the Titanic sinking and the radio system that were used onboard the ship.
Old Business: Old Generator Disposition, waiting to remove the generator from the trailer frame, so it can be sold as scrap metal.
Field Day Location: No new information from the Niskayuna Sports Committee on the use of the Soccer Field located near the Craig School off of Balltown Road.
Election Committee: The Election Committee is looking for volunteers who may be interested in becoming a club Officers or Board Member
Broughton Award: Secretary Dan Fiorillo will head up the Broughton Award Committee.

Please keep the club proactive by volunteering your time as an Office or Board Member and providing nominations for the Broughton Award.

Training: Craig Wood is looking into the methods of conducting the training over the repeater system.

Meeting was adjourned at 8:05PM
Submitted by Secretary Dan Fiorillo, KC2MER

Board meetings are open to any SARA member. Board meetings are held the 2nd Wed. of each month at LT's.

QSY Society Special Event

The QSY Society Amateur Radio Club will be hosting a Special Event at the Samuel F. B. Morse Estate (Locust Grove) in Poughkeepsie, NY on Saturday April 14th from 8:30 am to 1:30 pm EST. This Special Event is a celebration of the invention of Morse Code by Samuel Morse around 1832.

Radio Amateurs who have a confirmed CW contact with the QSY Society's Special Event Station K2QS in Poughkeepsie, NY on the frequencies 7.034 and 14.034 MHz will be able to obtain a Certificate and QSL Card to commemorate the occasion. These can be obtained by contacting David Ruth at 48 Hoof Print Road, Millbrook, NY 12545.

Radio equipment and antennas will be set up starting at 7:30 am and club members will begin making contacts using Morse Code at 8:30 am.

All Amateur Radio Operators who can send and receive CW are invited to help celebrate Samuel Morse's invention of Morse Code. Both slow and fast operators are welcome. Give it try. Additional information can be obtained at the QSY Society web site www.qsysociety.org and by contacting Scott Dunlavey N2NTV the event manager at sdunlacey@optimum.net.

Thank you and 73,
Henry Ritz KB2VJP
QSY Society PIO

SARA NEWS

Saratoga Swapfest!

Swapfest, Saturday, March 10, 2012. Great time to pick up or get rid of your treasures. Hope to see you all there !! 8AM to Noon http://www.k2dll.org

Volunteer Examiner Session

SARA conducts VE sessions at 6:00 PM on regular meeting nights, the first non-holiday Monday of each month except July, August, and December. Those interested in taking an exam are encouraged to contact Bill Michler, KG2AC, a few days prior so he can arrange for sufficient VEs to be present. You can find Bill's contact information on the last page. Non-members who successfully complete the exam will be given SARA membership for the physical year (July – June) Contact Bill at kg2ac@juno.com or 982-0144.

DXCC News Release February 23, 2012

According to the Finnish Ministry of Transportation and Communication, the Saimaa Canal Treaty between Finland and Russia has been finalized by relevant Finnish and Russian authorities through ratification.

The Treaty has entered into effect with a date of February 17, 2012.

Malyj Vysotskij Island (MVI), R1M, is no longer included in the Treaty. Thus, MVI will be deleted from the DXCC list as of February 17, 2012, and added to the Deleted Entities List.

Administratively at HQ, we will not make the necessary changes to the DXCC system until after the final data processing for 2011 is complete -- this includes the tables shown in Logbook of The World. (The 2011 DXCC Annual and Honor Roll listings will contain MV Island as it stood in 2011, a current entity). This change will affect the Honor Roll numbers as follows:

#1 Honor roll will drop to 340 (down from 341) The entry level Honor Roll number will drop to 331 (down from 332)

DXCC members will see their current entity totals drop by one on their Mixed awards, and on the bands and modes where MVI credit is given. They will also see their DXCC Challenge totals drop commensurately.

73 es DX!
Bill Moore NC1L Awards Branch Manager ARRL

Notable Dates in February:

Heinrich Rudolf Hertz (22 February 1857 – 1 January 1894) was a German physicist who clarified and expanded the electromagnetic theory of light that had been put forth by James Clerk Maxwell. He was the first to conclusively prove[1] the existence of electromagnetic waves by engineering instruments to transmit and receive radio pulses using experimental procedures that ruled out all other known wireless phenomena. The scientific unit of frequency — cycles per second — was named the "hertz" in his honor.

He died of Wegener's granulomatosis at the age of 36 in Bonn, Germany in 1894.

W2RCR, ex N2LMA, SK

The Board and membership of the Schenectady Amateur Radio Association acknowledges the passing of W2RCR Bob Rivenburgh SK {ex N2LMA} on Feb 9 2012 Ballston Spa NY, Our deepest sympathies go to Bob's family.

SARA NEWS

WORKING THE GRAY LINE

Paul Harden, NA5N

For those of you new to a solar cycle, an interesting form of working DX is called "working gray line." This simply means working 15m or 10m during twilight hours.

Here's what happens:

During the day, solar radiation collides with the molecules in our ionosphere, ripping off electrons. These electrons are called "free electrons" because they are not attached to an atom or molecule. All of these free electrons cause the density of the ionosphere to increase. The more dense the ionosphere, the higher the frequency that is reflected back to earth. Our electron density is what determines the maximum usable frequency (MUF), and the action of solar radiation separating electrons from the molecules is called ionization.

During the day, solar radiation causes ionization to stratify, that is, to form distinct layers. The layer closest to the earth is called the D-Layer. It does not reflect signals generally, but does absorb some of the energy, and hence the D-Layer is often called the "absorption layer." Higher up in our ionosphere, we find the E- and F-Layers. These layers do reflect the signals back to earth if they are below the MUF, and is exactly what causes "skip propagation." So during the day, the sun is ionizing the D, E and F layers (there are actually two F layers, called F1 and F2). Your 10m signal must travel through the D-Layer, getting attenuated, then bounces back from the E or F layer to some exotic DX spot, passing through the D-Layer for more absorption again. But since solar radiation has to travel the farthest to get the D-Layer, absorption is usually fairly minimal. So far, during the middle of the day, we have moderate absorption, and good skip propagation.

AT SUNDOWN ... solar radiation no longer strikes our ionosphere right above our heads, and ionization stops. This means there is no solar radiation to form free electrons. In fact, without this solar radiation, these free electrons tend to get attracted back to recombine with their host molecules. This is called "recombination" (gee, how original!). Recombination, when it starts to get dark, causes the electron density to go down, forcing the MUF to go down as well, which is why by total darkness, 10m (and a bit later 15m) are completely dead. The MUF is far below 28 MHz.

The D-Layer is the first layer where ionization stops, since the sunlight no longer reaches near the surface of the earth, but is still illuminating (and ionizing) the ionosphere far above our heads. (For the same reason, we can see satellites pass overhead in the early evening ... it's dark on the ground, but the satellites are still being illuminated.) As the D-Layer goes into recombination, the electron density goes down, and the absorption does down. This is why signals appear stronger at night, because there is less absorption by the D-Layer at night.

BUT DURING TWILIGHT ... OR IN THE "GRAY LINE" ... the D-Layer suddenly causes little absorption to signals passing through it, while the E and F layers are still being ionized by sunlight. This makes for about 45-60 minutes of interesting operating, especially for QRPers (low power operators). There is almost no signal attenuation, but the MUF is still very high, so long-distance skip is still possible. However, when the sun quits illuminating the E and F layers, the MUF can drop dramatically ... sometimes with only a few minutes of warning, sometimes between heartbeats. So when you establish a contact, get the QSL info fast!

One other advantage of gray-line DX is that your signals tend to reflect off the edge of the ionized portion of the upper layers. This means propagation will often be in a southerly direction, bouncing along the shadow, or terminator, between sunlight and darkness. This is good for working into South America and the South Pacific. Your signals can also bounce northward along the terminator, bending around the pole, and down the morning terminator across eastern Europe, the Middle East, and into Africa (depending on the time of year). So gray-line DX also affords an opportunity to work portions of the world not usually accessible during the day, where propagation tends to be more east-west circuits.

The same principles apply at sunrise. The upper ionosphere begins to become ionized, while the D-Layer is still

dark and offers low absorption, although, the MUF in the morning generally does not support propagation on 10m, so most people enjoy gray-line work on 20m or 15m (if open). Morning gray line can even be eventful on 80m and 40m, due to the low absorption before the sun starts heating the D-Layer.
And remember, 10m and 15m (and often down to 30m) are not generally bothered by a geomagnetic storm. So even during major geomagnetic storms, the higher bands may be open and fairly quiet. And even if a bit noisy, the short period of gray-line operating can still produce a couple of good QSO's.
Hope this helps to explain the "gray line" phenomenon, and hope it helps you snag a few new ones.

From an e-mail posting by Paul Harden, NA5N, to the "Low Power Amateur Radio Discussion E-mail List"
30 December 1998 (12:01:49 AM)
By Paul Harden, National Radio Astronomy Observatory, Socorro, New Mexico
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Bradway SK, from Pg1

ing in Frozen Foods. He entered employment with the New York State Dept. of Agriculture and Markets in 1956 as a food products Inspector. He then advanced through various office positions in the Division of Marketing, to chief marketing representative and farm products inspection services supervisor, retiring in 1991.

During his teen years, he was active in the Boy Scouts of America. He was a past member of the National Rifle Association, enjoyed hunting and won many trophies for Competitive Pistol Shooting. He was a member of the Helderberg and Watervliet Gun Clubs.

Philip then became interested in amateur radio with the call KB2HQ (extra license), was a life member of the American Radio Relay League (ARRL), served as president and Newsletter editor of the Schenectady Amateur Radio Association and was a recipient of the Broughton Award for Exemplary Service to Amateur Radio. He also served one year as president of the Plymouth MA Radio Club (G.A.R.S.), during the time he and his wife, Bette, resided in Plymouth.
On his father's (Bradway) side, he was a descendant of the Reverend Roger Williams, founder of Rhode Island and several other Rhode Island colonial familes. On his mother's side (Schellinger), he was a descendant of Elder William Brewster of the Mayflower (and 11th cousin to his wife, also a Brewster descendant), a life member of the Society of Mayflower Descendant in the State of New York (Albany Colony) and had a dual membership within Rhode Island Society. Philip served as Newsletter editor for the Albany Colony of the New York Society for many years. He was also past president and Newsletter editor for the Elder William Brewster Society. Philip became active with the General Society of Mayflower Descendants, serving on the General Society Computer Committee, also serving some time as chair of the committee.
In 2011, the editor and assistant editor of The Mayflower Quarterly awarded him with a Certificate to the Order of the Hook, for his service to the General Society. Philip is survived by his wife of 43 years, Bette (Innes) Bradway; three children, Lynn (William) Scheriff, Cheryl Bradway and Paul (Michelle) Bradway; sister in law, Eleanor (Giles) Bullock; two stepchildren, Robert (Kathleen) Stelman and Henry (Diane) Stelman; five grandchildren, Jeffrey, Alex, Anna, Danielle and Jessica Bradway; stepgrandchildren, Nicole Bastian and Catherine Stelman; and stepgreat-grandchild, Allison Dutkiewicz.

A private funeral service, at the convenience of the family, has been entrusted to Daly Funeral Home, Inc., 242 McClellan St., Schenectady, NY 12304. Memorial contributions may be made to: ARRL, 225 Main Street, Newington, CT (please state the purpose on memo line), or to: General Society of Mayflower Descendants, Attn: Donald H. Studly, PO Box 3297, Plymouth, MA 02361-3297.

Board Of Directors

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S-A-R-A
Schenectady Amateur Radio Association, Inc.

MEMBERSHIP
APPLICATION/RENEWAL FORM

Regular Dues	$20.00	$_____
Spouse	$5.00	$_____
Student	$5.00	$_____
Repeater Donation		$_____
Initiation Fee	$5.00*	$_____

Name _____ Call _____

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Send to SARA, PO Box 449, Schenectady, NY 12301
July, 2010 through June, 2012

SARA/K2AE Repeaters

Status	ON AIR	ON AIR	OFF AIR	ON AIR
Band	6-Meters	2-Meters	1.25-Meters	70-Centimeters
User TX	52.570 MHz	147.660 MHz	222.460 MHz	449.200 MHz
User RX	53.570 MHz	147.060 MHz	224.060 MHz	444.200 MHz

Schenectady County Emergency Net

Band	Repeater	Time	NCS
70cm	444.200Mhz+	1:00 PM	Raleigh K2RI
2m	147.060Mhz+	1:30 PM	Raleigh K2RI
75m	3953KHz	2:00 PM	TBA

Schenectady County Emergency Net

SARA members act as Net Control Stations for the Schenectady County Emergency Net (SCEN) on Sunday afternoons. The nets are open to all amateurs; ARES RACES membership is not required to participate. The purpose of the nets is to train, pass any traffic that you might have and any announcements of general interest.