



MINUTES OF MEETING: AUGUST 10 2018

CALL TO ORDER: The meeting was called to order at 11:45 by Scott, W7SLM in the training room at Mullis Fire Station.

Introductions:

ATTENDEES:

Peter WA7FUS	Dave K9MRQ	Hoop K9QJS	Paul N7TZW
ED KD7TUN	Mike N7TLL	Ken K7KCA	Monte N7TAU
Basil N7NIX	Scott W7SLM	Dan N6AU	Tom KK7TX
Carol N7LHY	Peter K2SPR	John KE7WJJ	Bill KI7QBI
Wayne WA6MPG	Larry NM7A	Bryan K7UDR	

Silent Key presentation:

On August 3 David King, KK6WQ died in a plane crash on Lopez Island. Ed spoke briefly about his friend, club member and fellow pilot, David.

MINUTES:

The minutes of the July meeting were approved as posted on the web site.

Officer's reports:

• President's report:

- Scott reported that the CHIME radio telescope in Okanagan BC (<https://chime-experiment.ca/>) has recently detected some fast radio bursts at 580 megahertz which is the lowest frequency they have detected so far. Larry added that the lower the frequency the older the original signal is so they are looking back light years in time. 6 to ten billions years is their target/goal.
- Minutes of the recent ARRL Board Meeting have been posted to SJCARS groups.io. ARRL is seeking input for proposed changes to the ARES Strategic Plan.

• **Treasurer:**

On Behalf of Dani, Bryan presented the treasurer's report. We currently have 62 members including new member, Greg Hancock, AE7EL (Orcas Island) the treasury balance is \$5,970.67.

Committee Reports:

EMCOM & WhiteBox:

- Bryan reported that the cause of the recent San Juan County communication/internet outage was a squirrel chewing through a fiber optic cable on Fidalgo Island. Various services including cell phones, land lines, and internet were affected. Bryan says that we have an important task to come up with a plan for alert and dispatch of hams when public communications services are not available.
- Jim "Hoop" Hooper has been appointed to replace Bryan as San Juan County EC. Bryan is now the AEC for "Cop Shop" in Friday Harbor.
- Bryan stated that SJC ACS and SJCARS are two separate entities which have members in common so it is appropriate that EMCOM discussions be part of club meetings. SJCARS can serve as a pool for ACS members.

• **Calendar**

The SJCARS internal and external calendars are posted in the files section of SJCARS groups.io

Next SJCARS meeting will be on Friday September 14, a picnic in Odlin Park on Lopez Island.

Old Business:

Hoop presented information on the W/VE Islands QSO Party which is sponsored by <http://usislands.org/>

As reported at the July meeting and in the minutes, Bob, K7NHE and Clark, K7LRK recently activated/qualified several islands in San Juan County by operating portable ham radio stations from each of them and making the required number of contact for qualifications. Bob invited club members to come to his station on Stuart Island to operate during the QSO party/contest on Saturday August 25. Hoop also encouraged club member participation from home stations to make San Juan Islands available for contacts and to also join in the fun themselves.

• **New Business**

- Friday Harbor 8.8K Run – Bryan will coordinate communications for this event. He plans again this year to utilize APRS to track participants and to sweep the course for the sponsors. The race is on Saturday August 18th.
- ILLW- Ed, Mike, and Hoop will operate 2 HF stations from the Lime Kiln Light House. They invite all to come and participate with them on Sun August 19th.

Presentations:

Space Weather – Hoop

Hoop's presentation defined space weather for us and reinforced the importance the various influences of the sun are to many aspects of our lives.

He introduced his talk by saying that it is based upon a talk given by Dr Tamitha Skov at the 2017 Contest University at the Dayton Hamvention. Rather than providing a link to his slides he has provided links to her video which uses these slides and also several other links to Space Weather and Tamath Skov.

- <https://www.contestuniversity.com/videos/> The video referred to is 2017's #4, The Wonderful World of Space Weather.

Here are some more links on this fascinating subject:

Space Weather Prediction Center

<https://www.swpc.noaa.gov>

Dr Tamitha Skov's website:

<http://www.spaceweatherwoman.com>

Carl Luetzelschwab K9LA Amateur Radio Propagation Web Site

<http://k9la.us>

NASA Is Trying to Save Us From the Sun

<https://fivethirtyeight.com/features/nasa-is-trying-to-save-us-from-the-sun/>

SDR Frequency Measurement – Larry NM7A

Larry walked us through some of the history of frequency control methods and attempts to achieve stability and accuracy through the years. These included simple oscillators, crystals, ovens, atomic clocks which continued to get more complex and expensive to own and operate as the needs for stability and super accurate timing increased. The mass need for this precision has been the mother of invention for the cell phone industry. The military's development of satellites carrying GPS technology for themselves and then opening it up for consumer use has brought precision frequency standards within the reach of all. Whereas labs used to have to spend thousands of dollars on precision frequency reference equipment Larry brought, to show, a lab quality device costing around \$200. Here is a link to it:

http://www.leobodnar.com/shop/index.php?main_page=product_info&products_id=234

Bryan added that GPS modules which can be incorporated into devices for achieving 1 pulse per second timing are available for only a few dollars now.

Stories from our shacks:

- Mike said that a recent conversation with Hoop spurred his memory of an amazing QSO that he had shortly after he moved to SJI full time. He had a vertical antenna on a fence post and while tuning 20 meters when it otherwise sounded very dead he

all of a sudden heard a station in Melbourne talking to a station on the Ivory Coast of Africa, They were so strong and clear that he took a chance, jumped in and had a 25 minute 3 way conversation with them. It was the thrill of a lifetime. There was nothing else on the band other than this equatorial skip. A couple of years later he had a similar experience having a 3 way conversation between South Africa, Namibia, and SJI. This goes to show that even when the band appears to be dead “magic” can suddenly happen.

- Basil – One of his current projects is to be able to see the top of his desk. He has acquired some racks and is progressing with the organization.
- Ed – Thanks to Wayne mentioning that 6 meters opens up occasionally Ed says that he had a QSO with a station in Californian on 6 meter sideband by loading up his 80 meter dipole. He is also excited that he is going to get a “proper” electronics lab. They are building a garage and he will have the whole second story to use for an electronics lab replacing the currently cramped 100 square foot space he has now. The hamshack will remain in the living room between the 2 couches.
- Dan – is having fun experimenting with an RTL-SDR dongle. See RTL-SDR.com
- Ed says that he recently purchased one of the RTL-SDR dongles in a bundled deal with several antennas and accessories for \$25. The software he began using with it is called GNUradio. Accessory devices are available convert to other frequencies.
- Wayne mentioned that the tropo conditions that we are experiencing with the current warm weather make for some interesting listening.
- Peter reported on KiwiSDR radios being deployed. Checkout KiwiSDR.com. Read about this exciting web enabled SDR radio. Then click on “listen live:” and explore the many openly available KiwiSDR radios which are available to you to control and listen to using your computer, web browser, and speaker. The frequency range of these radios is from 0 to 30 megahertz.

• **Next Meeting – The next SJCARS meeting will be a picnic in Odlin Park on Lopez Island on Friday September 14th.**

The meeting was adjourned at 1:30

Respectfully submitted by: Peter Dahl, Recording Secretary (additions, corrections or comments to Peter Dahl WA7FUS@arrl.net)