

Event Horizon

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There go our skies?

[Editor's note: This article was originally posted to the Bigbang mailing list and is printed here with permission]

by Tom Steckner

Last night I went to a joint Burlington Ward 3/ Ward 6 community meeting hosted by the respective councillors. I went because I heard something about a 400-class highway being put in nearby. I found out more about this plus something else that I thought would be of concern to the HAA and RASC-Hamilton members as well as anyone who cares about the Niagara Escarpment. I'll try to stick to the facts here and not put in any editorial remarks other than to say that both of the developments I'm about to describe will significantly affect the quality of our skies in this area, including the RASC observatory at 7/Millborough.

Issue #1. In June the Ontario government released the Niagara Peninsula Transportation Needs Assessment Study which recommended a new "Mid-Peninsula Highway" (MPH). Originally the MPH was going to stop at Hwy. 6 but was extended last minute through Burlington/Halton. The proposed route runs

just north of Hwy. 5 (i.e., on top of the edge of the Escarpment) between #1 and #2 Sideroad. This route is just south of the RASC observatory - so it won't be much of a dark site any more! Burlington/Halton, while interested in the highway, don't at all want it to go there - i.e., not a case of NIMBY but a desire for a better route. They would like it to either run a more southerly course to hook up with the 403, or else a more northerly route which would hook up with the 401. What concerns Halton and Burlington is that they were not in any way consulted on the proposed route. It was hastily added whereas the rest of the route was planned in consultation with Niagara Region, St. Catherines, Hamilton, etc. It's unclear what one can do at this point since so little is known, but a letter to the area MPP (Cam Jackson) was suggested.

Issue #2. CN wants to develop an "intermodal" facility near Milton. If you don't know what an intermodal facility is, let me explain - otherwise skip to the next paragraph. Lots of freight is moved around the country and by ship in containers - those big steel boxes you often see in pictures of dockyards. One of

these containers can be placed on a truck trailer (two would be far too big) and hauled to its destination. However, often it is more efficient to transport many containers at once by rail (or boat), before delivering it to its final destination by truck. So, to transition a container from one mode of transport (rail) to another (truck), you need an intermodal terminal.

Intermodal terminals are very big, very dusty, and pump out an incredible amount of light at night. There are couple in the Toronto area that I'm aware of (though apparently there are several). One of them can be seen coming down Hwy. 400. It's not so much that you see the facility as it is you can see its light-dome for miles and miles before you actually get near it. There's another one near Hwy. 407 and Airport Rd. That one is only 200 acres in size. The one CN is thinking of building near (south of) Milton is 450 acres in size! They are buying up agricultural land even though there's industrial zoned land not too far away because it is much cheaper. (Because of federal regulations, CN can override local zoning without permission.) It is also being built rather far

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Chair's Report

As Yogi Bera said, "It is deja vu all over again!"

First, I want to thank Marg Walton and all of the good folk of the HAA Council during the last year for their many efforts. I know that they were all out there promoting understanding of astronomy and personally have enjoyed the many days and evenings out under the sun and stars with our observers. Apart from the meetings themselves, which always require lots of preparation, there were our booths at public events and community group get-togethers. The interest in astronomy has never been stronger than it is now.

Second, I am really happy to be back in Hamilton full-time and look forward to engaging in building the group even more. A quick look at a sky calendar will reveal that there is always something happening. This month we have the close pass of the asteroid 1998 WT24 which will be not much further away

than the moon and will get as bright as mag 9.5, as well as an occultation of Saturn. Needless to say, I hope that many of you will attempt to observe these things and tell us of your experiences at the meeting or in Event Horizon!

I would like to encourage anyone who has an interest in talking to the group or getting more involved to speak to me or any of the other Council members. I am sure that you would prefer to see some variety in the speakers at our meetings! At least one of our lectures this fall came about because of a suggestion by a member!

Rosa Assalone deserves credit for continuing to maintain the quality of our Newsletter. Please help her out in the New Year by resolving to write at least one article!

All the best to you and yours during the holidays ahead! To all, a good night!!

Doug Welch

Skies...

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away from any highway, which means several rural (i.e., relatively dark) roads will need expanding - and all the streetlights that that entails. If you want more info, go to <http://www.miltonrail.com/>. The light and dust this thing will pump out will significantly affect our skies. (There are of course all sorts of

other health, safety, traffic, etc., issues - but that's not what this mailing list is about.) If you want to do something about this, go to miltonrail.com and click on the "View my site" dropdown in the upper left corner and follow the appropriate links.

HAMILTON
AMATEUR
ASTRONOMERS

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The HAA is an amateur astronomy club dedicated to the promotion and enjoyment of astronomy for people of all ages and experience levels

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2001: An African Eclipse Odyssey

by Ray Badgerow

I suppose that this is better late than never. As you may know I travelled to Zambia for the June 21st total solar eclipse. Just like my trip to Turkey back in 1999, I travelled with the Calgary Centre and Civilized Adventures for my safari to Africa. I arrived in Lusaka after 2 days with little sleep as we settled into our hotel, the Ndeke. Unfortunately, I had a bad sandwich on the flight to Lusaka and was laid up for several days, although I did go into the city for a few hours.

On eclipse day, we got up early and headed through the deserted streets of Lusaka to our prime site, a small village known as Malambanyama. The government of Zambia had declared Eclipse Day a national holiday so there was

no one around at all. The journey took four hours as we travelled to the northwest of Lusaka, passing several chasers on the way.

We set up in an open soccer field next to the school, and the sky was perfectly clear! Our group distributed several backpacks of school supplies to the headmaster of the school, as the school was damaged by floods several months earlier. The eclipse was very spectacular as there were several prominences easily visible to the naked eye, and I saw the entire 360 degree sunset this time round. The eclipse reminded us of a

“flower in the sky” with the intricate coronal streamers extending several solar diameters from the disk. I may even have seen shadow bands this time? Totality



lasted some 3m37s, and ended with a spectacular diamond ring, this was followed by spontaneous cheers and applause from everyone. This was followed by the traditional champagne and group photo.

The day after the eclipse we travelled to South Luangwa National Park to begin our safari adventure. We stayed at both Wildlife Camp and Kafunta River Lodge and observed the diverse and rich wildlife that inhabits this part of Africa. We observed elephants, giraffes, hippos, lion, baboons, warthogs, crocodile, impala, and much more. The food and accomodations were excellent and the skies were dark and clear. We indulged in a star party one night where we observed such things as Mars, Omega Centauri, Eta Carinae,

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1998 WT24 Flies Past the Earth

This weekend on December 16th the Aten class asteroid 1998 WT24 makes a close flyby of the Earth as it moves about 1 degree per hour across the Perseus starfields. The asteroid will be some 0.012 AU away ,and will be become as bright as magnitude 8.5 thus making it easily visible in amateur telescopes. The following ephemeris is provided:

Date	RA(h,m,s)	Dec(d,m,s)	Mag	r(au)
Dec 14 1:00	06 59 13.92	+ 25 18 05.2	9.89	0.016
6:00	06 48 28.27	+26 56 33.1	9.72	0.016
11:00	06 36 17.03	+28 35 27.7	9.55	0.015
22:00	06 06 32.06	+32 26 47.7	9.22	0.014
Dec 15 04:00	05 45 57.82	+34 42 45.0	9.11	0.013
09:00	05 26 08.98	+36 26 07.4	9.10	0.013
12:00 N	05 13 42.83	+37 22 01.8	9.11	0.013
23:00A	04 24 16.99	+ 40 27 35.7	9.29	0.012
Dec.16 04:00	03 58 06.45	+ 41 27 49.9	9.41	0.012
09:00	03 31 19.05	+41 57 00.3	9.55	0.012
22:00	02 26 15.37	+ 41 46 10.3	9.95	0.012
Dec.17 03:00	02 01 56.45	+ 41 08 56.6	10.13	0.013
08:00	01 39 52.45	+ 40 09 35.1	10.32	0.013
22:00	00 50 29.25	+37 01 54.2	10.83	0.015
Dec.18 03:00	00 35 11.76	+35 46 48.2	11.02	0.015
08:00	00 22 08.06	+34 27 42.8	11.21	0.016
22:00	23 53 18.21	+31 15 38.0	11.69	0.018
Dec.19 03:00	23 44 17.33	+30 09 53.0	11.87	0.019
07:00	23 38 06.28	+29 18 00.3	12.00	0.020
22:00	23 19 19.44	+26 36 36.8	12.45	0.022
Dec.20 00:00	23 16 58.32	+26 16 44.1	12.51	0.022

Ray Badgerow

Travellers Beware!

by *Sheila Overall*

Mars is no place for the faint-hearted. It is arid, rocky, cold and lifeless. Fans of extreme sports, would even find this place, too much for you! Mars is home to the largest volcano in the solar system, the deepest canyon and the worst weather and temperature patterns. It would be the ultimate lonely planet destination. Compared to the temperature extreme fluctuations on Mars, Earth is luxurious.

Mars is a very dry planet compared to Earth. When we look at Mars today, we see a

planet without the deep blue oceans, lakes and rivers that our own planet has plenty of.

If Earth is the "big blue marble", then Mars is the "red dusty one". Many scientists believe that, millions of years ago, Mars may once had much more water than is visible today (as ice). If there is any liquid water on Mars, it is probably under the surface.

If Martians ever existed, they certainly would not be the "little green men" of our imagination. Even the prospect of finding the tiniest forms is very exciting

Vesta Skirts the Hyades

The fourth largest asteroid Vesta is currently high in the sky making a large loop around the Hyades star cluster in Taurus following its opposition on November 27th.

The following coordinates are cover the month of December:

	RA(h,m)	Dec(deg,min)	Mag
Dec. 7	4 09.6	+14 05	6.6
17	4 00.0	+14 11	6.8
27	3 52.5	+14 25	7.0

Vesta will be having a very close conjunction with Saturn on March 19, 2002 and will also be occulted by the moon 5-6 times next year.

Ray Badgerow



Eclipse 2001

(Continued from page 3)

and even Centaurus A (with binoculars). It was very disorienting, but I got used to seeing the Southern Cross every night.

After our safari adventure we departed for Victoria Falls, and saw one of the great national wonders of the world. Many of our group indulged in the activities offered by the local area such as helicopter flights, ultralight, white water rafting and more. One member of our group, Glen Hawley was brave enough to bunji jump over the Bakota Gorge some 111 meters down. On our last night there we had a special dinner with dancers at the

Boma Restaurant. The next day we flew back to Harare and had one last dinner together as a group at the Bronte Hotel. The next day most members of our group went home after doing shopping in Harare. I went on my own extension the next morning as a group of six, including myself departed to the Save' Valley Conservancy in SE Zimbabwe. We stayed at Senuko Safari Lodge for a week and saw the rare painted wild dogs and black rhino. In fact, 3 of us, took part in a rhino tagging operation. Following this we left for a freebie as we stayed at Big Cave Camp in the Matobos Hills NP, near Bulawayo. I had a last minute shopping spree on our way out of the

CALENDAR OF EVENTS

- December 15
January 4, 5, 11, 12

BINBROOK OBSERVING NIGHTS - For confirmation or directions call Ann Tekatch 575-5433, Marg Walton 627-7361, Rob Roy 692-3245

- Sunday December 16, 2001

Asteroid "WT24" will be only 1.86 million kilometres away when it passes the Earth on December 16.

- Friday, January 11, 7:30pm

HAA GENERAL MEETING - The meeting will be at the Spectator Building auditorium.



To see this comet, get out soon as it's rapidly moving into the southern sky.

by Bob Botts