PRINCE GEORGE ASTRONOMICAL SOCIETY
ROYAL ASTRONOMICAL SOCIETY OF CANADA
PRINCE GEORGE CENTRE
7365 Tedford Road
Prince George, BC
V2N 6S2

PGC108 Business Meeting Minutes
January 12, 2011

Date: January 12, 2011
Location: 490 Brunswick St.

Chairperson: Brian Battersby
Recording Secretary: Glen Harris
Executives Present: Brian, Gil, Bob, Blair, Doug, Jim Van Doren, Glen, Ken
Members Present: Rod

Meeting Called to Order at 7:35 p.m.

1. Welcome and Introductions
2. Approval of Minutes of PGC107
Motion: To accept the meeting minutes of PGC107 (Nov. 10, 2010) as presented.
Moved: Gil Seconded: Blair Carried

3. Reports of Officers
a. President (Brian Battersby)
Calendar bulk order – most of the calendars have been picked up and paid for. Brian will contact those who have not yet picked up their calendars.
Form for Gaming Grant Use was sent to Ken for completion and filing.
NOVA registrations are ongoing. So far I have talked to about 6 people. We won't know how many may be taking the course until the first night, Jan 15.

b. Vice-President (Blair Stunder)
Nothing to report

c. Secretary/Recorder (Glen Harris)
Canada Post mail was distributed as required.
The RASC Prince George 2010 Annual Report was submitted to National on 2011/01/10.
The Treasurer's Report Form AR 2010 for the 2011 RASC Annual Report was emailed to Ken on 2011/01/12.

d. Treasurer (Ken Lovin)
Regular Account balance: $5668.53
Gaming Account balance: $44.42
A detailed financial statement is filed with these minutes.
Motion: To accept the Treasurer's Report as presented.
Moved: Glen Seconded: Gil Carried

4. Reports of Members-at-Large
Jim Van Doren - A new friction drive wheel incorporating heavy truck brake lining material has been fabricated.

Motion: To install the new friction drive wheel on the dome motor drive assembly on January 14, 2011. Glen and Bob will assist.
Moved: Gil Seconded: Bob Carried

5. Reports of Committees, including any motions from the Committees
Observing & Small Scope Maintenance Report
By Blair Stunder, Doug Wayland
All the Dobsonian telescopes are working properly. One of the Starblaster Dobsonians is on loan.

Website Report
By Wayne Sanders
A Night Sky link to the text of Maurice's weekly segment on 93.1 CFMS has been added to the club website as have all available PeGASus newsletters.
All links have been checked and the dead ones removed. Spelling errors have been corrected.

Media Relations Report
By Maurice Sluka
1. The January 'Our Night Sky' features have been completed; I have learned how to edit the recordings, and this should make the process easier.
2. Promotion of the NOVA course has been moderately successful, with positive responses, and efforts continue. I was interviewed on CFIS's Ben Meisner program Monday the 10th. I hope to get CBC's Daybreak to feature it as well.
3. Perhaps fellow members have contacts and other methods they can pass the NOVA course information on to.

Building Maintenance Report
By Rusty Hoff, Doug Wayland
Water tanks are 75% full. The viewing deck was cleared of snow. To this date, the driveway and lot had not been plowed. The Christmas lights were taken down and the extension cord repaired.

Tours & Public Outreach
By Wayne Sanders
Nothing to report.

Newsletter
By Gil Self
The deadline for the next newsletter is January 21, 2011.

Computers and AV Equipment Maintenance Report
By Glen Harris
The observatory computer network has been revamped to accommodate additional computers. Hardware conflicts due to running 2 sound cards on the RMOB computer led to the installation of a separate computer (WEATHERCAM) dedicated solely to operating the weather camera. No compensation was received or expected for this computer, so it will be 'on loan'.

Additional CAT5 wiring was installed between the equipment bay and the control room to accommodate the network expansion. An onsite power bar was installed to distribute UPS AC to the 5 computers in the control room.
The DELL tower running ICOM, SpecLab, and Colorgramme software was replaced with a DELL Small Desktop computer. The DELL tower that utilizes a 2.8GHz processor then replaced the observation deck computer (METEOR) that runs at 1GHz. This upgrade will provide improved performance when running various planetary programs, and imaging software for the ST6 and ST9 cameras. Installation of a PCI serial port card is pending. This card will accommodate the port requirements for the ST6 camera and future focuser. The existing onboard serial port is being used for the servo controller.
The most current versions of CCDSoft, TheSky6, Cartes du Ciel, Sky Map Pro 10, Virtual Moon Atlas, and various analyzing software have been installed and tested. For some reason, SkyMap Pro 10 sometimes has difficulty resolving Com Port 1 that is associated with the telescope control unit, but TheSky6 and Cartes du Ciel work properly. Closing and then reopening the program seems to circumvent the problem.
The DELL GX270 tower computer is located on the Control Room desk to allow more convenient access to the USB ports and the CD R/W drive for those of you who will be doing research type work and want to take your data home with you. There are 6 USB 2.0 ports on the rear panel, and 2 under a cover at the bottom of the front panel, one of which is being used for the USB extender. Once the extender's performance has been verified, I'll move the cable to a rear USB port.
A KVM switch (Keyboard, Video, Mouse) was installed to reduce desktop clutter in the Control Room, and to provide communication with the SonofSOL, RMOB, WEATHERCAM, and SENTINEL computers. The large monitor, extra keyboard, and mouse were removed.
All documentation affected by the above changes was updated or added as required.
Software has been updated as required on all observatory computers, and scheduled maintenance performed.
ALL Observatory Operating Procedure documentation has been reviewed and updated or deleted as required, posted on the website, and placed in the Operating Procedures handbook. The revised Observatory Lockup procedure is posted on the main exit door.

RASC National Representative Report
By Bob Nelson
New RASC National Office Administrator Jean Wilson replaced Jo Taylor.
Two new Quick Reference Guides have been placed on the RASC National website. The first describes how to develop effective outreach programs; the second is a guide to writing project proposals for consideration by National Council.

AllSky Camera/Meteor Monitor Report
By Glen Harris
The Mile 108 AllSky camera installation at Mile 108 Elementary School has been deferred to at least the end of January 2011 due to the slow progress of mechanical upgrades at the school.
Various observatory AllSky computer problems have been resolved.

Grants & Funding Committee Report
By Gil Self, Bob Nelson
It is not yet known if this year's Gaming Grant application was successful.

24" Telescope Maintenance Committee Report
By Bob Nelson
Saturday, December 18, 2010 12:52 AM
Today, Gil and I installed the flip secondary with both hunks of glass (Cass and Newt secondary) attached to the rotor. We checked the operation of the drives, retaining two weights on the big steel ring. The telescope now slews satisfactorily in Dec and RA, (in both directions for each, of course).
The inter-mirror distance is exactly the same as before.
We checked and tweaked the collimation in the Cass mode, and it's just fine. (We left the secondary in the Cass position, of course.)
When the weather moderates, I shall check the visual images on the first available clear night (assuming it's not Christmas).
The next step is to put the Newt focuser back on and try to get the auto guider working with my ST-9XE temporarily mounted.
Recent servicing at the observatory Monday, January 10, 2011
Tonight, Glen, Gil and I went out to the observatory to check out the big scope.
1. We checked the Cassegrain focal plane position and found it to be too far out; the eyepieces needed to be retracted 1 or more cm from the focuser tube and even then, the best focus was near the outer end of travel.
We moved the convex secondary out a couple of millimeters and the best focus now seems to be near the midpoint of the focuser travel – what we want.
2. We checked the collimation of the convex secondary with my laser collimator and it was good.
3. We checked the collimation of the main mirror by looking at a bright star and found (by the out-of-focus test) that it was off. The back nuts were adjusted to make the image true.
4. We checked the slewing, both in RA and Dec. The scope 'gallops' a bit in Dec (downward) -- we'll adjust the balance when we can.
5. We aligned all the finder scopes.
6. I repeatedly moved the flip secondary mirror Cass-Newt-Cass. The star remained within the centre 1/3 of the field. Therefore, we should be able to move back and forth between modes with confidence.
7. Glen got my ST-9XE CCD camera working on the dome computer (thanks, Glen) and we took images using the bottom port. (This was without the telecompressor lens.)
Now for the really good news: I analyzed the star images back home with MIRA. The full-width at half maximum was 8.05 pixels. Since the pixels are 20 μm = 0.020 mm that means 0.161 mm fwhm. The plate scale in the Cass mode is 27.5"/mm so therefore, the fwhm was 4.43" Sunday night. This image size is par for the course with this telescope, and I have the records from 1999, 2000 and 2001 to prove it. Then, I found that image sizes varied (depending on the night) between 3 and 5 arcseconds. On one very special night, I got down to 1.6" – if memory serves -- but that was very special. So I submit that we can conclude that the 24" telescope is back in operation – for the Cassegrain mode. In the near future, Gil and I will install the Newtonian focuser and test my camera there. I hope this helps allay any concerns.

7. Old Business
- As of this date, no action had been taken towards purchasing a $100 Gift Certificate to pay the neighbour for snow plowing the observatory lot approved at thePGC106 (Oct 6) meeting.
- A proposal/motion with cost and schedule to re-coat the secondary mirror as discussed by the Telescope Committee at the PGC106 (Oct 6) meeting has not been brought forward yet.

- Brian visited the Royal Bank and had a meeting to begin updating the bank records regarding signing authority and officers/directors list. Once the last executive member takes care of business, this item will be completed.
- The 17 BOG's the club purchased for the 2011 NOVA course arrived and were delivered to the observatory.
- Brian is holding off on producing more binders until the NOVA class size is determined. 12 are on hand at the observatory already.
- The Geminid meteor shower on December 13, 2010 was not visible due to cloudy skies.
- The Lunar eclipse was partially visible for short periods of time through some breaks in the heavy cloud cover. The forty visitors who attended were able to see the eclipse from other parts of the continent via an internet feed projected onto the classroom screen.
- A work bee held on November 13, 2010 to clean the observatory was a success. Thanks to all who contributed their time and energy. Activities included repairs to the soffits and gutters, organizing the basement and tools, repairing tables, modification of the furnace to accommodate the filter properly, mounting red dot finders on the two larger Dobsonian telescopes, sweeping and vacuuming all floors, washing of the classroom and hallway floors, cleanup of the room at the end of the hallway, removal of all garbage and clutter, checking the integrity of the crawl space drain pipe mesh, repair of the lower slot door cable, and a check of the grounds for litter. The outside Christmas lights were put up.

8. New Business
- Blair will extract the 'member's interest' data from the most current membership list and present it for discussion at the next business meeting.
- A proposal by Wayne Sanders for a new way to drive the dome has been tabled pending the results of the installation of the new friction drive wheel fabricated by Jim Van Doren.
- The driveway culvert should be extended at least 3m to the west and east to eliminate the hazard of school buses backing into the ditch as they attempt to enter the parking lot. Work required would be to obtain culvert and collars, redirect the existing drainage further to the west, sandbagging both ends of the new culvert configuration, extending the fence west from the gate post or installing bollards to prevent large vehicle access, gas line locates, obtaining, installing, and compacting appropriate fill material, hiring a Bobcat or appropriate excavator, renting a compactor, and obtaining MOTH or Regional District permit approval. This work would be done following the end of Spring runoff.

Motion: To proceed with creating a spending proposal to address the extension of the driveway culvert at least 3m to the west and east.
Moved: Glen Seconded: Blair Carried

- Motion: That the Prince George 24" telescope conversion from Cassegrain only to Cassegrain/Newtonian be recommenced, and completed no later than July 15, 2011. Ongoing improvements shall not impact the regular use of the telescope for Open Houses, tours, etc.
Moved: Glen Seconded: Bob Carried
Completed means:
- Installation of the Newtonian focuser and CCD camera mount assembly
- Installation and testing of the Newtonian focuser controller (either hand pad control or through the computer)

- Collimation of both Cassegrain and Newtonian systems resulting in flawless Cassegrain and Newtonian operation
- CCD9XE camera installed temporarily for testing purposes at the Newtonian position
- Filter wheel installed at the Newtonian position
- Filter wheel controller installed and tested
- Auto guiding verified
- CCD9XE image acquisition proven, both visual (pretty pictures) and data, at the Newtonian position
- Final balance with the CCD camera or suitable dummy, and filter wheel at the Newtonian focus, and CCD6 camera attached to the four shooter
- Alignment of the CCD four shooter port
- Testing of the CCD6 camera attached to the four shooter
- Confirmation of focus with all usable lenses at the four shooter
- Flip operation verified and re-verified
- Guard ring installed
- Dome mapped and documented for potential mirror/guard ring interference with obstructions, and warnings posted at critical impact areas
- Detailed written instructions c/w images on how to flip the mirror
- Detailed written instructions on CCD image and data acquisition
- Installation and testing of relevant software
- Realignment of all finder scopes
- Installation of limit switches
- Orientation sessions for image acquisition and use of the CCD cameras
- Repairs and maintenance to any equipment associated with the day to day operation of the telescope
- Spending proposals on cost items to complete any of the above to be submitted for approval at the February 9, 2011 business meeting.

- Motion: To rescind the motion made on October 6, 2010 to pay the neighbour to the east of the observatory $100 in recognition of snow plowing. The wording was changed from $100 to a $100 gift certificate at the business meeting on November 10, 2010. To date, no plowing has been done at the observatory.
Moved: Glen Seconded: Ken Carried

9. Date, Time, and Location of next Board of Directors Meeting
Motion: That the next Board of Directors meeting, PGC109, be held on Feb. 9, 2011.
7:30 pm at SpeeDee Your Office Experts. Please submit all agenda items to Brian by Feb 2.
Moved: Blair Seconded: Gil Carried

10. Adjournment
The meeting was adjourned at 9:05 pm