

The Official Publication of the Hamilton Centre RASC

September 2005

Volume 38, Issue 7

ISSN 1191-2774

From The President

Les Nagy, President

Summer is over and this means two things to me. It is bad that warm temperatures are leaving us. It is good that nights are longer so we can see the stars longer. I face this dilemma every year as everyone does, but I particularly dislike winter more than most people I know. In the past, this has curtailed my enjoyment of the night sky for many months of the year, but it doesn't have to be that way this year!

Our 16" Ritchey-Chretien is running beautifully and we are getting comfortable with the CCD camera. With a roll off roof being installed to replace the dome we can all stay warm downstairs and run the telescope remotely. I won't have an excuse to not do astronomy this winter. The images that are possible with the scope and the CCD are stunning. If you then take into account that a person can be up and running within _ hour of arrival then you can understand the excitement I believe we will all feel in being able to really make good use of our observatory.

The Trilllium Foundation, the body who funded our telescope, has made their

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final visit and inspection to follow up on our agreement. They are more than happy with what we have done with our grant, and we have been invited to apply for another grant. We have many possible uses for another. We could pay to get high speed Internet access run to the site and be able to provide live feeds of information and images to classrooms, media, provide services to higher education, etc. The really interesting prospect would be to have a remotely operable telescope. There are many possibilities for another grant so lets start hearing ideas.

As a final note, I would like to thank all who have participated this year to help make my job easier as President.

From The Editor

Ev Rilett

LYRA – one of the three bright stars making up our Summer Triangle is the constellation I'll focus on this month. It can be found overhead around 11.00 pm dst. Lyra's alpha star is VEGA, meaning the "Harp Star". Some 12,000 years ago, Vega held the all important position of the North Star, 3000 years ago held by Thuban in Draco and is now held by Polaris in Canis Minor. The constellation Lyra, as it rotated very slowly in a circumpolar motion, represented the slow movement of a turtle. Lyra is named for the "Little Tortoise" or "Tortoise Shell" taken from the legend that Hermes created the first harp from the empty shell of a tortoise.

The Lyre is associated with many gods and heroes including Apollo, Mercury, King Arthur, the Biblical David & the Greek poet Arion.

Longfellow in his "occultation of Orion" speaks of the heavenly lyre:

"... with its celestial keys,
Its chords of air, its frets of fire,
The Samian's great Aeolian lyre,
Rising through all its sevenfold bars,
From Earth unto the fixed stars..."

The Lyre has been represented on silver coins of the Aegina about 400 BC. The music of the Lyre in Greek legend cast such a spell that Orpheus charmed every living creature with it, even persuading the guardians of the Underworld to allow him to rescue his beautiful wife Eurydice from the Land of the Dead. Having been warned to cast no glance upon her until the couple had safely reached the Upper World, Orpheus unfortunately lost Eurydice at the last moment by disobeying the fateful order. The story is one of the most popular of the Greek legends and was the subject of the opera *Orpheo and Euridice* by Gluck in 1762, and a ballet by Stravinsky in 1947.



Photos by Steve Barnes



SCHEDULE OF EVENTS

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

September

8 – General Meeting – Member's Night

9 – Sidewalk Astronomy @ Spencer Smith Park in Burlington @ 9.00 pm

15 – Board Meeting @ Observatory

October

6 – General Meeting – Annual Business Meeting

7 – Sidewalk Astronomy @ Spencer Smith Park in Burlington @ 9.00 pm.

13 – Board Meeting @ Observatory

Sidewalk Astronomy

Spencer Smith Park In Burlington @ 9.00 pm

Friday May 20 Friday June 17 Friday July 15 Friday August 12 Friday Sept 9 Friday Oct 7

Always a good time had by all. Members and guests alike. Many people pass through and are able to share an experience for the first time. Bring a scope if you have one or just bring yourself. Everyone can help. Hope to see you there.

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.

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.

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 call for a booking.

Call a board member to find out more. Your help is always welcome.

LIST SERVERS

Check out our newest addition of communications. We have a **new website** found at http://www.hamiltonrasc.ca/new.

Also, we have a new forum linked from the new homepage including an interactive calendar which members can contribute to, found at the following: http://www.hamiltonrasc.ca/forums

Les Nagy will be making improvements to their appearance and function as the weeks go on.

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

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.

October is our Annual
Business meeting and also
BOARD ELECTION TIME. You
can find your nomination form
in Orbit, or on line at
http://www.atsi.ca/raschc/

Please participate. This is your club. Make it the best.

YOUR BOARD OF DIRECTORS

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Mars Rising, Returns

by Harry Pulley

On August 24th, Roger Hill posted that the clear sky clock predicted not only clear and dark skies until moonrise, but excellent seeing as well. I'd been sketching Mars for a few weeks before sunrise in my quick view 80mm f/7 scope but I was hoping to see it in my 200mm scope, or perhaps something even bigger. After some aurora warnings on the list, a few of us decided to come to the observatory to view northern lights and Mars.

Like Mars, I have been away from the centre for most of the past few years. By and large, the Leslie V. Powis Observatory was the same as the last time I'd been there but new security measures and a mosquito vacuum plus the impressive Trillium telescope told me it had been a while since I'd spent time there.

I was the first to arrive at the observatory and it sounds like I missed some aurora while I was getting my car in and setting up my 200mm Vixen catadioptric. Stephan Barnes told me that Paul Tarvydas reported seeing northern lights from up around Georgian Bay and centre president Les Nagy reported seeing some from home around the same time, right when I arrived. We never saw any more that night.

The next to arrive after me was Bert Rhebergen. Like old times we spoke about our most recent solar sketches and the spot group which was responsible for the aurora warnings. Bert set up his 4.5" reflector and opened up the buildings. He gave me a quick look at the Trillium scope, under wraps.

Stephan Barnes and I had discussed meeting at the observatory to look at Mars and he was the next to arrive. He had no scope with him, intending to use the Ritchey-Chretien in the dome. I went up with him to get my first look at the big catadioptric in action. While waiting for Mars to rise around midnight, I was treated to views of M57, the Ring Nebula; M27, the Dumbbell Nebula; M56, a globular cluster in Lyra; NGC 6888, the Crescent Nebula; NGC 6992, part of the Veil Nebula; NGC 6826, the blinking nebula (which doesn't blink in that scope using an OIII: it is right with direct vision); the blue sphere of Uranus; the smaller, darker, blue sphere of Neptune; and a suspected single sighting of Pluto which appeared quite dim even in a fairly large scope.

Les Nagy arrived next. Before heading back up to the big cat, we viewed M57, M56, M27 and Epilson Lyrae, the double-double, in my scope. Seeing the ring in both scopes reminded me of the first time I'd seen it at the observatory in a borrowed 50mm f/12 Tasco refractor.

The Moon and Mars were high enough for viewing but the seeing was quite poor. The clear sky clock was quite badly off. Compared to previous mornings of the usual rock steady views in my little 80mm scope, the out of focus image of Mars danced around in even that small scope. Unfortunately I never got a satisfactory view of Mars in the big RC, between the seeing and some local effects caused by the dome. Even in my scope with half the aperture, the moving cells of poor seeing were quite obvious. Bert's 4.5" may have had the best view of the night. Even with the poor seeing, my 200mm scope beat my 80mm scope for details so I spent about twenty minutes waiting for the very best moments for my Mars sketch (Figure 1).

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Mars Rising, Returns cont'd



Figure 1 Harry Pulley

It was made between 7:11 and 7:29 August 25th UTC in my 200mm f/9 at 200x with a 23A light red filter to reduce the effects of poor seeing, dim the image and bring out the contrast. I estimated seeing to be 3/10 on the scale of the Association of Lunar And Planetary Observers.

At his home, Roger Hill was imaging Mars on and off between 5:30 an 7:00 UTC. Using his 12" SCT at f/20 he stacked 350 of 1000 acquired frames from a Toucam Pro II using Registax 3.0. The result is Figure 2.



Figure 2 Roger Hill

If you look you can see a high rate of correlation even though the seeing was too poor for a steady image and Mars' disc was still relatively small in apparent size, just 13". The major visible features are Terra Sirenum, Mare Cimmerium, Mare Chronium,

Eridania and Phaethontis.

If we'd stayed later we could have viewed the nice, dark Syrtis Major and Minor, Mare Tyrrhenum, Elysium area but we were tired so we left at 4AM EDT. I sent a seeing report to the clear sky clock so they can improve their model. Perhaps a few years of observations will help them tune it.

Overall, it was an evening of great fun with people and a place I'd missed. I'm sure there will be more fun evenings viewing Mars this fall as it heads for its closest approach. Hopefully the seeing will be better next time!



Object: Venus and Jupiter over the mill pond **Date:** September 1, 2005 at 8:40pm EDT

Photo By Colin Haig