

FROM THE PRESIDENT

Les Nagy

"Weather. Astronomy. Seems like we are having a little too much of one lately. Myself and 3 other RASC Hamilton members traveled about 2,600 kilometers south of Hamilton to try and get some more astronomy during the Winter Star Party in Florida. It was mainly successful and we had an overall good time. But..... we still managed to see more clouds than we wanted.

So what do we do when we have more weather than astronomy? Well for me, computers have been a big help in doing astronomy even during bad weather. There are space probes at Saturn and on Titan sending back images and information for us to see. Mars has two representatives of the planet earth wandering around on the surface letting us be there virtually. There are many ways we can use computers to help curb our astronomy cravings.

The spells of bad weather we have been having give us "opportunities" to tune up our equipment and learn how to make things run smoother. Have a look at your telescope and see if it needs some cleaning, adjusting etc. Many times we use our equipment in the worst conditions and then put it away without looking at it until the next time. Speaking of which, the Hamilton Centre will be holding some workshops on things like this over the next year, many of them I hope. Things like telescope collimation, optics cleaning, mechanical maintenance and the like will all be subjects for these workshops. There will also be workshops on CCD camera operation, imaging processing, observing techniques and tools and more. These are all things that are good things for us to get together to do during the bad weather times.

If anyone has requests for workshop subjects or wish to present one themselves, please get in touch with a board member or myself at [president\(at\)hamiltonrasc\(dot\)ca](mailto:president(at)hamiltonrasc(dot)ca) or 905-388-1011.

Limeridge Mall Display

Come out and join us on Saturday, April 16th, 2005 as we celebrate "Astronomy Day" in Hamilton. From 10:00 am to 4:00 pm, the Hamilton Centre of the Royal Astronomical Society will have several telescopes and equipment on display at the Community Booth in Limeridge Mall. We will be distributing handouts sent to us from Astronomy Magazine and Sky Publishing, along with a few Sky News magazines. We will be collecting ballots for a free annual subscription to Astronomy Magazine. If you have time, please support our club at the mall. Hope to see you there!

If you have any questions or suggestions, please feel free to contact Patricia Marsh, Public Education Director at [gassmann\(at\)mountaincable\(dot\)net](mailto:gassmann(at)mountaincable(dot)net) or 905-573-8808. Keep Looking Up!

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THE HAMILTON CENTRE OBSERVATORY:

From Highway 6 North of Hamilton.

Take Concession 7 East eastbound, cross Centre Road. Continue on 7E, keep going past railroad tracks, to near end. Observatory driveway is on the right just before the stop sign.

From Mississauga or Milton.

Britannia Road past Highway 25, Guelph Line, Cedar Springs Road to End. South 1 Block on Milborough Townline to Concession 7 East. Our gate is on the south side of the last lot (south west). The observatory phone number is (905) 689-0266.

FROM THE EDITOR

Ev Rilett

Gemini – With Saturn prominently stationed in Gemini I felt this would be an excellent constellation to concentrate on this month.

CASTOR “The Horseman” the more northern bluish star and POLLUX “The Boxer” with more of a golden tint. Pollux although it is the Beta star is one of the few stars which is actually brighter than the alpha star, in this case Castor. It has been suggested that one of these stars has changed brightness over the last few centuries.

In Greek mythology, Castor and Pollux were venerated by mariners and invoked for protection against storms and perils of the seas. In the legend of the Argonauts they are

guiding and protecting the adventurers in their quest for the Golden Fleece. Shelley’s version of the Homeric *Hym to Castor and Pollux* refers to this ancient tradition:

*“When wintry tempests o’er the savage sea
Are raging, and the sailors tremblingly call
On the Twins of Jove with prayer and vow....”*

In Western tradition the Horseman and Boxer brothers were believed to guide Roman armies to victory, a tradition made famous by Lord Macaulay’s account of the famous Battle of Lake Regillus in his *Lays of Ancient Rome*.

Another well known reference is in Tennyson’s *Maud*:

*“It fell at the time of year,
When the face of night is fair on the dewy downs,
And the shining daffadil dies, and the Charioteer
And a starry Gemini hang like glorious crowns
Over Orion’s grave low down in the west,
That like a silent lightning under the stars
She seemed to divide in a dream from a band
of the blest...”*

Take an interest in Gemini this month. Saturn is a golden jewel within this constellation shining a beautiful golden hue, adding it’s brightness to that of Castor and Pollux, the twins.

(From Burham’s *Celestial Handbook*)

SCHEDULE OF EVENTS

*Hamilton Steam Museum
hosts our General Meeting on
the 1st Thursday of each
month*

MARCH

*03 - General Meeting – Peter
Jedicke – Hawaii Trip*

*05 – Messier Marathon &/or
Movie night*

*10 - Board Meeting – 8:00 pm
at the Observatory*

*12 - Workshop – Steve Barnes
on Astrophotography – tripod
& piggy back – 8:00 pm @ the
observatory*

*Observing Nights – 2nd & 4th
Fridays at the Observatory*

APRIL

07 – General Meeting

*09 – messier Marathon &/or
Movie night*

*14 – Board Meeting @
Observatory*

*16 – Astronomy Day @
Limeridge Mall 10:00 – 4:00 –
Held at the Community Booth*



*Photo by
Steve
Barnes*

YOUR BOARD OF DIRECTORS

President - Les Nagy - 905 388 1011 – [president\(at\)hamiltonrasc\(dot\)ca](mailto:president(at)hamiltonrasc(dot)ca)
Past President – Steve Barnes – 905 631 9944
Vice President – Colin Haig – 416 729 7073 – [astronomer\(at\)cogeco\(d0t\)ca](mailto:astronomer(at)cogeco(d0t)ca)
Treasurer – John Williamson – [John.Williamson\(at\)sympatico\(dot\)ca](mailto:John.Williamson(at)sympatico(dot)ca)
Secretary – Victor Grimble -
Recorder – Roger Hill – 905 878 5185 – [Roger.Hill\(at\)simpatico\(dot\)ca](mailto:Roger.Hill(at)simpatico(dot)ca)
Observing Director – Ken Lemke – [cfs\(at\)worldchat.com](mailto:cfs(at)worldchat.com)
Orbit Editor – Ev Rilett – 905 319 8864 – [erilett\(at\)cogeco\(dot\)ca](mailto:erilett(at)cogeco(dot)ca)
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Public Education – Patricia Marsh – [gassmann\(at\)mountaincable\(dot\)net](mailto:gassmann(at)mountaincable(dot)net)
Observatory – 905 689 0266

C14 Modification

by Kevin Hobbs



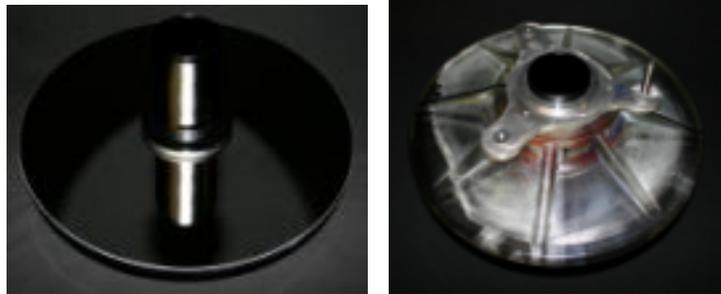
With every hobby there seems to come a time when the law of diminishing returns applies. It all seems pretty simple ... all I want to do is point my camera upward, open the shutter for twenty minutes or so and have beautiful pictures appear. Fat chance!!! Even on a mount as good as the Paramount ME, it still isn't easy, especially if you're shooting prime focus through an OTA with almost 4m of focal length.

The first thing you find out is that creating something as simple as a T-Point model for the mount using an SC telescope such as the C14 just isn't possible. There is this little issue about non-repeatable primary mirror flop errors. This is why the club's RC telescope is so nice, the fixed primary mirror means no mirror flop. But, for a modest sum, an SC telescope can be modified to create an acceptable substitute.

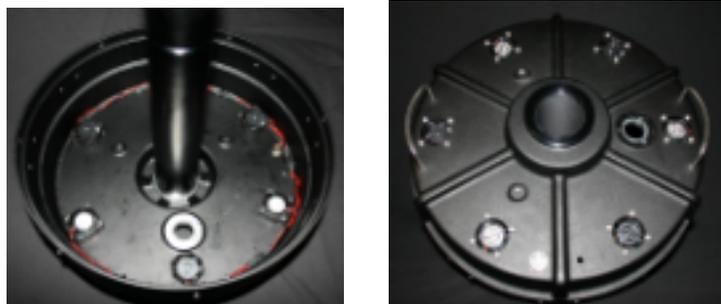
Software Bisque / New Mexico Skies developed a dandy little device called a locking collar (below – left) designed to almost completely eliminate mirror flop. It accomplishes this by deforming the mirror sliding tube so that it is pinched to inner fixed tube (rear cell). It has a few small drawbacks like having to totally disassemble the OTA and add holes to allow adjustment (below – right). Operationally the primary mirror is "locked" in one position (tool adjustable) set precisely for an individual accessory (camera, etc).



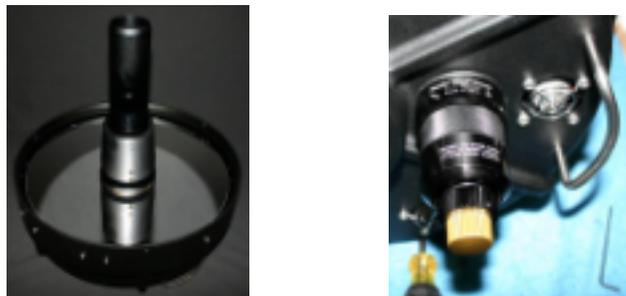
The 2 images below are the front and rear view of the C14 primary mirror.



The 2 images below are of the C14 rear casting showing the installation of 6 fans, three blowing in and three blowing out for better flow and uniformity. This should provide an effective method for rapidly equalizing the temperature of the primary mirror with the rest of the scope and ambient temperature on those occasions when rapid temperature are encountered.



Below – left shows a picture of the primary mirror reinstalled in the rear casting with the locking collar installed. Below – right shows the Feather Touch Microfocuser.



Cont'd page 4

The goal of the locking collar is eliminate non-repeatable mirror flop that negatively effects telescope pointing modeling and subsequently errors in absolute pointing accuracy. This will also prevent mirror flop from spoiling long exposures, especially as imaging near the meridian when using a German Equatorial Mount.

The next step will be to lock down mirror, create a new T-Point model, and then compare the overall pointing accuracy with previous results to determine the effects of the modification. After that, some clear skies would be a welcome sight to hopefully reap the rewards this labor.

<http://home.cogeco.ca/~hobbservatory/>

Mercury - An Observing Challenge

By Carl Roussell

Mercury is the closest planet to the sun, and goes through phases much like our moon. At inferior conjunction (Earth-Mercury-Sun line), Mercury is at new phase. During a morning apparition Mercury goes from a thin crescent (dia=10") to a gibbous phase. The planet appears full phase (dia=5") when at superior conjunction (Earth-Sun-Mercury line). When observed during an evening apparition, Mercury moves from a full phase to a thin crescent. Then the cycle repeats itself.

Being so close to the Sun, Mercury never gets farther than 28 degrees. It can be a very difficult object to find and study. The upcoming March apparition will be one of the best times to observe Mercury this year. A 76mm telescope at 100X should suffice to follow the phases changes. Telescopes in the range of 90mm to 100mm at 200X will allow one to see possible features on the planet disk. Red filters (W25) will help with the dark features. Orange (W21) and light red (W23A) filters will accentuate the light features. The W21 and W23A are also good for smaller

telescopes because of higher light transmission.

There are a few aspects to watch for when observing Mercury. When observing the crescent phase, note the shape of the horns. At times the southern extent will appear blunted (perhaps the presence of shadowed craters at the poles), while the northern cusp seems most often quite pointed. The terminator (dividing line between light and dark), may have irregularities. Crater shadows or the presence of dark features may cause an indent. Sunlit highlands may create a slight bulge in the terminator. If you are lucky, you may be able to see dark streaks and light spots (albedo features) on the disk of the planet. The best time to look for markings is when Mercury is presenting a thick crescent phase with an angular diameter of 6" or greater. Again the use of coloured filters will enhance the appearance of any features.

Before going on, a couple of definitions may prove useful. Albedo is the measure of light being reflected by a non-luminous object (such as a moon or planet). An albedo feature is a region that is markedly lighter or darker than it's surroundings. These features may or may not be related to the topography or geology of the region. Having said that, the International Astronomical Union adopted an albedo map created by Murray and Dolphus in 1971. The naming of these features was based on nomenclature devised by Antoniadi.



Messenger spacecraft is due to arrive at Mercury in 2011, and engage in an extended study of the planet from orbit. Until then, amateur planetary groups such as the Association of Lunar and Planetary Observers (ALPO), the British Astronomical Association (BAA), and others are attempting to prepare the most accurate albedo maps to compare with the Messenger images. With this goal, the technology available to the amateur, and pro-am collaborations, this is truly an exciting time to be a Mercury observer.

In April 2003 I was using a 15cm Newtonian. Having not decided at that time what area of astronomy to specialize in, I made an observation of Mercury on the 13th of that month. A dark patch was noted on the terminator, this proved to be Solitudo Criophori. Five drawings were completed for that apparition, with marking being seen on one other occasion. I was hooked on planetary studies.

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Mercury – con't

The following month I joined ALPO, and have continued with my Mercury studies. Within the last two or three years it has been determined that some of the dark features may actually be large basins on the surface. Several of the bright patches are now thought to be the ejecta blankets of very large or bright craters.

Two observations done by me in January, 2004, were used in support of more experienced observers to determine that the bright albedo feature, Pieria, is the ejecta blanket of a crater imaged by radar in 2002. Pieria is on the portion of Mercury not imaged by the Mariner spacecraft in the 1974-75 fly-bys.

I hope that some of you are able to get out and observe Mercury this month. If you have any questions, or are interested in simultaneous observing, you can contact me at [Roussellcar\(at\)aol\(dot\)com](mailto:Roussellcar(at)aol(dot)com). Be sure to check out the ALPO website

[The Solar Disk in a Nexstar 11" GPS on 25 February 2005, 12h 20m UT](#)

Mike Spicer

I'm oft advised the Sun wears spots
Upon His yellow hide;
Large, black and grey they are
All say, and on His back they ride.

A fortnight 'cross His disk so far
They trek and swell or fade,
But always do some freckles mar
His golden face by day.

In fact astronomers announce
>From time to time - no lies!
That they see spots upon His disk
With shielded naked eyes!

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[Observing Opportunities](#)

Ken Lemke

With the arrival of March we start to anticipate milder weather and longer observing sessions. The days around New Moon are always a good time to search for those elusive deep sky objects. In March New Moon falls on the 10th and in April it falls on the 8th.

Speaking of elusive objects, the period of March 5 - 15 is a good time to look for fleet little Mercury. The best observing time for 2005 is centred on March 11 - 13. On March 11/05 look in the west around 6:30 PM and about 5 degrees to the lower right of a very thin crescent Moon, you'll see Mercury. Mercury will be about 18 degrees above the horizon.

Saturn remains high overhead and will make for great observing on any night of good seeing. Jupiter clears the horizon around 8:30 PM at the beginning of the month and at month's end should be well above the horizon and the poor seeing caused by our atmosphere by 9 PM. On pages 59 - 61 of the March issue of Sky and Telescope there are charts showing the positions of Jupiter's moons, Red Spot transit times, shadow transits and other phenomena of Jupiter's moons. For example, on the evening of March 30, at approximately 10:11 PM Europa's shadow followed by Europa itself will transit across the face of Jupiter.

On the evening of March 25 around 9 PM, Jupiter will be just below a full moon. For sharp eyed, early birds (approx. 5:30 AM EDT) on April 3/05, in the South East you can catch a glimpse of Mars about 8 degrees to the upper left of

Con't page 6

[QUIZ YOUR KNOWLEDGE](#)

Last month we had comet questions – here are the answers.
- Halley's Comet last came back in 1986. What were the dates of its last two previous returns. (1910 & 1835)
- Name the brilliant comet of 1858, usually said to be the most beautiful ever seen. (Donati's Comet)
- Who discovered a – Faye's Comet, b – Encke's Comet, c – D'Arrest's Comet (a - Herve Faye, 1843, b- Pierre Mechain 1786, c- Heinrich Ludwig D'Arrest 1851)

This month's Quiz

- In 1543 a Polish astronomer published a book in which he claimed that the Earth moves around the Sun. Who was he?
- Name the odd one out: Hubble, Ryle, Hale, Shapley, Curtis.
- T/F – Minor Planet No. 518 is named after a cake.

Check next month for the answers.

(all questions taken from Patrick Moore's Astronomy Quiz Book)

Ob. Opportunities – con't

a waning crescent Moon.

NOTE: Daylight Saving Time begins on April 3/05

Members vacationing in the South Eastern United States will see the partial phase of an Annular Solar Eclipse on April 8/05.

If you missed February's photo op of the Moon and the Pleiades, there is another opportunity on Mar 15/05 with a crescent Moon five degrees to the upper left of the Pleiades. On April 11/05, a crescent moon will be just over a degree from the Pleiades.

If you like a challenge, Asteroid Herculina will be tracking just below Castor (in Gemini) during the month of March/05. A finder chart can be found on page 61 of the March issue of Astronomy magazine.

On clear moonless nights, here's a couple of objects to track down with binoculars. Locate Pollux (in Gemini) and draw an imaginary line to Regulus in Leo. Now, imagine the mid- point of this imaginary line and look at the area just below the mid-point and you should see a large patch of stars. This is M 44, an open cluster referred to as the "Beehive". (M 44 is a fun object to explore with a small aperture telescope. Next locate Sirius, the alpha star in Canis Major and scan about two binocular fields to the left (east) and you should see another open cluster (M 47). In good skies you may also see a fainter open cluster - M 46 (east of M 47).

The final observing opportunity is Polaris. I find we (myself included) often overlook the brighter stars, so if you've never looked at Polaris with a telescope, I would encourage you to do so. You'll find it has a nice 8th magnitude companion. Have you

looked at Alcor-Mizar with a telescope? More surprises if you haven't.

In closing, I would like to remind you of our Messier Marathon nights on Mar 5/05 and April 9/05. If we are blessed with clear skies, we start at dusk and try to go all night to observe as many of the Messier objects as possible. If clouded out, we'll console ourselves by watching a movie. Watch the e-mail announcements for more information.

Enjoy the Night Sky

Solar Disk – con't

Bespectacled I am and shy
Of looking at Sol's rind;
His radiant face effulgent so,
Would in a trice me blind.

But every theory needs a test
For once the world was "flat".
Though every other voice says "spots"
I can't leave it at that.

I have a mighty telescope
Celestron (it's so quiet!)
Resolved to test for solar spots
I bought a filter - try it.

The filter on my telescope
Orangeified the sun
So one can see those darkened spots
And count them, one by one.

-15 degrees it was
When I watched Sol today
At dawn as out of mist and cloud
He rose in grand array.

Take note: on February 25th
2005 - today
That not a single spot I saw,
Not black, not even grey.

A dozen eyepieces I used,
A binoviewer too,
The sun was beautiful, but bare
A spotless orange-hue.

I'm oft advised the Sun wears spots,
I looked but didn't see them
I wonder if such "spots" are just
Small specks upon the eyepiece - dust!

[LOANER EQUIPMENT](#)

Thinking of buying your first telescope but wondering what kind to get? Try a beginner's night at the Observatory or ask Mike Spicer about his "loaner" 5" telescope which is easy to set up and very easy to use. Mike is offering newer members of the club one of these scopes to try out for a month or so. Mike also has an electronic eyepiece for video astronomy.

Contact him at Mike Spicer – 905-388-0602

[DeBeneEsse2001\(at\)AOL\(dot\)com](mailto:DeBeneEsse2001(at)AOL(dot)com)

[PUBLIC EDUCATION](#)

Public Education is very important at the Observatory. Among other events, our Centre is involved with Girl Guides, Scouts, and other groups interested in a guided tour of the night sky. We generally give a brief discussion, a slide show or other visuals, and then a tour outside with two or three different scopes. This gives the guests a chance to decide for themselves which type of telescope they like best.

If you are interested in helping out on these special nights, please contact me at the number listed below. It is wonderful to see the look on a child's face the first time they look through a telescope. Also, if you know of a group that may be interested in an evening under the stars, please call me for details and a booking. Clear Skies!

Patricia Marsh, Public Education
Director, Hamilton Centre, RASC
905-573-8808

[gassmann\(at\)mountaincable\(dot\)net](mailto:gassmann(at)mountaincable(dot)net)

[MONTHLY SWAP MEET](#)

Feel free to bring in any astronomical items you no longer need in your collection. It might be just what someone else is looking for. A table will be set up each month for items to be swapped that evening. So, clear out that closet space and make room for some new, slightly used astro ware.

[LIST SERVERS](#)

There are two list servers available for members to receive and contribute with informative conversation. Our local centre list. Get in touch with Mark Kaye (see Board of Directors List) and he will sign you up.

There is also the national list. Members must go the national web page to sign up for. <http://www.rasc.ca/computer/rasclist.htm>

[Hamilton Centre Board Minutes](#)

Thursday, January 13th, 2005 at the L. V. Powis Observatory, Flamborough, Ontario.

Board Members present:

Les Nagy	President
Colin Haig	Vice President
Roger Hill	Recorder
John Williamson	Treasurer
Mark Kaye	Curator
Mike Spicer	National Representative
Ev Rilett	Orbit Editor
Steve Barnes	Secretary (Interim)
Ken Lemke	Observing Director
Victor Grimble	Public Education
Patricia Marsh	Councilor at large
Board Members Absent (with apologies):	
Gary Colwell	Maintenance Director
Guests:	Grant Maguire.

The meeting was called to order at 8:04 pm.

Motion 2005-01-16-A: That the minutes of the December 16th, 2004 Board meeting be accepted, with the following amendments: 1. Motion 2004-12-16-G was made by Colin Haig and seconded by John Williamson. 2. Mike Jefferson should read Mike Spicer. 3. Motion 2004-12-16-S should read "by the end of the year" not "prior to the next Board meeting" 4. The Raffle raised \$70.00 5. A Letter of complaint was received from Mark Kaye in Item 2 of the Presidents report. 6. Nothing further will be done with the brochure at the moment due to the cost. 7. In the report on the Telescope Committee, the word "implanting" should be replaced by "implementing". The motion carried.

Directors Reports:

Recorder: Roger Hill had nothing to report.

Treasurer: John Williamson reported that \$103 was raised by the raffle at the previous General Meeting. Got a letter from the Hamilton Wentworth Police regarding registration of our Alarm Force alarm system. Motion 2005-01-16-B: That we pay \$48 to register our alarm system with the Hamilton Wentworth Police. The motion carried.

It was noted that the membership prices as listed on the Centres web are

[A NEW LOOK FOR OUR WEB SITE](#) – ANY IDEAS. A NEW FRESH LOOK IS IN THE AIR AND OUR WEBMASTER, SCOTT BARRIE IS LOOKING FOR IDEAS. THIS SITE IS FOR EVERYONE. LET'S MAKE IT SOMETHING SPECIAL. Contact Scott at [scottbarrie\(at\)homerroom\(dot\)ca](mailto:scottbarrie(at)homerroom(dot)ca) or call him at (905) 693-1469.

incorrect. To make everything consistent, the web site should read: Ordinary \$63, Youth 31.25, Associate \$30. A note will be sent to Scott Barrie.

Curator: Mark Kaye reported that the locks have changed. The combination lock that was taken from the front gate has been found.

Motion 2005-01-16-C: That the lock be put back on and see lets see what happens. The motion carried.

Publicity: Victor Grimble stated that he unsuccessfully tried to get hold of Girl Guide leader who had requested a tour. Similarly, neither of the Hamilton Boards of Education had responded.

Observing Director: Ken Lemke reported that there will be a Learn to Use Your Telescope night for the general public tomorrow. Les, Ken, Grant and Andy Blanchard (possibly) will attend. On January 22nd, there will be an Astrophotography workshop dealing with piggyback and tripod methods. It will be run by Steve Barnes. The donation box has been installed. Events of astronomical interest will be announced on the Hamilton RASCal list, not the announce list.

Vice President: Colin Haig reported that he did not have a lot to report. The final secretary box will be handed over to next secretary.

The centre now has a fireproof box that was donated by Colin. A Vote of thanks from the Board was offered to Colin. Follow-up regarding status of by-laws - the Hamilton Centre is covered under Corporations Act of Ontario under the purview of the Ministry of Consumer and Business Services. Since we are not federally incorporated we do not

need to submit the By-Laws to the Federal Government. It should be noted that officially, the Hamilton Centre is not a charity, but a corporation without share capital. Colin has ordered a book from Ontario government that helps Non-profits run properly. No clarification yet on if we have to submit by-law changes to Revenue.

Canada. Colins lawyer suggested that the By-Laws be revised to state that a minimum of 3 Board members are required. Further to some more research, the Centre does do not need to have a professional CA do the audit, but whoever does it must not be a member. Colin suggested we follow up with Clement Feierabend, a CA based in Hamilton. He will give an approximate cost once a couple more questions have been answered.

Councilor at Large: Mike Spicer - Mike Spicer had nothing to report

Publicity: Patricia Marsh wondered if we have a letter of welcome? The answer was affirmative, and it should be in the secretary's files.

Orbit Editor: Ev Rilet stated that Microsoft Publisher 2003 wouldn't install on her computer, but that Colin has an older copy. She Wants Articles. She will be sending out announcements twice as a friendly reminder of Orbit deadlines. She reminded everyone to submit articles as text files or rich text files but without formatting.

Telescope Scheduling: Interim Scheduler Steve Barnes noted that he has some observing time request forms, and that they are available on the web site, too. No completed forms have been received. Steve has drafted a letter to the Board stating that he will be making a motion at the next General Meeting to remove Mike Spicer from the Board. The Secretary draft a letter to be sent to the membership, informing them

that a vote will be held at the February meeting. All parties were officially informed.

President: Les Nagy reported that our scheduled January speaker, Hamilton Centre member Ray Badgerow did not show up at the January meeting. Mr. Badgerow was contacted a few days prior to the January meeting to determine if there were any special requirements for his talk. He gave no indication that he would not be speaking to the Hamilton Centre. Mark Kaye offered a talk in his stead. A Vote of Thanks offered from the Board to Mark for this effort. The fate of the seven trees beside the observatory is still in limbo due to the Christmas Holidays being a poor time to contact a bureaucracy. Les provided a copy of the invoice for the projector. The original was sent in for a rebate. The cost of the telescope was \$24435.30, the Paramount was \$10,890.60, with \$164.60 for the counterweight bars. Adding in the Robofocus upgrade, and the total cost of the telescope, mount, finder, etc. was \$41990.25, tax included.

Old Business: Victor Grimble tendered his resignation from the Public Education portfolio.

Motion 2005-01-13-D: That Mr. Victor Grimble be appointed to the position of Secretary. The motion carried.

Mike Spicer has returned all the Secretaries items and accoutrements. This includes the key to the lock box.

Motion 2005-01-13-E: That Patricia Marsh be appointed to the Public Education portfolio. The motion carried.

Motion 2005-01-13-F: That motion 2004-12-16E be untabled. The motion carried.

Mr. Steve Barnes spoke in rebuttal to reply to the letter of complaint from Mr. Ray Badgerow.

Motion 2005-01-13-G: That a letter be sent to Mr. Ray Badgerow: 1. We have heard the complaint and we have heard the rebuttal. 2. further action, but thanks Mr. Badgerow for the letter.

The motion carried.

Motion 2005-01-13-H: That all further business be tabled and that the meeting adjourn. The motion was defeated.

Motion 2005-01-13-I: That item 4 on the agenda under old business: "The complaint against Les Nagy by Mike Spicer" be tabled. The motion carried.

Desert storm cover. Has been installed. The funds necessary were raised solely by concerned members who donated the funds necessary. An invoice was requested from Steve Barnes.

National Representative election: The membership needs to be notified that there will be an election for the position of National Representative of the Hamilton Centre at the February General Meeting. Furthermore, it must be in separate notice to any other notifications from the Board.

Fundraising: Patricia Marsh suggested that since previous years had great success with a Garage Sale that we have one in April? Further, she proposed a car wash at the Canadian Tire, Queenston Mall location be held in May or June. She proposed that there be a "Swap Table" at each and every monthly General Meeting. Lastly, there will be a Mall display event at Limeridge Mall.

Trillium Grant: Grant Maguire offered to help with the Trillium Grant report. The Secretary should send a letter to the Trillium Foundation acknowledging the receipt of extension that was reported via email. Grant will need all invoices or copies for all the equipment purchased.

Motion 2005-01-13-J: That all invoices, checks, related trillium correspondence regarding reporting, and an accounting of the trillium money be prepared and disseminated to the Board prior to the next Board meeting. The motion carried.

Banquet: The banquet will be held on May 14th. Grant reported on one idea of getting a hall and hiring a caterer.

Motion 2005-01-13-K: That the Hamilton Centre banquet be held on or about May 14th, and that John Nemy be invited to speak. The motion carried.

Next Board meeting

February 17th, 2005, at the Leslie V. Powis Observatory.

Motion 2005-01-13-L: That the meeting be adjourned. The motion carried.

Respectfully submitted by Roger Hill, Recorder.