

As the BARC was settling down for the meeting, Phil (K0RVD) handed out information sheets on the Scholarship program that he would be presenting to the club. Terry (K6UN) circulated copies of the latest BARC participant list and Club roster for review while he also processed membership renewals. There were also some printed copies of last month's minutes for those without email.

John (AD6NR) called the **meeting to order** at about 7:07 pm.

Participant introductions: K0RVD, K6JNX, KI6AIK, WA6IQO, KK6HTM, KA6HII, AE4TM, AA7GK, KE6SRX, W6KRF, AG6WM, W6IY, KK6BAF, Gordon (KK6JOD), KA6HGI, K6UN, KF6YLW. A special acknowledgment to Gordon, who found out his radio call at the meeting, and to AE4TM (ED) who managed to show up to the Club meeting from Tennessee.

January Minutes: Accepted as published.

Activities:

BARC breakfast at Denny's, 8 am, second Saturday after the Club meeting. T-hunt postponed until Spring. New ideas for hunt to be presented by Dennis (W6IY) later in the meeting.

Sunday morning 80 m net (7:30 +/-) review by Len (WA6IQO). Len has been the net control recently, operating from his pickup truck while parked at the Bishop Airport. There has been about 12 to 15 check ins lately. This used to be called the "Ice Cube" net. A discussion ensued about participants, antennas, and other aspects of the net.

There are ARRL phone and CW contests coming up.

Phil is heading up a Volunteer Exam class starting on Thursday night, February 20. He has two Technician study packages left over from the last class.

KK6JOD is Gordon's new radio call. He would like some help in getting his vintage military 6m rig on the air. It should be an FM unit. Mil number is 525.

Treasurer's Report: December 31 to date; \$300 in income, \$140.84 expenses, checking balance \$2785, and duplexer fund \$995.

Break at 7:25 for announcement of raffle sales and availability of BARC library. Lots of good reading material in Library.

Scholarship presentation:

Phil – Look at the printed handouts to see information about the Scholarship proposal. We already have one anonymous donor willing put \$500 into this fund.

Keith – Concerned over politics involved in the selection of the recipients, and a suggestion that other organizations would be much better suited to selecting recipients than BARC.

Terry (K6UN) – Terry helps in three other organizations that provide scholarships. Some of the larger organizations delete the applicant names from the forms that the selection panel views in order to discourage the accusation of politics and nepotism. Even with that, we could have a problem in our small community.

Jeff (AA7GK) – Could it be opened up to the general public, with the provision that math and science

applicants would be favored?

Mark (KE6SRX) – Could one applicant end up acquiring this and all of the other local scholarships?

Phil - It could be possible.

Keith - How about opening it up to technical schools as well as college applicants?

Jeff - I support tech schools and technicians. Wording in the ARRL is “any institution”.

Rich - (KF6YLW) – How are the students selected?

Phil - That is normally done by the schools.

Rich - Could it could be opened up to auto mechanic majors? There is a lot of electrical knowledge required in automobiles. Maybe yard sales to raise funds. Engineers and technicians are both part of the “math and science” deficiency in the U.S.

John - Is BARC able to handle the “administrative” burden? There are existing scholarship organizations that accept donations, including the ARRL. That should be investigated as a “low overhead” way of handling scholarships.

Phil - About 80 funds are available through the ARRL. It would be better if we could keep our donated funds in the local area, possibly within the BARC family.

Mark - The Legion donates to Cerro Coso for qualified “needy” students.

Jeff - If one of the objects for the scholarship is to generate interest in Amateur Radio and BARC, the main thing is to have BARC thoroughly publish the details of its donation. That aspect has little relationship to who is chosen to receive the donation.

Keith - I'll second that.

John - How shall we go forward on this matter?

Terry - Club members should study the proposals with the intention of coming up with a solution at the next meeting. \$1000/yr. is the minimum that the ARRL scholarship fund will accept.

Jeff - Thoroughly look at our objectives for doing this. There would be high overhead for the Club to administer such a program internally. What schools should be chosen? Publicity should be an important part of any decision.

Bill (KK6HTM) - Keep it local.

Gordon - Suggest that Phil digest comments and revise proposal accordingly.

Phil - Acknowledged that he could do that.

Motion to have Phil submit revised proposal at next meeting. Passed.

Dennis - Keep tax factors in mind.

Duplexer:

Jon (NW6C) – BARC does not have enough money in the “duplexer” account to purchase even a minimally acceptable new duplexer. A minimum suitable duplexer for the Silver Peak application would cost over \$1000, and better ones go for over \$2000. We have a printed list of suitable units at the table. Its not a very long list. Also, with the \$1000+ investment, we would get a duplexer with a one year warranty. Another option would be to take John up on his offer to sell the BARC his duplexer that we are currently using on the BARC Silver Peak repeater. The object of this acquisition is to have a Club owned repeater at the Club owned Silver Peak site – not tied to an individual member. John's duplexer is at the site, installed, tuned to the right frequencies, and is working correctly.

John - My duplexer is a Sinclair Q2230E, dual notch (pass/reject). It is in current production and has a list price of \$2,370. I am willing to sell it to BARC for what I have invested in it, and promise to refund to the Cub the full amount paid me if it does not perform to the Club's satisfaction for the next three years.

Members - What is the dollar amount?

John - \$450 for the bare duplexer plus \$75 for the mounting rails. Total \$525.

Terry - Motion to accept John's offer, Club to purchase duplexer now in service. Passed.

High Sierra Ultramarathon: Web site is down. No more information about a new promoter. Doesn't look very promising.

Lone Pine Ultramarathon: Volunteers are needed for this event on May 3. This is now the 3rd longest running Ultramarathon. Contact Keith if you can help out.

Mule Days special event station: Club has received a rejection notice for the request of a "vendor spot" at the Fairgrounds. Paul (KK6BAF) and John are working on another suitable location on the Fairground that would not be a "vendor spot."

Volunteer Exams: Dennis (W6IY) reported that four applicants passed the test for their new Tech licenses. Five examiners showed up to administer the test.

John – How about offering free BARC membership for the remainder of the then current year to any applicant that obtains their first license at one of our Club administered VE sessions? Motion made. Request for amendment that membership would be contingent on that person attending at least one meeting. Amendment rejected. Original motion passed.

New HF net proposal by Bob (W7WOW) via Len (WA6IQO): How about a Monday evening 75m net? Maybe we would have more local HF operators. It could be coordinated on the 2m repeaters. Does anybody want to follow up on this idea? Table for later? Keith volunteered to give it a try. 3.985 +/- on Thursday night at 7 pm. Ridgecrest has their net on Monday night, and the BARC repeater net is at 8 pm.

50/50 Raffle: Won by K6UN. \$41 pot. Terry kept \$20 and sent \$21 to BARC.

Program: Dennis gave a presentation on techniques used in finding a hidden transmitter with a handy-talky with an omnidirectional antenna. The main solution was to use your body as the attenuator to determine direction. An adjustable radio shield would be needed when the transmitted field became strong enough to fully quiet the receiver. This could be accomplished by lowering the handy into a metal container – a can or tube. How about having a sample hunt at the next Club meeting? Jeff commented that the "can" attenuator is particularly suited to handy-talkies because they often don't have very good internal shielding.

John – How about an actual T-hunt using this method in May or June? Field Day is in June.

Ed – He has worked with Doppler systems to locate transmitters. (These usually show up as four receiving antennas arranged in a square pattern on the roof of a vehicle. The difference in timing of the received signal between them is used to determine the direction of the signal.) Ed recounted a hunt in which illegal transmissions were tracked to several police cars with radios that had been modified to work out of band. Two officers ended up being laid off when the evidence was presented to their commander. Although the ability to find the direction of a signal is no better with a Doppler system than a directional antenna, it can be determined much faster with Doppler.

Rich – Has anyone had experience with noise canceling audio systems? Gap is advertising them.

Ed – That is part of digital processing and digital modes. Ed gave some examples of his experience, particularly Packtor. Message retrieval at very high noise levels can be done with digital methods. One example that he was involved with was the relaying of a message from a community under siege to the U.S. Military. Officials did not credit Amateur Radio for the information because of the possibility that all amateurs would be targeted by the aggressors.

Meeting adjourned officially at 9:05 pm.

Show and Tell:

John brought a radio repeater to the meeting that he had assembled from two Motorola GM300 mobiles and a kit controller. It was intended to replace the one at the Little Lake site, but when we (Kut, John, and Jon) installed it we found that there were other major problems with that installation. As soon as the repeaters transmitter came on RF feedback locked up the repeater. It took about an extra 34dB to overcome the noise. That problem had been taken care of in the existing unit by cranking the squelch way up. We then had a better understanding of the operator reports that “they can see the repeater but can't get into it.” The original repeater was re-installed with a resolution to return to the site better prepared for troubleshooting. Best guess is a duplexer problem.

Rich brought the Marconi test set to the meeting that he had inherited from Terry Downey. It looked like Jeff was giving him a good tour of its features.

I (Jon) was given a rundown of Terry's new tablet computer/wireless communicator. There is probably going to be one of those in my future.

Jon, NW6C, Secretary of BARC, Inc.