

SJCARS

San Juan County Amateur Radio Society

Minutes of Meeting: 11 September 2020

Respectfully submitted by Elizabeth Menozzi (KE7KDR), SJCARS
Secretary

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Call to Order

A brief business meeting was called to order at 11:30am by Scott (W7SLM) via Zoom.

Attendees

Elizabeth KE7KDR	Scott W7SLM	Dan N6AU	Mary-Brooke W7TZW
Ed KD7TUN	Clare KE7WQY	Corky AF4PM	Paul N7TZW
David KC6UVZ	Brenda KJ7BUV	Dave K9MRQ	Jim KJ7BJT
Jeff N7OSS	Peter WA7FUS	Monte N7TAU	Bill K7UTX
Habib KJ7KJC	Basil N7NIX	Bryan K7UDR	Dani KE7TLE
Hoop K9QJS	Robin KJ7BFD	Nancy KD7IRD	Brian K7BLS
Wayne WA6MPG			

Summary of Motions and Votes

Previous Meeting's Minutes

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

Motion for club to purchase 3-pack of HAMwan connectors for site evaluation purposes

Motion submitted by Bryan and seconded by Scott.

Vote approved by majority of members attending with none opposed.

Topics Discussed

- Officers Reports
 - Treasurer
 - Current balance is \$5334.13
 - Membership -- 1 single and one family renewal
 - Expenses

- Reimbursal for Kenny from previous meeting decision
 - Renewal of post office box
 - 82 paying members -- all time high
 - Secretary -- nothing to report
 - Vice President -- nothing to report
 - President
 - FCC proposed charging a fee for obtaining/renewing HAM licences. \$50 for ten years.
 - ARRL has a new CEO David Minster, NA2AA. According to the ARRL announcement, David has a very strong CEO level background, and is a "real ham" since 1977 and has participated in many aspects including CW contesting, and AMSAT. Sounds like he will be a great fit!
 - The great-great-great-great-great-granddaughter of Samuel Morse, is WA State Ferry System Captain Marsha Morse, and is a Ham, and took her exam in Ward Silver's kitchen, back when...
 - Bill Gates invested in Kymeta (a Redmond satellite antenna/communications company):
<https://spacenews.com/kymeta-raises-85-2-million-in-bill-gates-backed-round/>
 - The highway 410 fire earlier this week was first spotted and reported by HamWAN cameras.
- Committee Reports
 - EmComm
 - Second and fourth Tuesday morning white box drills from home. Open to everyone.
 - Nothing new to report.
 - Repeaters
 - Not gone up to the batteries yet, but might happen soon.
 - Pandemic restrictions have lifted a bit and may be able to complete this next week.
 - VE Team -- nothing to report
 - Elections -- nothing to report
 - Website -- nothing to report
- [Calendar](#)
- Old Business
 - Monthly club technical seminar report
 - 12 participants in the first meeting
 - Discussed Arduino project and repeaters

- Budd WB7FHC will be presenting on 25 September
- No other old business
- New Business
 - HamWAN update from Bryan
 - Previously very little coverage in the SJIs
 - Currently covers east side of Orcas, some of San Juan and Lopez, and various other islands (map on HAMwan.org)
 - Low cost units are now available for \$60 if you buy a 3 pack (was \$250 each)
 - Recommending that the club picks up a few for testing purposes to allow people to do site evaluations
 - If club purchases a 3 pack, one can be sent to each San Juan, Lopez, and Orcas
 - Also useful at Field Day
 - Inter Island Point to Point links
 - Motion put forward by Bryan
 - Seconded by Scott, subject to discussion (clarification of what is included in the package)
 - ~10 club members attending thought this would be helpful for them (based on comments and show of virtual hands)
 - Vote had about 9 raised hands and about 8 vocal affirmative responses, none opposed.
 - Motion approved.
 - [Presentation](#)
 - [Stories from the shack](#)

Presentation

Adventures in Radio Direction Finding

Corky AF4PM

Key points:

- A radio direction finder (RDF) is a device for finding the direction, or bearing, to a radio source.

- The act of measuring direction is known as radio direction finding or DF.
- Widely used as a radio navigation system, especially with boats and aircraft.
- Also used for emergency locator beacons, lightning location, locating a stuck or interfering transmitter, locating illegal broadcast stations, fox hunting, and radio orienteering.
- Location of a transmitter can be determined using two or more measurements from different locations.
- Location of a vehicle can be determined using two or more measurements of known transmitters.
- Location methods include:
 - Directional antenna (Yagi or Loop)
 - Amplitude
 - Doppler / Pseudo Doppler
 - Phase difference
- For RDF using directional antennas you need:
 - Source or beacon
 - Antenna
 - Radio -- tune to frequency mode of TX
 - Attenuation (because we are in a signal rich environment)
 - Physical
 - Electronic (de-tune radio or in-line attenuation)
- Theory is straightforward, but the practice is not...
- What could go wrong?
 - Multipath
 - Signal scattering / blockage
 - Directional source
 - Failure to fully understand equipment
 - "Human factor"
 - Technique skills
- Real world experience gained by:
 - Need to locate a downed aircraft
 - Follow-up practice scenarios to improve proficiency
- Discussion of antenna design used for this purpose

Calendar of Upcoming Events

Upcoming Club Events:

- SJCARS tech session on 25 September & 23 October

- General meeting online on 9 October & 13 November
- VE testing session TBD in October

Upcoming External Events:

- TAPR digital communications conference going on now (today)
- Salmon Run QSO party coming up 19-10 September

Stories From the Shack

- Dan N6AU recommended *The Secret Wireless War: the story of MI6 Communications 1939-1945* by Geoffrey Pidgeon -- firsthand accounts of stories from the war.
- Basil N7NIX shared that the Lopez hams are planning to get a 9600 baud APRS beacon up on Lopez. You will need a raspberry pi and a soundcard device to get connected.

Meeting Close

The meeting was adjourned at 13:16pm.

The next club meeting will be Friday October 9, 2020 online via Zoom.

Please send additions, corrections or comments to:

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