



Sinewaves



STONEWALL JACKSON AMATEUR RADIO ASSOCIATION

Meetings: 3rd 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

November 15, 2016

| <u>Net Control</u> | <u>Date</u> |
|------------------------|-------------------|
| 1. K8TPH..... | October 25, 2016 |
| 2. WV8TIM | November 1, 2016 |
| 3. K8PEC / K8TPH | November 8, 2016 |
| 4. K8BNC | November 15, 2016 |
| 5. N8FMD | November 22, 2016 |

Minutes SJARA Meeting October 20, 2016

Meeting called to order by President KA5NYN at 19:30. Minutes from September meeting read by Secretary K8TPH. Motion to accept minutes as read by WV8TIM, seconded by KCHFHW. Past by unanimous vote. Treasurer's Report read by Treasurer KD8IZC. Deposits since last meeting from dues and donations of \$52.00. Balance as of date \$931.72. Motion to accept by K8PEC, seconded by WV8TIM. Past by unanimous vote.

OLD BUSINESS:

Discussion of the September meeting at the 911 center with Harrison County OEM. The use of the APP proposed to be used by OEM was explained by WV8TIM and it was suggested that no action be taken until such time as the Red Cross furnishes a list of Reception Centers. KA5NYN will keep in touch with the Harrison County

OEM to obtain the list as soon as supplied by the Red Cross. N8FMD made a motion that no action to be taken until the list is made available. Seconded by K8PEC. KD8IZC announced that the SJARA Christmas party will be held at Eat N Park on December 15, 2016 from 6 - 9PM. The Secretary will contact CWVWA and invite the club members to the Christmas party as in the past.

NEW BUSINESS:

N8FMD brought before the membership of some errors in the SJARA By-Laws. Question about certain Articles were discussed and it was recommended that N8FMD examine the By-Laws and bring any corrections to be considered at the November meeting. All members should read the By-Laws listed on the SJARA Web Site and notify N8FMD prior to the November meeting if any changes that should be made.

Nominations for Officers and Executive Committee were made as follows:

President Doug Cutlip, KC8AJH
 Vice President Tim Yoos WV8TIM
 Secretary Kayla Loy K8YLA
 Treasurer Ceil Reid KD8IZC
 Executive Committee:
 N8FMD, WD8NSC, K8PEC
 Motion made by N8FMD that nominations be closed and seconded by K8YLA. Past by unanimous vote. Election for Officers and Executive Committee will be held at the November meeting on November 17, 2016 at St. Marks Lutheran Church.

Members present:
 K8PEC, N8FXJ, N8FMD, N8FWD, WD8NSC, WV8TIM, K8YLA, KC8AJH, K8BNC, KB8FHW, KA5NYN, KD8IZC, K8TPH

**Amateur Radio
 "Uniquely Situated" to
 be at Leading Edge
 Again, Conferees Told**

The dawn of so-called "smart" -- or cognitive -- radio has presented Amateur Radio with an opportunity to regain the leading edge in radio technology in the near future. It will also alter our view of spectrum as a limited resource. Those points and others were part of a forward-looking, tag-team Sunday Seminar presentation, "Spectrum (It's the frequency crunch for real)," by Michelle Thompson, W5NYV, and Bob McGwier, N4HY, at the 2016 ARRL and TAPR Digital Communications Conference ([DCC](#)), September 16-18 in St. Petersburg, Florida. Thompson heads the AMSAT Ground Terminal Team, a component of the Phase 4B geosynchronous satellite project. McGwier is chief scientist at the Hume Center for National Security and Technology at Virginia Tech. This week, *HamRadioNow* made the entire 3-hour presentation available as part of its conference coverage: [HamRadioNow Episode 276 Parts 1, 2, and 3](#).

"If you put the smarts in the radio, what can possibly go wrong?" quipped Thompson, pointing to an example that demonstrated how sufficiently complicated technology is also more likely to fail.



Michelle Thompson, W5NYV, at the ARRL and TAPR Digital Communications Conference. [Photo courtesy of *HamRadioNew*]

Thompson said cognitive radio technology will alter the paradigm of treating spectrum as if it were land. "Spectrum is immediately reusable," she said, "and land is not." Regulation and spectrum allocation have been necessary to manage interference among services, but smart radios can avoid collisions among users, she said.

The Doctor Will See You Now!

"Anderson Powerpole Connectors, and Antenna Polarization" are the topics of the latest (November 3) episode of the "[ARRL The Doctor is In](#)" podcast. Listen...and learn!

Sponsored by [DX Engineering](#), "ARRL The Doctor is In" is an informative discussion of all things technical. Listen on your computer, tablet, or smartphone - whenever and wherever you like!

Every 2 weeks, your host, QST Editor-in-Chief Steve Ford, WB8IMY, and the Doctor himself, Joel Hallas, W1ZR, will discuss a broad range of technical topics. You can also e-mail your questions to doctor@arrl.org, and the Doctor may answer them in a future podcast.

Enjoy "ARRL The Doctor is In" on [Apple iTunes](#), or by using your iPhone or iPad podcast app (just search for "ARRL The Doctor is In"). You can also listen online at [Blubrry](#), or at [Stitcher](#) (free registration required, or browse the site as a guest) and through the free Stitcher app for iOS, Kindle, or Android devices.

If you've never listened to a podcast before, download our [beginner's guide](#).

National Parks on the Air Update

A couple of milestones were reached in the ARRL National Parks on the Air ([NPOTA](#)) program last week. Washington, DC-based Activator Paul Stoetzer, N8HM, became the first amateur to activate from all 28 NPOTA units in DC, completing that feat on November 7.

Pete Kobak, K0BAK, also deserves credit for activating all of the NPS units in the Eastern Pennsylvania Section. These include some difficult urban units in Philadelphia.

These are two examples of the efforts that Activators are putting forth to achieve 1 million total NPOTA contacts by year's end. Activity remains strong, with more than 25,000 contacts uploaded to Logbook of The World every week.

Fifty-four activations are scheduled for November 10-16, including Theodore Roosevelt Birthplace National Historic Site in New York, and Dry Tortugas National Park in Florida.

[Details](#) about these and other upcoming activations can be found on the NPOTA Activations calendar.

Keep up with the latest NPOTA news on [Facebook](#). Follow NPOTA on [Twitter](#) (@ARRL_NPOTA).

US JOTA 2016 "Flash Numbers" Show Participation was Up

According to the US Jamboree on the Air (JOTA) 2016 "[flash numbers](#)," participation swelled in the annual Scouting event this fall. JOTA Coordinator Jim Wilson, K5ND, released the preliminary report last weekend.

"After sifting through the reports and eliminating a few duplicates along with reports from countries outside the US, we've compiled the early flash numbers," Wilson said. "The great news is that there have been some excellent increases in participation."

The total number of Scouts taking part was up by 51% to 10,761, while the visitor total was up by 30% to 6,668. Perhaps the best news was an increase in the number of stations reporting -- up by 28% to 267 this year, just short of the record 271 in 2013.

After station reports slumped last year, the Boy Scouts made a big push that included prize drawings to encourage participants to file post-JOTA reports. Station registrations dropped by 15% this fall to 295. Jamboree on the Internet (JOTI) registrations were up from 100 last year, to 505 this time around.

The stats showed that the number of Amateur Radio operators was up by 14% to 1,120, but they used fewer radios -- down 25% in 2016 to 631.

"The next steps are to do further analysis and finalize the report for full publication," Wilson said. "We'll be sifting through the written reports and suggestions, finding memorable quotes, and

photos/videos, as well as searching for other insight. We know for starters that there was far more interest this year in JOTA-JOTI from Scout leaders and parents, based on the new 2016 Arrow of Light award requirement."

Wilson said he expects to have the final report out by month's end. The grand prize winner of the drawing for an Icom ID-51A Plus, donated by [Icom America](#), was Leroy Wignot, WA4OTD.

Austrian Moonbounce Enthusiast Demonstrates Success with Small-Scale Setup

Hannes Fasching, OE5JFL, of Braunau am Inn, Austria, has demonstrated that you don't need a huge antenna system to operate EME (moonbounce) successfully. Fasching fired up for the October 22-23 weekend of the [ARRL EME Contest](#), using a small horn antenna on 1.2 GHz.

"Because of other commitments I had only a few hours to be QRV in the first part of the ARRL EME Contest," he said in a Moon-Net post on October 26. "As tests with my recently built 23-centimeter horn antenna were promising, I decided to give it a try to work some stations."

Fasching placed the horn on his balcony with an 80 W solid-state amplifier. Operating *WSJT*, he logged contacts with Switzerland, Russia, Germany, and the Czech Republic.

He also heard stations in the Netherlands, Finland, Denmark, and Italy on digital modes and in the UK, Czech Republic, Denmark, and Italy on CW. Fasching, who also has a 7.3-meter homemade dish, has [uploaded](#) recordings of some EME signals to his website, along with the results of tests with his small system

Quest Continues for 1 kW Power Privileges in Australia

On the Wireless Institute of Australia ([WIA](#)) VK1WIA [National News](#), WIA Director Roger Harrison, VK2ZRH, recently remarked on efforts to raise the Amateur Radio power limit to 1 kW there. A 1 kW limit was trialed in 2012-2013, but Harrison said he does not expect the Australian Communications and Media Authority (ACMA) to repeat that test.

The central issue comes down to that of compliance with electromagnetic radiation standards in Australia," Harrison said, not what other countries may allow. He noted that radiocommunication regulation in Australia is embodied both in license conditions and in compliance with electromagnetic radiation standards, and ACMA has a responsibility to ensure that emissions from *all* radio transmitting systems do not expose the public to harm.

"In fulfilling that responsibility, the ACMA needs to know where possibly harmful transmitter systems are located and that such locations are recorded on a license," Harrison continued.

"With that understanding, the [WIA] Spectrum Strategy Committee is working with ACMA to develop suitable procedures under which amateurs interested in running high power can make an application that meets the ACMA's technical and regulatory requirements. Talks are continuing." -- *Thanks to Southgate Amateur Radio News; WIA*

Reminder: NASA CubeSat Launch Initiative Application Deadline is November 22

The application deadline to take part in NASA's CubeSat Launch Initiative ([CSLI](#)) is Tuesday, November 22. NASA has invited accredited education institutions, nonprofit organizations, and NASA centers to join the adventure and challenge of space, while helping the agency to achieve its exploration goals. Many research CubeSats launched as part of the CSLI have carried Amateur Radio payloads.

CSLI provides CubeSat developers with a low-cost pathway to space, in order to conduct research that advances NASA's strategic goals in science, exploration, technology development, education, and operations. The initiative provides students, teachers, and faculty members with a chance to gain hands-on flight hardware development experience by designing, building, and operating small research satellites. NASA will announce its selections by February 17, 2017;

selection does not guarantee a launch opportunity. Selected experiments are considered auxiliary payloads on NASA launches or for International Space Station deployment starting next year and continuing through 2020. [More information](#) on CSLI is on the NASA website. -- *Thanks to NASA*

Latest Edition of the ITU Radio Regulations is Available Online

What the International Telecommunication Union ([ITU](#)) calls "The global treaty behind your mobile communications" -- the [ITU Radio Regulations](#) (2016 edition) -- now is available online and at no cost via the ITU website. Published in ITU's six official languages, the new edition of the Radio Regulations is also available for purchase in hard copy format and as a multilingual DVD.

"Following the successful completion of World Radiocommunication Conference 2015, I am pleased to announce the issue of the ITU Radio Regulations, edition of 2016, which will come into force for all the signatory parties on 1 January 2017," said François Rancy, Director of the ITU Radiocommunication Bureau. Calling the treaty "an incredible success story," ITU Secretary-General Houlin Zhao noted that the global treaty upon which mobile communication and other uses of wireless technology internationally depend, will celebrate its 110th anniversary this year.

Delegates to the World Radiocommunication Seminar

([WRS-16](#)) in Geneva this December will mark the occasion. -- *Thanks to ITU ([media release](#))*

Getting it Right!

In the story "Rule Making Petition to FCC Calls for Vanity Call Sign Rule Changes" in *The ARRL Letter* for November 3, 2016, the correct number of the *Petition for Rule Making* is [RM-11775](#).

Interested parties may comment using the FCC Electronic Comment Filing System ([ECFS](#)). Comments are due within 30 days of the October 26 posting date.

The K7RA Solar Update

Tad Cook, K7RA, Seattle, reports: At 0002 UTC on November 9, this geomagnetic warning was distributed by Australia's Space Forecast Centre: Increased geomagnetic activity expected due to coronal hole high-speed wind stream and possible glancing blow from CME [coronal mass ejection] associated with November 5 filament on November 9-10 2016. The Centre said the forecast for November 10 is "Active."

But the USAF Ap forecast predicts the disturbance will occur perhaps a few days later. The USAF forecast was issued about 21 hours later than the Australian forecast.

Predicted planetary A index is 8, 14, 26, 20, 12, and 8 on November 10-15; 5 on November 16-18; 8, 15, 54, 42, and 24 on November 19-23; 18, 22, 18, 12, and 10 on November

24-28; 8 on November 29-30; 5 on December 1-3; 8, 20, and 8 on December 4-6; 10, 12, and 20 on December 7-9; 18, 10, and 8 on December 10-12; 5 on December 13-15; 8, 15, 54, 42, and 24 on December 16-20.

Predicted solar flux is 80 on November 10-12; 85 on November 13-14; 90 on November 15-16; 78 on November 17-18; 77 and 75 on November 19-20; 78 on November 21-22; 79 on November 23-25; 78 on November 26; 77 on November 27-28; 76 on November 29-30; 77 on December 1-3; 75 on December 4-5, and 78 on December 6-15.

Sunspot numbers for November 3 through 9 were 23, 25, 24, 23, 24, 0, and 12, with a mean of 18.7. The 10.7 centimeter flux was 75.6, 76.7, 76.7, 76.2, 76.5, 76.9, and 79.9, with a mean of 76.9. Estimated planetary A indices were 18, 5, 3, 5, 4, 3, and 7, with a mean of 6.4. Estimated mid-latitude A indices were 12, 3, 2, 4, 2, 2, and 5, with a mean of 4.3.

Were you active in the ARRL November Sweepstakes (CW) last weekend? [Send](#) me a report of your observations.

Just Ahead in Radiosport

- November 12-13 -- WAE DX Contest (RTTY)
- November 12-13 -- 10-10 International Fall Contest (Digital)
- November 12-13 -- JIDX Phone Contest

- November 12-13 -- OK/OM DX Contest (CW)
- November 12-13 -- SKCC Weekend Sprintathon (CW)
- November 12-13 -- Kentucky QSO Party (CW, phone, digital)
- November 12-14 -- CQ-WE Contest (CW, phone, digital)
- November 17 -- NAQCC CW Sprint

See the [ARRL Contest Calendar](#) for more information. For in-depth reporting on Amateur Radio contesting, subscribe to [The ARRL Contest Update](#) via your ARRL member profile e-mail preferences.

Upcoming ARRL Section, State, and Division Conventions

- November 12-13 -- [Indiana State Convention](#), Fort Wayne, Indiana
- November 19 -- [Alabama State Convention](#), Montgomery, Alabama
- December 9-10 -- [West Central Florida Section Convention](#), Plant City, Florida
- January 8 -- [New York City/Long Island Section Convention](#), Bethpage, New York
- January 14 -- [TechFest 2017 Convention](#), Lawrenceville, Georgia
- January 20-21 -- [North Texas Section Convention](#), Forest Hill, Texas

- January 21 -- [Georgia ARES Convention](#), Forsyth, Georgia
- January 22-28 -- [QuartzFest Convention](#), Quartzsite, Arizona
- January 27-28 -- [Mississippi State Convention](#), Jackson, Mississippi
- January 27-29 -- [Puerto Rico State Convention](#), Hatillo, Puerto Rico
- February 3-4 -- [Southern Florida Section Convention](#), Ft. Lauderdale, Florida
- February 4 - [South Carolina State Convention](#), North Charleston, South Carolina
- February 4 -- [Virginia State Convention](#), Richmond, Virginia
- February 10-12 -- [Southeastern Division Convention](#) (HamCation), Orlando, Florida
- February 17-18 -- [Arizona Section Convention](#), Yuma, Arizona
- February 25 -- [West Central Florida Section Technical Conference](#), Sarasota, Florida

Find conventions and hamfests [in your area](#).