

## MINUTES OF THE SARA BOARD OF DIRECTORS MEETING of June 11, 2018

Revision 2 Compiled by Bruce Randall, Secretary

### Officers, Directors, and Editors in Attendance

Present at Green Bank:

Officers: President Ken Redcap, Vice-President Tom Hagen, Treasurer Dennis Farr,  
Secretary Bruce Randall

Directors: Stephen Tzikas, Charles Osborne, Wayne McCain, Ed Harfmann

Directors at Large: Adrian Howell

On Teleconference Connection:

Officers: None

Directors: None

Directors at Large: Keith Payea

Unavailable:

Officers: None

Directors: None

Directors at Large: Stuart Rumley

Jon Wallace (Sent email report.)

Founding Director: Jeff Lichtman

Supporting Members and appointees

Jim Brown Grants

**A quorum was present. Meeting started at 7:00PM EDT**

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### EMAIL ACTIVITY BY BOARD

Email BOD activities of last year Included for context of this meeting:

1. November 2, 2017. Jim Brown brought up Grant issues. He is not the contact person. We need to find out who is and fix web site forms.
2. November 21, 2017. Bill Dean resigned as treasurer due to health problems. Dennis Farr volunteered to take over. He was recommended by Melinda Lord. His resume was posted as discussion.
  - a. Motion to accept by Bruce Randall
  - b. 2<sup>nd</sup> by Ken Redcap
  - c. Discussion ended based on Melinda's recommendation and resume.
    - i. Votes to accept: Bruce Randall, Ken Redcap, Adrian Howell, Steve Tzikas, Jon Wallace, Wayne McCain, Keith Payea, Tom Hagen, Ed Harfmann
  - d. No Votes against
  - e. Passes: Dennis Farr is now SARA Treasurer.
3. January 1, 2018. Dennis Farr made a request to purchase SARA Shirts for sale on line and at the both conferences.
  - a. After much group discussion we settled on 40 shirts with a mix of sizes for about \$700
  - b. Tom Crowley, Ken Redcap and Dennis Farr set the proper size and color mix.
  - c. Ed Harfmann made a motion to go ahead with purchase. Jon Wallace 2<sup>nd</sup>.

- d. Voting for: Ed Harfmann, Jon Wallace, Ken Redcap, Charles Osborne, Steve Tzikas, Dennis Farr, and Bruce Randall.
  - e. Motion carries and Dennis is proceeding to order shirts.
- 4. February 4, 2018. David Westman requested travel expense payment for Scott Tilley who is an invited speaker for the Western Conference. This is estimated at as much as \$1500.
  - a. Motion by David Westman: Since this is an unprecedented subsidy, I move that the Board of Directors formally approve this expense. Ken Redcap 2<sup>nd</sup>
  - b. No real discussion.
  - c. Voting for: Ken Redcap, Dennis Farr, Tom Hagen, Keith Payea, Bill Lord, Ed Harfmann, Steve Tzikas, and Bruce Randall.
  - d. No votes against.
  - e. Motion Passes. David Westman will coordinate this.
- 5. February 20, 2018. Ken Redcap made a motion: Funding needed for SARA presence at “USA Science and Engineering Festival” event in Washington DC area. **(R1)**
  - a. After much discussion Bruce Randall modified motion to put a \$3500 cap on spending.
  - b. Ken Redcap 2<sup>nd</sup> to modified motion.
  - c. Discussion ended.
    - i. Votes to accept: Ken Redcap, Bruce Randall, Ed Harfmann, Wayne McCain, Dennis Farr, Adrian Howell, Tom Hagen, and Steve Tzikas.
    - ii. No votes against
  - d. Vote passed.
  - e. It was established that Ken Redcap is coordinating this event.
  - f. Ciprian Sufitchi (Web Master) pointed out the issue was really about spending money if we do not have people to support the booth. He will support event.
  - g. Wayne McCain and son Collin offered to support event and add Cube Sats.
  - h. On February 27, 2018 Dennis Farr paid bill after adequate support was available at event.
- 6. March 13, 2018. Dennis Farr made \$1100 payment for booth at Dayton Hamfest. This is an on-going SARA event.
- 7. March 23, 2018. SARA failed to get connectivity and people to hold a BOD meeting at the Western Conference

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## AGENDA

### REPORTS FROM OFFICERS

#### President

- 1. SARA was present with a booth at Hamvention and Hamcation ham radio events. SARA does need presence at these events. There are visitors to our booth that would like to buy SDRs, Super SIDFs and IBTs. SARA is not a vendor in the conventional sense. We are pushing radio astronomy education. We might not be able to do the next Hamcation as Tom Crowley is not available to help.
- 2. See email activity for “USA Science and Engineering Festival”. **(R1)**

### **Vice-President**

1. Tom wants to hand off committees to set up the next conference to next VP. He stressed the need for more support in setting up the conference. Ed Harfmann helped set up a GoogleIO group for conference set-up. Tom is to coordinate with the next VP.

### **Treasurer**

1. The treasurer's report was read. Total membership is 226 paid through 2019 with uncertainty due to renewals. Total assets are about \$63,778. Twenty-six Super SIDs were sold, 13 as grants.
2. Corrected total: "The membership count including those whose membership expires at the end of this month is 431." From Dennis Farr email correction. **(R1)**
3. A motion was made to approve by Ed Harfmann, 2<sup>nd</sup> by Wayne McCain. Approved by voice vote.

### **Secretary**

1. The minutes and email activity of last year were read.
2. It was established that Jim Brown is on the Grant Committee, but not the contact person. Charles Osborne is the contact person.
3. Motion to approve by Ken Redcap, 2<sup>nd</sup> by Dennis Farr. Approved by voice vote.

### **COMMITTEE REPORTS**

#### **"USA Science and Engineering Festival" report by Wayne McCain. **(R1)****

1. The event went well. Wayne, Collin, Ken and Chip supported the SARA booth.
2. Chip prepared banners and posters.
3. There was a lot of interest in SARA projects.
4. Having some SARA trinket to hand out would be good for kids.
5. SARA was the only astronomy- related display at the event.
6. This event occurs every two years.
7. About \$1000 registration was the only SARA expense.

#### **Grant Committee Report by Jim Brown** See also Apendix B for email comments **(R2)**

1. Grants are mostly for Super-SID and Radio Jove. There are very few grants for other projects.
2. Super-SIDs sell for \$100.
3. Radio Jove is over \$200 to make and may be as high as \$280 with updates.
4. SARA gets almost no feedback on equipment given out on grants.
5. We should consider \$100 deposit on grants with deposit being refunded when grantee produces a SARA Journal paper, a science fair project, or other report.
6. Should kits or grants be given out only after contact between grantee and a SARA mentor/advisor?
7. Wayne McCain suggested kits should be sent to teachers who advise on projects.
8. Dozens of grant units go to India with no feedback at all. Shipping is expensive.
9. SARA typically has 12 grants per year.
10. Ken Redcap appointed Dennis Farr, Treasurer, to the grant committee to watch expenses.
11. Tom Crowley is the contact person. Charles Osborne is also to assist with grants. **(R2)**

### **OLD BUSINESS**

1. **Journal Paper Review:** We needs more reviewers per request by Kathy Hagen. In the future, papers are to be reviewed by the BOD and officers as well as the present technical reviewers.

2. **20 Meter Dish Time:** There is concern that some observations could use up our allocated 3 hours of time very quickly. From the user point of view, it is not always obvious what operations consume large amount of time. Steve Tzikas will investigate if SARA can get a permanent free account, and if not, the cost for a permanent account. The account would support radio astronomy learning for SARA membership, as well as efforts to set up a citizen science program by learning how to take and evaluate proper observations of Cas A and other objects of interest. (R1)
3. **Cube Sat Grant:** Wayne McCain is still working on this.

#### NEW BUSINESS

1. **SARA Operating procedures:** Dennis Farr initiated this. Ken Redcap appointed Ed Harfmann, Wayne McCain, and Adrian Howell to look into this. Ken is to oversee this.
2. **Web Master:** Dennis needs some interaction with Chip for web site issues such as the SARA store. Ken suggested that Dennis work directly with Chip. The BOD will be involved only if needed.
3. **Honorary Membership for Bill and Melinda Lord:** proposed by Dennis Farr, 2<sup>nd</sup> by Tom Hagen and passed by a voice vote. This means a title, lifetime membership and no dues.
4. **Western Conference Venue:** The use of the VLA may be lost because Lori Wingate, our contact, is no longer there. Keith Payea suggested Owens Valley. There was also mention of one of the Colorado groups interested in being a possible venue. The Western Conference people will look at these possibilities. (R2)
5. **SARA Conference East Date:** The Green Bank Observatory cannot give us July dates. (R2)
  - a. August is their slowest month.
  - b. Starting the conference on Monday afternoon instead of Sunday afternoon works better for the Green Bank Observatory because it avoids Sunday work to prepare rooms. We would leave Thursday morning instead of Wednesday. (R1)(R2)
  - c. The 2019 conference is tentatively scheduled for August 5, 6, 7 and 8. (R1)
  - d. This will probably not line up with the Star Quest optical astronomy event at Green Bank.
6. **Dues requirement for Conference Attendance:** Dues can be paid at either conference but are part of conference fee unless they are already paid. **See appendix B also.** (R2)
  - a. Motion by Dennis, 2<sup>nd</sup> by Wayne.
  - b. Vote passed.

**Motion to Adjourn** was made by Wayne McCain, 2<sup>nd</sup> by Tom Hagen. Motion passed by voice vote of the Board. Meeting closed at 8:50 EDT.

### Meeting of Membership, June 12, 2018

Election Results:

Ken Redcap	President	Reelected
Adrian Howell	Vice-President	Elected
Ed Harfmann	Director	Reelected
Steve Tzikas	Director	Reelected
Keith Payea	Dir at Large	Reelected

David Westman Dir at Large Elected

Resulting slate of officers:

Ken Redcap	President
Adrian Howell	Vice-President
Dennis Farr	Treasurer
Bruce Randall	Secretary
Ed Harfmann	Director
Steve Tzikas	Director
Wayne McCain	Director
Charles Osborne	Director
Keith Payea	Dir at Large
David Westman	Dir at Large
Jon Wallace	Dir at Large
Stuart Rumley	Dir at Large
Jeff Lichtman	Director Emeritus

Change of Conference Date discussed:

Move the day of the week to start Monday afternoon instead of Sunday afternoon. **(R1)**  
Main presentations will be on Tuesday and Wednesday.  
July is off the table per Green Bank staff. We will settle for early August.  
It will probably be August 5, 6, 7, 8 of 2019.  
Alignment with Star Quest may not be possible. **(R1)**

Western Conference venue may be a problem due to loss of Lori Wingate as our contact at VLA. David Westman is addressing this.

SARA needs volunteers near several Hamfest and other events so we can have visibility. Note that SARA can pay for table/booth and entry fee but not travel expenses.

SARA has some out of date pamphlets still around. Check to assure that Dennis Farr is the contact before giving out the pamphlet.

SARA shirts are now available. See Denis Farr.

There is the need for a few more people to review SARA journal articles. Contact the editor, Kathy Hagen.

Dennis Farr requested a volunteer from general membership to help with room assignments.

There was discussion about possible changes to the grant process. We are considering a requirement of a \$100 deposit to get the grant kit or equipment. A published SARA paper or other evidence of research would be needed for a refund of the deposit. Also we discussed assigning a SARA mentor to each grant.

Possible Green Bank conference registration was discussed as a reward for the top paper from the grants. Grantee would present a paper or be interviewed at the conference.

The BOD needs to ascertain if Gary Memory will continue doing the proceedings for the conference. This task entails organizing the conference papers for publication. Staples© handles the printing and binding of the books. Dennis Farr may need help with this. The Western Conference follows the same procedure.

We need a volunteer to write up the conference for our Journal.

## **APPENDIX A**

### **Education and Mentor Report 2018 – Jon Wallace**

This year I decided to try to update the Mentor and Technology volunteer lists I have and sent out a request for volunteers for speakers and technical help, etc. in the journal. I got a very poor response (I think only 2-3 responded). I also tried to get more presentations to have online in case we can't provide a speaker. I got 2 additional presentations and added them to the Google Docs page I maintain for that purpose. So far I have only had 2 requests for these and I don't think they were used despite receiving very positive reviews on them. I know one group found a speaker (I think it was Curt Kinghorn(?) – thanks!). I would like to have permission to add a note on the education page (or other appropriate page) to advertise that we first, have people willing to present to groups and that in the case we can't get someone to travel to the group, we have these presentations. Does that require board approval?

I also requested help compiling a list of recommended sites in the journal again (as well as the list serve) and got a better response for that with 5-6 responses (though I did seem to generate some controversy by stating that if I got too many suggestions I would have to cut some – some people wondered what criteria I would use to cut material...). I decided to use every response and recently sent two versions of that list out to the board for ideas on organizing it – either by person who contributed or by topic – most respondents wanted it by topic. I am considering this a 'work-in-progress' and will take contributions and suggestions whenever anyone wants to make them. I hope to post this to the education page soon. Does that require board approval?

I gave a couple of talks but there wasn't much interest this year – I think people were looking for something different. With that in mind I am re-writing my presentations and hope to have that ready to place in the Google Docs page this summer and for presenting this fall.

I wanted to make a couple of requests that will need board approval; first, since I started managing the mentor list we have had only 1 request for a mentor. I would like to remove this since no one seems interested. Everyone now uses the list serve to get questions answered quickly. I assume that needs a board vote. Second, I wanted to ask that we stop selling or update the IBT DVD/CD – it is really old and was made using the Channel Master IBT. It was great when it came out but is no longer available and the DVD/CD has served its purpose and either needs a re-write or retirement. I assume that also needs a board vote.

The major focus for me this year was gaining some knowledge of SDR radios and their use. I have been asked for help with these for the last few years and wanted to get some first-hand knowledge so I built and operated a SDR radio and was able to collect 24 hour data on three sections of sky near Cassiopeia A, Cygnus A and Virgo A. I next collected data on the Milky Way galaxy at 30 degree intervals of Galactic Longitude (30-240 degrees was what I could observe from my house). I used this data to calculate Doppler shifts; Local Standard of Rest (LSR) velocities; distances to source hydrogen clouds, and finally galactic arm positions. This was a very challenging project for me and I hope to write it up soon for publication in the journal and to be posted on our education section of the website for others to try. I had a couple of college professors interested in looking at this project for use with their students – I will be following up this summer and hope to get someone interested in trying it this fall.

I also used my SDR to try meteor detection and it seemed to work (thanks Chip for your help!). When I am confident using this I will add that to my astronomy visits and programs.

Lastly, I assume that as Education Coordinator, the education page is part of my responsibility and I wanted to be sure that I can post materials there without board approval, when I develop them. After reading the operational procedures page I noticed I was responsible for more than I realized and hope to improve efforts to promote the grant program and support people with outreach suggestions. I have done these informally but need to formalize it if it is my responsibility.

## **APPENDIX B** Charles Osborne minutes review email comments

p.4 item 6: Just a comment: The original intent of dues being due at the summer conference was to stop all the prorating and confusion of people who were paying at all times of the year due to their original membership join date. With our conference dates moving around several months lately and now the Western conferences it becomes a question of how much work the Treasurer wants to do in keeping up with and chasing people who keep forgetting to renew till late in the year.

Mentors: To Jon's comment. It is a bit out of date. However based on James Brown's Grant comments and discussions it has renewed importance, to have access to a list of potential members who can act as mentors for any grants. A better approach may be to look at the entire member database and find someone near the student applying for a grant and/or pairing them up if the member is willing. I agree a little of this is being done on the list server. But if we wait for a student to initiate the infrequent conversation it may diffuse and delay the responsibility to insure that they are making progress and not hung up on some trivial detail. Most students do not use email today, except with their grandparents. At least that's what I'm hearing from teachers who are dealing with this generational disconnect.