PRINCE GEORGE ASTRONOMICAL SOCIETY ROYAL ASTRONOMICAL SOCIETY OF CANADA PRINCE GEORGE CENTRE

7365 Tedford Road Prince George, BC V2N 6S2

Robotic Telescope Project (RTP) Minutes

August 2, 2022

Meeting Number: RTP021 Date: August 2, 2022 Location: Zoom Meeting

Chairperson: Malhar Kendurkar Recording Secretary: Glen Harris

Committee Members present: Glen, Malhar, Gil

Meeting Called to Order at 7:02pm.

1. Approval of Minutes of RTP020

Motion: To accept the meeting minutes of RTP020 July 19, 2022

Moved: Gil Seconded: Glen Carried

2. Old Business

- Get the SkyX and MaximDL from Bob and reimburse him.
- Motorize the mirror cover.

Malhar's report

- Synchronized the 0.6m telescope and took several test images with the Canon DSLR over a couple of evenings and fine tuned the focus. Very successful, with the images posted on FaceBook.
- Dropped off Ian's f/2 Celestron RASA telescope and ZWO 1071 camera.

Glen's report

- Lower shutter closure continues to be a problem. I can't seem to get the tension right on the two cables. Suspect a cable spooling problem with the hand crank assembly. The cable will need to be completely unspooled, removed from the shutter, and the crank disassembled to rectify the problem. Will require assistance with this.
- Added a manual belt tensioner to the winch motor bracket.
- Belt slips on small hand crank pulley regardless of belt tension. Contemplating replacing the 2.5" pulley with a 3.5" pulley to increase belt surface contact area. The crank will move significantly slower as a result. (i.e. 36 rpm vs 50 rpm).
- Installed and activated the Cloud Sensor.
- Reinstalled the AllSky camera.

Rob's Report

- Installed and tested the Cloud Sensor software.

3. New Business

- Resolve the lower shutter closure problem.
- Replace the hand crank pulley with a larger diameter pulley.
- Prioritize completion of the mirror cover.
- Install the f/2 Celestron and camera on the top of the 0.6m telescope enclosure and rebalance the telescope.
- Configure the f/2 telescope for remote operation.

4. Current actionable items

Malhar:

- Work with Glen to resolve the lower shutter closure problem.

Rob:

- Collaborate with Glen re lower shutter control interface.
- Upgrade Alcyone and Maia to Windows 10.

Glen:

- Resolve the lower shutter closure problem.
- Collaborate with Rob re lower shutter control interface.
- Experiment with different types of adhesion for attaching the control rod to the coroplast mirror cover vanes.

Gil:

- Investigate hardware for operation of the lower shutter.
- Experiment with different types of adhesion for attaching the control rod to the coroplast mirror cover vanes.

5. Outstanding tasks and priority

- Mirror cover mechanism
- Flip mirror automation
- 4Shooter automation

6. Date, Time, and Location of the next Robotic Telescope Project committee meeting

- The next committee meeting (RTP022) will be held on Tuesday August 16, 2022 starting at 7:00 pm using Zoom.
- **7. Adjournment:** Meeting adjourned at 7:45pm.