

## DSES Minutes for 9 December, 2019

- **Treasurer's Report:** Checking: \$2300; Savings: \$5741; - Monthly expenses include: Telephone (\$38.54), Electricity (\$85), Public Relations (\$90).
- **Last Trip:** Ed C. found that the power supply for the 1420MHz feed was using approximately 600mA @ 40% duty cycle. He believes that the preamp is OK. He could not confirm the status of the fiber optic cable.

Gary A. and Ed C. installed the feed coax for the Ham antennas on the tower. They verified the "Talk-In" 2meters channel is working out to Sugar City and Ordway. Gary tested the antennas: 160meters was noisy but he talked with KY and TN stations. The Yagi for 15meters worked Hawaii on phone and about a dozen stations (mostly N&S America) on digital mode. 20Meters was wide open to Japan, plus S.Korea, China, and Australia were worked as well! Also worked a Portugal station. 80Meters had lots of US & CA stations. Is the "skirt" around the Com. Trailer still in the plan?

Bob H. would like to be able to use his radio when he goes to Plishner; Need to label the coax cables for the separate antennas.

Myron B. wants to install a Rohn 45 tower for an Oscar station (he has the rotor, antenna, etc.) just waiting for good WX (maybe this Spring?). He looked for a door (for the "Dog House" exit) but nothing was currently available at the local recycle store.

Rich R. asked if the 6meter ant. (at the Com. Trailer) be moved to the bunker? Or, will it stay at the Com. Trailer for meteor work? Could the Transmitter be used there without causing problems?
- **Next Trip (28 Dec.):** Ray U. wants help to measure/install the new universal feed mount. The 410MHz ant. Will be linear polarized for pulsar work (could be changed later). We should replace the plastic preamp box with a metal box. The 1296MHz amps could be under the hub plate (running 200W with the 18m dish it should be heard on EME work). Can someone provide a brief program for PPRAA's January meeting? Rich R. said he could put that together. Rich and Ray have put a digital readout for the 9ft dish (at Rich's house). It had a problem with an op-amp. Replacement part should cure that. A thermostat on the feed would help reduce temperature fluctuations. Perhaps a Dicke switch?
- **Future:** Install some "creature comforts" now that we are on the mains. Antifreeze has been installed in the porta-potties.

Rich R. has an article in the Dec. issue of the SARA Journal about his 9ft dish. 1420MHz data shows the Milky Way Galaxy distribution for 10deg increments of Declination. The new digital readout should improve this to 1deg increments! For the Western Conference he has a paper showing  $\Delta$ velocity vs.  $\Delta$ galactic longitude. The data shows three arms of the M/W galaxy! VLT data is incorporated as well to give a comparison.

Myron B. has brochures for DSES for distribution to groups/clubs etc.

Johnathon A. is trying to get data (from the 9ft dish) into a 3D mode. He is also trying to display data from FIT files. He wants to overlay Hubble images with the data. He is also working on stabilizing the temperature variations in the data.
- **Pointing System #1:**
  - **Status** – Software "manual" method works. It should be very accurate working the 410MHz pulsars (due to the wider beam width).
- **Pointing System #2:**
  - **Status** – Unavailable – Bill M. was "on the road".

**BOARD** • Prepare for Elections. Review/modify By Laws? Collect Dues.