



# Sinewaves



## STONEWALL JACKSON AMATEUR RADIO ASSOCIATION

Meetings: 3<sup>rd</sup> Thursday of each month, 1930 hrs at Saint Marks Lutheran Church RT19/98 Clarksburg  
SJARA Tuesday Night Net

*This net meets each Tuesday evening at 2100 hours utilizing the N8FMD Repeater on  
147.210 Mhz with PL Tone of 103.5*

*16 December 2013*

### Net Control

### Date

|    |            |                   |
|----|------------|-------------------|
| 1. | K8TPH..... | December 3, 2013  |
| 2. | K8WWW..... | December 10, 2013 |
| 3. | K8TPH..... | December 17, 2013 |
| 4. | K8WWW..... | December 24, 2013 |
| 5. | K8TPH..... | December 31, 2013 |

### Minutes

#### SJARA Meeting

**November 21, 2013**

Stonewall Jackson Amateur Radio Association meeting was called to order by the Secretary, N8YPE at 7:30 PM at St. Marks Lutheran Church... Minutes of the October meeting were read by N8YPE and accepted as read.

Treasurers, K8TPH, report a balance of \$ 1323.97 with \$ 1333.97 in the general fund and \$ 0.00 in the equipment fund.

Communication: K8TPH reported the money in the equipment fund had been spent to repair the antenna on the 210 repeater. K8TPH also reported that he and N8YPE made a presentation to the Harrison Count Commission for funds to help pay for the installation of a repeater on the 911 tower. The Commission agreed to cover the cost of the antenna, hard line and installation.

Old business: KD8TRA refused to accept the nomination for treasure

due to personal reasons. A motion was then made by KA5NYN to nominate KD8IZC as Treasure and seconded by K8YPA. Motion passed.

New business: The following were elected as officers for 2014 and 2015. President KA5NYN William R. Reid, Vice President N8YPE David B. Anderson, Secretary K8TPH Richard R. Wilt, Treasurer KD8IZC Cecelia U. Reid Trustee KD8FDD Jason C. Hatfield, K8WWW William W. Williams, and WV3G Gordon E. Cameron,.

Net controls were appointed and the meeting adjourned.

### QB50

Ham Radio transponder payloads to launch 2014

It was announced during the QB50 presentation at the AMSAT-UK International Space Colloquium that two CubeSats, carrying SSB/CW and FM voice transponders should be launched into a 600 km orbit in the first half

of-2014.

The QB50 project team has announced that on July 19, 2013 they signed a Memorandum of Understanding with AMSAT-UK, AMSAT-Francophone, and AMSAT-NL to enable two amateur radio payloads to fly on two 2-Unit CubeSats in the first half of 2014.

These precursor CubeSats, which have still to be named, will be placed into a conventional 600 km 98o orbit in advance of the main mission. This allows for the testing of key satellite and payload components ahead of the full QB50 mission.

In addition, the precursor mission allows for experimentation and validation of operational concept of the QB50 mission. Next to these objectives the amateur radio payloads will be operated as well. At the beginning of the mission, the various payloads onboard the spacecraft will be operated in an alternating fashion, whilst the amateur radio payloads will be

operated as the primary payload of the spacecraft once all QB50 related experimentation has been concluded.

The main mission of QB50 has the scientific objective to study in situ the temporal and spatial variations of a number of key constituents and parameters in the lower thermosphere (90-320 km) with a network of about 40 double CubeSats.

## Don't Break the Rules

**Band segments** - guess what, the US phone band on 40 meters stops at 7125 kHz but you can't set your radio's displayed frequency there! Why not? On LSB, your sidebands extend *below* the carrier frequency shown by your radio and you have to keep them above the segment's edge, as well. With a well-adjusted rig, you can probably operate as low as 7127.5 kHz but don't push it! And remember to double-check your transmit frequency when calling a station operating split outside the U.S. phone band. That practice is quite common on the crowded 40 meter band: there may be a QSO in progress on that frequency and some U.S. hams have been known to forget and call DX stations on *their* transmit frequency.

## Joke

A fellow decided to decorate his bedroom. He wasn't sure how many rolls of wallpaper he would need but he knew that the Irishman who lived next door had recently done the same job and the two rooms were identical in size.

"Murphy," he asked, "How many rolls of wallpaper did you buy for your bedroom?"

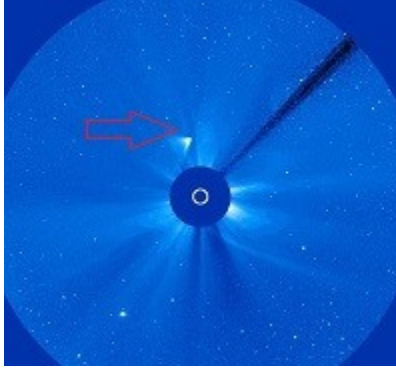
"Ten" said Murphy.

So the fellow bought the ten rolls of paper and did the job. It looked

wonderful, but he had 2 rolls of wallpaper left over.

"Murphy," he said. "I bought ten rolls of wallpaper for the bedroom, but I've got 2 left over!"

"That's funny," said Murphy. "So did I."



## Comet ISON lives!

Cancel the funeral. Comet ISON is back from the dead.

On Thursday, Nov. 28th, Comet ISON flew through the sun's atmosphere and appeared to disintegrate before the cameras of several NASA and ESA spacecraft. This prompted reports of the comet's demise.

However, the comet has revived and is rapidly brightening.

See you in another 70,000 years.

Visit <http://spaceweather.com> for images and updates.



## JT65HF

There is a new kid on the block. It is called JT65HF digital communications. It was first developed to aid hams wanting to

operate with very little power, usually much less than 25 watts but in most cases of less than 10 watts. It was developed to hear very weak signals, normally not audible falling below the noise level and can not be heard by ear.

The signal is redundant, repeating the information several times so it can be decoded and get through when nothing else does. JT65 uses a series of frequency tones to pass information making it possible to get through with high noise or QRM. It is not a system for rag chewing. It is based on the old premise that all you want or need is a contact and verification of that contact. This being the case only a total of 13 characters can be sent in each transmission. The normal information sent is your Callsign, the other station's Callsign your grid (4 digit) and the other station's grid (4 digit) indicator. Other things normally sent are a readability report such as R-13 meaning "Received at -13 db". The DB is calculated by the computer software comparing the incoming signal to the noise level at time of connection. Another standard transmission is "RRR" meant "I QSL your report". Of course "73" is another transmission included in the software. There is also a provision in the software to send up to 13 characters, and that is typed in a window of the transmitting station. The one thing that is absolutely imperative, "Correct Time" The clock in your computer which is used by the software must match the clock of the other station. Decoding is based on matching check points and the time of two stations have to be as close to "0" as possible. Stations of time differences of over 2 normally will not decode. When you receive a

transmission and it is decoded there will be a listing of the "DT" listed in the report on your monitor. A good "DT" will usually be below 1 such as (.6) point six. Another thing listed on your monitor is "DF" which how the signal you are copying is above or below the center frequency of zero beat on your receiver. This will be indicated from -999 through 0 up to a 999 being the complete range of 2 Khz band width you are listening to.

JT65 appears to be the replacement of CW for the new or younger computer or technical oriented ham of today. It can be frustrating to old hams like me that like instantaneous responses. Each transmission starts either on the even or odd minute and takes 48 seconds to send and then you receive a response in the next minute which takes 48 seconds. The software has the 12 seconds of each minute to decode the incoming signal and display it on your monitor. Thus, things go very slowly but the results can be very rewarding if you are trying to just collect contacts and reports from around the world.

Just as an example, on December 1, 2013 I let the software listen from 13:00 UTC 23:00 UTC on 15 mtrs (21.076Mhz center frequency) and the software logged hearing over 500 stations coming from the USA and station as far west as Australia, Japan, as far east a Russia and as far south as Argentina with everyone in between.

I was introduced to JT65 by a very old friend of mine, G0BHK. He and I have been trying to talk to each other for the last 20 years and have only made a very few contacts, but with JT65 I hear Ted

on the air several times a week and at least can send a report keeping in touch via ham radio. Of course, we have emailed each other over the years but it always makes you feel better to make that ham radio contact once in a while.

Two things you do need to operate JT65 is a computer with a good audio card and a digital interface which is available for less than \$50.00 commercially or you can build one usually for less than \$10.00. Of course, just like other toys you can pay for what you want, not for what you need.

Software can be downloaded from: JT65HF <http://jt65-hf.com/downloads/> or WSJT <http://physics.princeton.edu/pulsar/K1JT/wsjt.html>

## **SJARA**

### **Christmas Dinner**

Raymon's Restaurant

December 19, 2013

Meet at 6:30PM

Dinner at 7:00PM

### **Menu**

Sirloin Steak w/pot/veg/salad

Ribs w/pasta/veg/salad

A Bit of Italy compo dish

Chicken Breast w/pasta/veg

Fetucinne Alfredo

Eggplant Rollette w/salad

All meals served w/salad, bread & butter, beverage and cake

\$17.00 plus gratuity

## **Induction of New Officers**

President KA5NYN

V President N8YPE

Secretary K8TPH

Treasurer KD8ICZ

Board of Directores

KD8FDD/K8WWW/WV3G

**Bring your dues for 2014  
please bring correct change  
or check**

\$12.00 single membership

\$18.00 family membership

**W100AW**

**ARRL Centennial**



The FCC has authorized the Maxim Memorial Station W1AW to also use the call sign **W100AW** during 2014, the ARRL's centennial year.

Contacts made from the [Maxim Memorial Station](#) in Newington, from regional Centennial conventions, and during the [IARU HF Championship](#) will use W100AW, with portable designators as appropriate.

The "[W1AW WAS](#)" operations throughout 2014 from each of the 50 states will use W1AW, *not* W100AW.

Bulletins and code practice transmissions during 2014 also will still use W1AW.

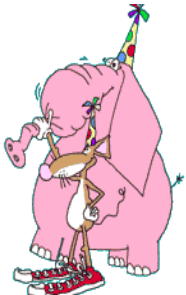
Contacts with W1ØØAW will be worth 100 points in the [ARRL Centennial QSO Party](#).

To help kick off the ARRL Centennial, special W1ØØAW activity will begin at 0500 UTC on January 1, 2014 (midnight in Newington), and will include participation in ARRL's [Straight Key Night](#); one CW station will use Hiram Percy Maxim's straight key. Activity will continue throughout New Year's Day.

**Merry Christmas**



**and**



**Happy New Year**

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