



THE QUARRAE



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Editor: John Lindvay WB3IFD

Our club station W3GV is the call of **Dawson Bliley**

President Says

Well spring has sprung here in Melbourne. The new leaves are out on the maple trees in my back yard. Daylight Savings time will start next Sunday March 10 and I think Punxsutawney Phil didn't see his shadow so hopefully the weather will start getting better in Erie. I also heard on the news that Spring Break for the college kids has officially started, a sure sign of better weather.

I have been hearing a lot of new call signs on the repeaters lately so I would like to congratulate them on getting their license's and welcome them to the hobby. I hope to see them at our club meetings in the near future. I'm looking forward to getting more help from the new folks for the public service events coming up this summer. Right now I have a date for the MS Society "Escape to the Lake" bike ride from Pittsburgh to Conneaut, Oh on June 8 & 9. As I get the dates for the other events we support, I will let everyone know.

The Echolink system has been working well lately and it will soon be upgraded by linking it to the 61 repeater using a 440 link into the controller which will make it even better. We have been getting interesting folks showing up on the repeater for our Ragchew net. We had

UA0DX – Alex from Russia and 7L2VPL – Hide from Japan join us recently. So please join us at 9PM, Monday – Friday via Echolink or one of the repeaters for the Ragchew net, you never know who may show up!!

73, Doug AD4UL

PS: A couple of the new folks have been looking for some "Elmering" regarding equipment and classes, so if you can help them out please do. THANKS

Always keep your words soft and sweet, just in case you have to eat them.

AANOUNCEMENT

K8PT and I will once again be operating from the small independent island country of Jersey (MJ/K3PLV and MJ/K8PT) from March 18th through the 26th. We will be on all bands, 160

**Radio Association of Erie Club Meeting –
March 6 at the Red Cross at 7 PM.**



**Presentation to be
announced**

through 6, using single-sideband, CW, and RTTY. I would like to work as many locals as possible and periodically will stand by for the local area. I really can't say what particular frequencies I will use, as that depends on conditions and QRM. But I can be found very easily by looking at the DX spots on one of the DX packet clusters or Telnet. An example would be DX Summit, <http://www.dxsummit.fi/DxSpots.aspx>. Also I will try to be on the Fort Pierce Connection on 14.340 MHz at 8-9 am Erie time. Jersey is off the coast of France, so point your antennas towards Europe (54 degrees) if you have a rotatable antenna. But I have worked many mobiles and QRP stations on other trips, so it's not a problem hearing you. Please say hello. 73, Craig – K3PLV

THE FOUR STAGES OF LIFE:

- 1) You believe in Santa Claus.
 - 2) You don't believe in Santa Claus.
 - 3) You are Santa Claus..
 - 4) You look like Santa Claus
-

Radio Signal Bandwidth

By Frank Etzler, N8WXQ

A unmodulated carrier is the only type of signal that occupies a single frequency. Any other wave form is a sum of many frequencies. The Fourier transform is a mathematical operation that takes a waveform (intensity versus time) and converts it to intensity versus frequency. For a AM signal modulated with a single audio tone the a graph of intensity versus frequency will exhibit three peaks one at the RF carrier frequency and two others - the sidebands. The sidebands will be located at the carrier frequency plus and minus the frequency of the audio tone. A similar Fourier analysis of any

wave form could be made on any type radio emission (e.g. FM, CW, RTTY, etc.)

For FM radio the frequency of the radio wave is varied with the limits of the deviation. 3m broadcast stations use 75kHz deviation, regular amateur radio FM stations use 5 kHz deviation some amateur and public service radios use 2.5 kHz deviation. Deviation refers to how much the frequency is allowed to deviate from the central frequency. For 5 kHz deviation the frequency is allowed to vary from the carrier frequency - 5kHz to the carrier frequency +5 kHz. In performing a Fourier analysis of an FM signal the carrier frequency, the deviation and audio frequency all would determine the overall bandwidth. Carson's Rule allows one to determine the bandwidth of a signal in an easy manner.

$\text{Bandwidth} = 2 (\text{Deviation} + \text{Maximum audio frequency})$

For 3m meter broadcast stations.

$\text{Bandwidth} = 2 (75 \text{ kHz} + 53\text{kHz}) = 256 \text{ kHz}$

The large AF range, here, takes into account 2 stereo channels. For regular amateur radio use, the numbers are as follows.

$\text{Bandwidth} = 2 (5 \text{ kHz} + 2.8 \text{ kHz}) = 15.6 \text{ kHz}$

For narrow band amateur radio (including D Star) and public service.

$\text{Bandwidth} = 2(2.5 \text{ kHz} + 2.5 \text{ kHz}) = 10 \text{ kHz}$

Hopefully this discussion clarifies the difference between deviation and bandwidth.

73 de Frank N8WXQ

February General Meeting Minutes

A regular meeting of the Radio Association of Erie was held on February 6th, 2014 at the Erie chapter of the American Red Cross. AD4UL was in attendance via Skype. The secretary present, a quorum being present the meeting was called to order by chair AD4UL at 1705. Presentation by John Szwarc N3SPW about DSTAR, what it is about, how it works and the possible implementation of the Erie market.

New hams- none

Visitors- KC3BLC

Silent key- none

Secretary's report- motion made by KB3THU to accept the minutes as published. It was seconded and approved, motion carried.

Treasurer's report- given by KB3ZSF.

Membership is at 49. KB3ZSF would renew our tax exempt status.

Board- WB3IFD reported the board approved more heating fuel for the clubhouse

Membership- 50 (contradicts earlier report, but one member assured his check was in the mail)

Repeaters- seem to be working well, just some slight audio adjustments were needed

Public Service- dates were sent into the website. www.w3gv.org

Website- was in good shape

Newsletter- published to the website. Mailed out 15 hard copies. We would like your articles sent to jlindvay@msn.com.

Contesting- WB3DEL absent. 10-10 contest went well. Hams operated the contest for about 16 hours of the weekend. 183 contacts 39 countries. People who attended said they enjoyed themselves.

Clubhouse- fuel oil replenished. Heat is only being turned on while someone is there.

KB3THU brought up the costs of keeping the

clubhouse open, but was in favor of keeping it open. Quite a few ideas were brought up on increasing membership, including an activity day, and a open house.

Education- Tech class in Corry PA being offered for \$59.00

2034 meeting adjourned.

How many times is it appropriate to say "What?" before you just nod and smile because you still didn't hear or understand a word they said?

Outgoing QSL Cards Bureau

First off, you must be a member of ARRL to use the service. The outgoing bureau ships QSL cards to QSL bureaus throughout the world which are managed by the national radio society of each country. Using the QSL Bureau takes a little longer than mailing them directly, but you can send 10 cards for less than two dollars. You also don't have to address them and mail each card separately. You can't use the bureau to exchange cards in the 48 contiguous states. Some countries don't have a incoming bureau and your cards will not be delivered. A list of these countries is found on the ARRL web site.

1. Presort cards alphabetically by callsign prefix. Some countries have a parent prefix and use additional prefixes. When sorting countries with additional prefixes, keep that countries cards together.
2. Do not separate cards with rubber bands, paper clips, or slips of paper or envelopes.
3. Please enclose proof a ARRL membership. A copy of your membership card, or QST address label, or written information on you label is needed.

4. Send \$2 for 10 or fewer cards in one envelope. Send \$3 for 11-20 cards in one envelope. For larger number of cards it is 75 cents an ounce. Minimum charge is \$3.
5. Please pay by check or money order. Do not send cash, postage stamps or IRCs
6. Send to ARRL Outgoing QSL Service, 225 Main Street, Newington, CT 06111-1494.

The recommended card dimensions are height of 2-3/4 to 4-1/4 and width of 4-3/4 to 6-1/4, Cards in this range are easier to handle. If you have any question to can call the bureau at 860-594-0274 or e-mail at buro@arrl.org.



N3SRF, WA3DOM and KB3THU

Two silk worms had a race. They ended up in a tie.

Amateur Radio Quiz: As Seen on TV!
By H. Ward Silver, N0AX

With ham radio getting a little exposure in the form of [Mike Baxter, KA0XTT](#), on the hit ABC comedy [Last Man Standing](#), let's have some fun remembering some other hammy appearances

in the media (Thanks to the [AD7DB](#), [KB9MWR](#) and [AC6V](#) websites for the references!).

- 1) Which of the [Munsters](#) sometimes operated a ham radio?
 - a. Lily
 - b. Herman
 - c. Grandpa
 - d. Eddie
- 2) In the movie [Frequency](#), which manufacturer's radio was used?
 - a. Hallicrafters
 - b. EF Johnson
 - c. Heathkit
 - d. Collins
- 3) In the movie [Independence Day](#), military officers used which mode of ham radio?
 - a. SSB
 - b. AM
 - c. CW
 - d. RTTY
- 4) What call sign does Ellie Arroway use in [Contact](#)?
 - a. W9GFO
 - b. W9WNV
 - c. W9GFZ
 - d. W9AW
- 5) Who played the ham in the [Twilight Zone](#) episode [The Monsters are Due on Maple Street](#)?
 - a. Leslie Nielsen
 - b. Claude Akins
 - c. Ronald Reagan
 - d. Hedy Lamar
- 6) Doris Day used ham radio to contact "Pop," played by what real-life ham in the movie [The Glass Bottom Boat](#)?
 - a. Andy Devine, WB6RER
 - b. Joe Walsh, WB6ACU

- c. Barry Goldwater, K7UGA
- d. Arthur Godfrey, K4LIB
- 7) Which late-night TV show host sponsored a contest between two hams (K7JA and K6CTW) using Morse code and two text-messaging champs?
 - a. David Letterman
 - b. Johnny Carson
 - c. Jay Leno
 - d. Craig Ferguson
- 8) Which comic strip character's girlfriend thought a ham radio license would increase his sex appeal?
 - a. Garfield's owner, John
 - b. Dilbert
 - c. Mark Trail
 - d. BD of *Doonesbury*
- 9) In *The Simpsons*, which of the following characters does *not* have a ham radio license?
 - a. Principal Skinner
 - b. Homer
 - c. Selma
 - d. Moe
- 10) Which show featured a ham radio phone patch between a soldier and his girlfriend back home?
 - a. *M*A*S*H*
 - b. *McHale's Navy*
 - c. *Combat!*
 - d. *Gomer Pyle, U.S.M.C.*

Bonus Question: Who were the Tennessee Valley Indians?

Answers

- 1) b -- Herman used the call sign W2XRL4 or W6XRL4
- 2) c
- 3) c
- 4) a
- 5) b

- 6) d
- 7) c -- The episode that aired on May 13, 2005.
- 8) b
- 9) d
- 10) a -- Klinger is married to his sweetheart back home by Father Mulcahy via ham radio during the third season

Bonus Answer -- Hams used this phrase to refer to TVI phonetically as a sort of code when using AM, because the person whose TV receiver was receiving the interference could understand the detected audio.

Two Eskimos sitting in a kayak were chilly, so they lit a fire in the craft. Unsurprisingly it sank, proving once again that you can't have your kayak and heat it too.

From the ARRL Newsletter

April 1922 -- The first contact was made between California and Hawaii.

September 1922 -- 1CCZ worked every US call district in one night, the first time that had ever been accomplished.

November 1922 -- Another record-breaking relay was accomplished, from 1AW to 9AWM to Hawaiian 6ZAC and back to 1AW in 4 minutes 18 seconds.

June 1923 -- The first expedition using Amateur Radio sailed. The schooner *Bowdoin* (WNP) had Don Mix, 1TS, aboard as its operator. This and later *Bowdoin* expeditions were searching for the land mass that was thought to exist at the North Pole.

September 1923 -- VK2CM contacted ZL4AA (a 1500 mile path), with VK2CM running 4 *milliwatts* on CW!

November 1923 -- 1MO and 1XAM worked F8AB, the first transatlantic contact. December 1923 -- 1EH made contacts with England, Italy, and Holland.



May 1924 -- The first contact was made between New Zealand and Argentina, a new DX record of 6400 miles. The

same month saw the first contact between North and South America.

July 1924 -- All previous shortwave work had required "experimental" licenses. After considerable groundwork by the ARRL, the government allowed shortwave work by all amateurs, with band assignments of 1.5 to 2.0, 3.5 to 4.0, 7.0 to 8.0, 14.0 to 16.0, and 56.0 to 64.0 MHz.

September 1924 -- The first confirmed contact was made between California and New Zealand.

December 1924 -- The first *daylight* transcontinental signals were heard, from Connecticut to California, as John Reinartz, 1QP, made experimental transmissions on the new 20 meter band.

April 1925 -- The first published article on the theory of shortwave propagation appeared in *QST*, authored by John Reinartz, 1QP. Also in April, the International Amateur Radio Union was formed at a conference in Paris, and Hiram Percy Maxim was elected as its first president.

May 1925 -- The first contact was made between Australia and England, during daylight hours on 20 meters.

April 1926 -- The Worked All Continents award was first offered; it garnered eight initial members.

May 1927 -- The first annual ARRL DX Contest was held.

March 1928 -- The 10 meter band was opened to Amateur Radio use.

These were just a few highlights from that wonderful era of advancement of the radio art by amateurs. Next week: On to the 1930s. -- *Al Brogdon, WIAB*

We could learn a lot from crayons. Some are sharp, some are pretty and some are dull. Some have weird names and all are different colours, but they all have to live in the same box.

Ham Radio Calendar

March 1 – ARRL SSB DX Contest. See <http://www.arrl.org/arrl-dx>

March 4 - Corry Club Meeting

March 6- RAE Club Meeting

March 8 – Pittsburgh Antique Radio Society Radio Clinic at Brentwood Presbyterian Church

March 8 - Idaho QSO Party See www.idahoarrl.info/qsoparty

March 9 - North American RTTY Sprint. See www.ncjweb.com

March 9 - Wisconsin QSO Party. See www.warac.org

March 9 - Pennsylvania Charter Day. WM3PEN, Philadelphia, PA. Holmesburg Amateur Radio Club. Celebrating William Penn

receiving the Charter for Pennsylvania from the King of England. www.harcnet.org

March 11 – Wattsburg Wireless Club Meeting

March 13 – Union City Club Meeting

March 15 - Virginia QSO Party. See

www.qsl.net/sterling

March 15 - Breezeshooters Ground Wave

Contest for more info see

WWW.BREEZESHOOTERS.ORG

March 16 – VE Exams at Greene Township

Center

March 17 – Saint Patricks Holiday

March 22 - Oklahoma QSO Party. See

www.k5cm.com/okqp.htm

March 22 - Louisiana QSO Party. See laqp.org

March 29 - CQ WPX SSB Contest. See

www.cqwp.com