

DSES Minutes for 14 October, 2019

- **Treasurer's Report:** Present accounts (both Checking and Savings) are in the black. Outstanding bills were not discussed.
- **Pointing System #1:**
 - **Status** - Software is ready for implementing the relays that will control the present manual input controls. The "step and track" simulation has been demoed and it worked! ◦ **Next Trip** – Perhaps next Sunday (20 Oct.)?
- **Pointing System #2:**
 - **Status** - "GoTo" function has Windows compatibility with a 555 timer watchdog to ensure it keeps driving. It needs a reset signal to reset the 555 timer.
 - **Follow Up** - Need to ask Paul Burge about moving the Limit Switches to allow tracking pulsars in the northern region.
- **Synchro Pointing System:**
 - **Status** – Elevation readout is OK. Azimuth readout has some rough spots. Right now, DO NOT plug it in! It is 120V system and it is not ready for immediate use. It needs to be safety inspected.
 - **Future actions** – It is a back-up; "Fail Safe" system. It may be useful for use in *Tropo* work later. Calibration of the Elevation readout will be required.
- **Dish Feed System:**
 - **Status** – Currently configured for 1420 MHz. EME (earth-moon-earth) system is in the works. Dr Russel has a 9ft. Dish running at his house that can be accessed via *Team Viewer*. So far, attempts to capture pulsar data using his Yagi array has been unsuccessful but he would welcome any mechanical/electrical help to improve this. He seems to think that his amplification is causing the problem (too much? – too little? Beam width should be OK). Also, he has been studying how to use the VLA's data to make pictures using their CASA system. Ray Uberecken has a 12ft. Dish which uses an SDR (RASDR2) on 1420MHz in meridian (0-90 deg) configuration which can be used to compare/confirm Dr. Russel's data.
 - **SETI Observation** – Steve Plock is scheduled to collect data on 19-20 Oct. for Skip's Green Bank efforts. Ask Steve if you would like to learn how you can help with collecting data.
 - **Possible Feed Change** – A 1296MHz system (modeled after VE4MA's system) may go up for *Tropo* work (as early as 19 Oct. or sometime after that...TBD). In addition, this will use a **sequencer** (RX/TX switch to ensure their separation). At 1296MHz the 60ft dish should offer 43.4dB of gain! Not certain what input power will be yet (120W or 400W) but either one will certainly be heard! First "light" may occur near 26-27 Oct. with a push to be ready for the 16 Nov. moon bounce contest. This will require a separate coax feed instead of using the fiber line. *Tropo* with the North Texas group can be scheduled whenever it is ready.
- **HAM Radio Station:**
 - **Status** - The new tower has been installed (Ed Corn). It has a rotor and tilt-over, but no beam antenna yet. 10m-15m-20m beam and a 2m beam will be the most likely next addition.
- **Outreach:**
 - **Status** – The annual Haswell Bazaar will be held on 26 Oct. Gary Agranat and Bill Miller plan to attend and display our best PR with an emphasis on Education benefits for the community. They want to encourage future membership from the younger population.

- **Future** - We should all try to encourage new members. This will keep our club growing and build more contacts for future projects and funding.