

# SJCARS

San Juan County Amateur Radio Society

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## Minutes of Meeting: 10 July 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 11:32 AM by Scott (W7SLM) via Zoom. Scott moved the presentation up in the agenda to follow introductions, before regular business.

## Attendees

Elizabeth KE7KDR	Scott W7SLM	Bob K7NHE	Ed KD7TUN
Molly KJ7HOD	Patti KJ7PRW	Bill K7UTX	Brenda KJ7BUV
Clare KE7WQY	Jeff N7OSS	Mike KJ7NRP	Steve K7HAK
Chris KD7PKE	Helen N7XOM	Kent KF7VDD	Nancy KD7IRD
Basil N7NIX	Habib KJ7KJC	Hoop K9QJS	Dan N6AU
Chris KD7PKE	Wayne WA6MPG	Rod KI7ZI	Peter WA7FUS
Mary-Brooke W7TZW	Paul N7TZW	John K7LVJ	Jim KJ7BJT
Steve K7HAK	Mike N7TLL	Brian K7BLS	Trevor KS1LAX
Greg AE7EL	Larry NM7A	Steve N8GNJ	

## Summary of Motions and Votes

### Previous Meeting's Minutes

The minutes of the [June meeting](#) need an addition.

- Correction will be to add comment from Basil N7NIX regarding getting connected to 44-Net via coordination with Rockisland. 44-Net.
- Decision to approve was tabled until next month.

## Topics Discussed

- Introductions
  - New folks
    - Mike from Bellingham KJ7NRP
    - Steve from Bellingham N8GNJ
    - Steve from Yakima K7HAK
    - Helen Janin, longtime Orcas resident N7XOM

- Trevor Macduff from Pasco KS1LAX
- Officers Reports
  - Treasurer -- nothing to report
  - Secretary -- nothing to report
  - Vice President -- nothing to report
  - President
    - HF World Championship Contest coming up this weekend (<http://www.arrl.org/iaru-hf-world-championship>)
    - QSO Today Virtual Ham Expo on August 8 & 9 (QSOTodayHamExpo.com)
    - The Mike & Key club hosted an outdoor testing session in a Boeing parking lot on June 20, administered 29 exams to 24 individuals. Big success!
    - July 1st was the date when testing shifts to the new new ham question set.
    - Hiker rescued by EMT who couldn't reach emergency services on cell phone, but the hiker was able to coordinate rescue via ham radio using repeaters and relays.
- Committee Reports
  - EmComm
    - At home white box drills are continuing.
    - Things are going well and will probably continue as remote until we get to phase four.
    - You do not need to be affiliated to a white box in order to participate.
    - Drills are on the second and fourth Tuesday at 9:30am on the Cady Mountain repeater.
  - VE Team
    - Session before Field Day and everyone passed their exams.
    - They all got their certification the same day.
    - One (or two?) new ham and three (or two?) upgrades.
- [Calendar](#)
- Old Business
  - Website Update
    - No update at this time.
    - Bryan is busy with work at the moment.
  - Field Day 2020 Reports
    - Submissions due by 28 July, so get them in!
    - Submissions have been received from the following folks:

### Submissions received as of July 9<sup>th</sup>

\_\_\_\_ AF4PM Complete San Juan County Amateur Radio Society 1B WWA  
\_722\_ K9QJS Complete San Juan County Amateur Radio Society 1D WWA  
\_\_\_\_ KD7TUN Complete San Juan County Amateur Radio Society 1D WWA  
\_\_\_\_ KJ7BUV Complete San Juan County Amateur Radio Society 1B WWA  
\_\_\_\_ KU7M Complete San Juan County Amateur Radio Society 1D WWA  
\_\_\_\_ N6AU Complete San Juan County Amateur Radio Society 1D WWA  
\_\_\_\_ N7TZW Complete San Juan County Amateur Radio Society 1B WWA  
\_192\_ W7SLM Complete San Juan County Amateur Radio Society 1E WWA  
\_\_\_\_ WA7FUS Complete San Juan County Amateur Radio Society 1D WWA

- Lessons learned:
  - Not much activity on Sunday. Lots more contacts on Saturday. (Peter says that "On HF I found a bunch of activity all during the 24 hours.")
  - You can only operate as one class for the whole thing. So you can switch from a handheld to a generator or a higher power radio, but you need to claim the lowest point version for all contacts.
  - ARRL does not confirm or cross-check anything except the call sign and the band.
- New Business
  - Upcoming Meetings
    - August will be via Zoom
    - We will need to be in phase four before we do in-person meetings again.
  - Would like to discuss other events that people might like to do. Possibly Salmon Run. Possibly at Jackson Beach Park.
    - [Salmon Run](#) is an event which receives wide publicity.
    - Participants in other Washington counties and in other states will be looking for contacts with hams in all 39 Washington counties.
    - Since the number of HF active San Juan County hams is not large, SJCARS hams operating in SJC will be sought after.
    - Since members of participating clubs can submit their individual station log entries as members of a club such as SJCARS they can participate in the Washington Club Aggregate Score Competition.
    - Operating in the QSO party can be anything that individuals want it to be. It can just be fun to give

out contacts with a semi-rare county or can be fun to try one's hand at relaxed contest operating or it can be operated as practicing full, all out contesting.

- Soliciting thoughts on September picnic on Lopez.

- [Presentations](#)
- [Stories from the shack](#)

## Presentation

### "Racing Balloons on the APRS Network"

Presented by Trevor Macduff KS1LAS

Key points:

- Usually think about 20' balloons filled with Helium
  - Can carry max of 12 lbs
  - Fly at 100,000 feet
  - Expensive
- These are mid-altitude balloons
  - Called Pico satellites
  - <12 grams
  - Solar powered
  - 30k - 45k feet
  - Low QRP
- Bill Brown WB8ELK is the developer of the pico satellite the pasco team used
  - NASA engineer
  - Designer and builder of SkyTracker
  - Shares launches on facebook
  - Coordinates events
- Joanne Cozens-Michael is the organizer of the program.
- Trevor is a science teacher, also runs a club associated with the National Air and Space Museum
- Started something called Silas Education, non-profit for education consulting.
- Inspired by training at training and support for authentic instruction.
  - Started a club with 21st century schools in a low income elementary

- Launched a HAB (High Altitude Balloon) in Virginia
  - Started reading up on what Bill Brown was doing
- Waiting to launch, the club decided that they didn't want to litter. Can be hard to retrieve the balloon depending on where it drops.
- Reached out to Ted Tagami and found out about ARISS race on 1 June (ARISS.org)
- Figured out how much helium to put in, but ended up doing a "guess and check" process until they achieved neutral buoyancy.
- Using the [NOAA Hysplit Model](#) they attempted to predict where the balloon would go.
  - Thought it would go from Pasco across Canada up to Greenland and hover around the Arctic Circle.
  - Ended up going up into Canada and then lost the tracking signal.
- Jim asked: There are restrictions on drones near airspaces. 30,000 - 45,000 feet is where commercial flight corridors are. Are there any FAA regulations or other restrictions on MAB flights?
  - No restrictions
- Greg AE7EL asked: It seems like airspace authorization must be complicated given that the balloon is crossing international borders. Can you talk a bit about how that process works?
  - There are some dead zones where you're not allowed to process, but the way the programming goes into the satellite, it shifts its frequency based on where it is. So if it goes over a dead zone (like UK or North Korea) it just stops broadcasting.
- Folks have found balloons and sent them back!
- Another option is the SBS-13
  - 1mm thick
  - Larger volume
  - Higher loft means it can go above storms
  - One has gone 6 laps around the world.
  - Another (W7QO) has done 22 laps around the world over nearly a year.
- ARISS is coordinating another launch for October for more teachers and students
  - Must have a Ham license programmed into Skytrack
  - Most teachers don't have a ham license
  - Order from Bill Brown
- Classroom applications
  - Weather predictions

- Electromagnetic spectrum
- Ohm's law and power law
- Buoyancy
- And gets kids interested in Ham radio
- ARISS.org has more lesson plans
- How can you help?
  - Order a SkyTracker from Bill Brown (<https://gmigliarini.wixsite.com/wb8elk>)
  - Connect with an educator and point them to the ARISS lesson plans ([www.ariss.org](http://www.ariss.org))
  - Launch, learn, and love.
  - Share your stories and inspire more connections.
- Here is a link to the presentation: <https://drive.google.com/file/d/16KHiAsbPavU8GKVf4ONKqaBeCIE2RPwX/view>
- And some more links from Trevor:
  - Interview with Bill: <https://youtu.be/9Mb-MjNxBAM?t=3422>
  - Video he created for his students: [https://youtu.be/H\\_sx\\_aI5PC8](https://youtu.be/H_sx_aI5PC8)
  - Balloon recovery in Nova Scotia: <https://youtu.be/FED-p5CSBkc>

## Calendar of Upcoming Events

### Upcoming club events:

- August meeting on the 14th will be online
- Lopez picnic in September 19th is TBD and open for discussion.
- Next VE session planned for October

### External events:

- Corrected URL for the salmon run: [www.wwdxc.org/salmonrun2020](http://www.wwdxc.org/salmonrun2020). It takes place on September 19-20.
- Lighthouse and Lightship weekend is August 22-23. Ed KD7TUN is not planning to operate his usual station at Lime Kiln Point State Park this year.

## Stories From the Shack

- Tour of Ed's KD7TUN new Ham shack.

- Bryan K7UDR has also recently been connected to 44-Net.

## Meeting Close

The meeting was adjourned at 13:30 PM.

The next club meeting will be Friday, August 14, 2020 on Zoom.

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**Please send additions, corrections or comments to:**

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