

# AURORA



Volume 33, Number 3

The Royal Astronomical Society of Canada - Windsor Centre

Oct. 2007

## Proposed Windsor Centre Council for 2008

### Executive

President  
1st Vice-President  
2nd Vice-President  
Secretary  
Treasurer  
National Council Rep.

Dr. Pierre Boulos  
Paul Pratt  
Tina Chichkan  
David Panton  
Ken Garber  
***OPEN POSITION***

### Councilors

Dan Anzovino  
Randy Groundwater  
Steve Pellerin  
Donna Ronconi  
Susan Sawyer-Beaulieu

C. Joady Ulrich  
Mike Mastronardi  
Paul Preney  
Ken Rount  
Tom Sobocan

### Appointed Positions

Honorary President  
Aurora Editor  
Librarian  
Director of Observing  
Director of Public Education  
Recording Secretary  
Light Pollution Abatement Director  
Observatory Director  
National Council Rep. (ALT)  
Webmaster

Dr. William Baylis  
Ken Garber  
Rick Marion  
***OPEN POSITION***  
***OPEN POSITION***  
David Panton  
Dan Taylor  
Peter Bondy  
***OPEN POSITION***  
Steve Mastellotto/John Berube

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## Calendar of Events

### *Our next meeting...*

Tuesday, Nov 20th, 2007 **7:30 p.m.**

at

K of C Maidstone Recreation Centre  
10720 County Road 34 (Old Hiway 3)

### *Main Speaker...*

### *Topic...*

**NOTE the NEW STARTING TIME**

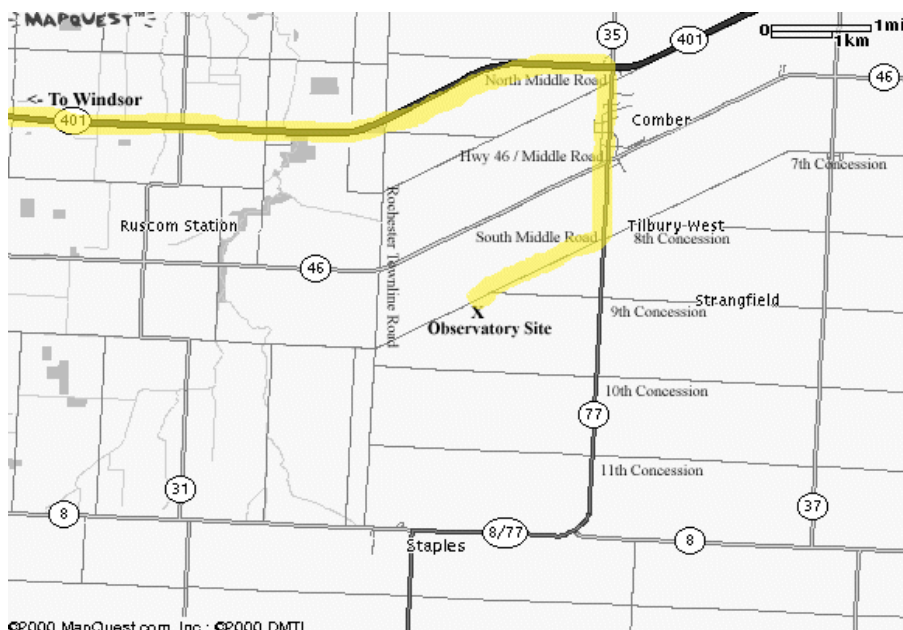
### *Coming Events*

#### *Astronomical Events:*

Oct 21 Orionid meteor shower  
Oct 25 Full Moon (Hunter's Moon), at  
12:52 a.m., EDT, on Oct 26.  
Oct 26 Largest full Moon of 2007 at  
8:00 a.m. EDT.  
Nov 4 Taurid meteor shower  
Nov 17 Leonid meteor shower  
Dec 13 Geminid meteor shower  
Dec 22 Winter solstice 1:08 A.M.

#### *Observatory Open Houses:*

SATURDAY	Start	Moon age
November 17	7:00 p.m.	8 days
December 15	7:00 p.m.	6 days



### Hallam Observatory Site

**Directions:** The map above shows the Comber area and it includes the major highways (401, 77, 8 and 46) that are in the area of the observatory.

The most direct route from Windsor is "highlighted" on the map which is to take 401 East to Highway 77 South to South Middle Road. While on South Middle Road you go about 1 kilometer and just after the barely discernable point where Concession 9 joins it you will find the observatory site on the South side of the road.

If you hit the Rochester Townline Road (i.e. you come to a stop sign and have to turn left or right) you have gone too far.

## Submissions

Aurora is published monthly except for August. The October, December, February, April and June issues are full newsletters (usually 6 pages) with a number of member submitted articles. The November, January, March, May and July issues are short flyers (2 pages) with one short article. September is a dual issue with the full 6 page newsletter mailed just **before** the meeting and a flyer available **at** the meeting. Submitted articles can be of any length from a paragraph to multiple pages. I can scan pictures and/or diagrams (both prints and film) to support your article and the originals will be returned to you. Submission deadline is the 1st of the month.

Editor: Ken Garber  
Ass't: Dan Anzovino

Email: kgarber@cogeco.ca  
Email: danzovino@sympatico.ca

## Membership

The Windsor Centre of The Royal Astronomical Society of Canada meets on the 3rd Tuesday of every month (except July and August) at the K of C Maidstone Recreation Centre. In addition to regular meetings the centre hosts a number of observing nights, a picnic and a December social. Members receive a copy of the Observer's Handbook, the RASC Journal (optional at extra cost), a subscription to SkyNews magazine and access to the Centre's library and telescopes.

Annual Membership Fees are Regular - \$55.00, Youth - \$34.25 and Life - \$2100.00. **\*\* NOTE New Rates \*\***

Contact Ken Garber at (519) 966-3478 or visit our website at: <http://www.rascwindsor.com> for more information.

# Minutes of the September 18th Meeting as compiled by Dave Panton

## **Chaired by Dr. Pierre Boulos**

Pierre welcomed members and guests arriving for the new 7:30 p.m. meeting start time. Minutes from the June meeting were read and the motion to accept them was made by Harry Brydon. Art Rae seconded and the motion carried.

## **Business from the minutes:**

Pierre noted the need for speakers in meetings to come. He also announced "Seeing in the Dark" a PBS Channel 56 program would be broadcast tomorrow night. An important item of business was a request forwarded by Steve Mastellotto (past president) asking for persons willing to serve on Council to forward their names to him for nominations at the annual election in November.

**Treasurer Ken Garber** reported we have \$3205 in the bank and there are 88 paid up members. Calendars for 2008 are in and for sale at \$14 each. Only 30 were ordered this year. The \$40 annual key to the observatory charge is due in October. Annual memberships can be renewed with Ken or online with the RASC. Randy noted observatory access requires a year in Windsor Center followed by a training session at the observatory plus a \$10 key deposit.

**Librarian Rick Marion** brought three boxes of science and astronomy books declared surplus from the Essex Library System. He urged members and guests to help themselves as their next destination is the recycle bin. The extensive book collection at the observatory has nearly been fully inventoried.

**Newsletter Ken Garber** is looking for member's articles for his newsletter. He encouraged use of web and other sources to help with articles and merely cautioned the sources must be credited.

Correspondence and Recording Secretary David Panton did not have any items to report.

**Public Education coordinator Randy Groundwater** reported there was little activity over the Summer other than a June 20th annual astronomy event for about 60 Dougal School students given at Camp Henry. Two upcoming events are on October 10th for the "Probus" group and another on October 16th for 12 "Pathfinders" to Hallam. Also coming is the 9 session Introduction to Astronomy class given by Randy at the Centre for Learning in Retirement.

Ken Rount reported he did two observing sessions at the Girl's Camp at Briarwood at the intersection of Howard and Texas Rd.

Mike Mastronardi, a member of the Greater Windsor Horticultural Society sometimes sets up his telescope for fellow members to see the night sky at the close of meetings. Pierre reported he set up his telescope under the wonderfully dark sky at Bruce Peninsula National Park and soon had about 30 people taking part in seeing telescopic targets.

Tom Sobocan shot some nice pictures of the eclipse of the Moon from the top of Malden Park.

Randy reported he has one school group set for January at Hallam.

He also had recently met with Jim Merideth, now 90 years old. Jim is a very long time member of Windsor Centre unable to attend meetings for health reasons.

Every public education session should be documented in some way (notes in the Hallam log book for example) for future reference in fund raising efforts or seeking support for our objectives.

**Public Relations rep Tina Chichkan** reported there was a phenomenal crowd at the Hallam open house in August. Mention of it in Randy's monthly Windsor Star article and her publicity note on Cogeco Channel 11 are effective publicity tools.

**Light Pollution Abatement efforts by Dan Taylor** were reported by Randy as Dan was at the LPA conference in Quebec presenting a paper on the subject of his efforts in this area. Dan has accomplished a great deal and will report on his latest accomplishments at the next meeting.

**National Council monitor Steve Mastellotto** was unable to attend the meeting. The main item of interest in current affairs is an effort to revise the current fee structure. Note that Windsor Centre does not currently have a National Council Representative.

**Observatory Director Peter Bondy** was unable to attend the meeting.

**The Short Talk** was given by Randy Groundwater on the subject of Summer Star Parties. Each has its own character, Randy explained.

Some are primarily for observers, others for telescope builders and some are great for the spirit of sharing information, swap tables and vendors showing their latest equipment. Star Fest at Mount Forest is a good example. Steve Pellarin, Al DesRosiers and Tina Chichkan all ventured to Star Fest and camped on the grounds shared by several hundred keen amateur astronomers and their families. Randy mentioned camping is not a necessity as there are motels within a ½ hour radius.

Randy showed a video of shots taken from Hallam at one minute intervals by Steve Mastellotto during the two hour passage of the Moon across the Pleiades.

Bob McCracken, local historian in Arner has published a book "From Forest to Farms" featuring the Staples area. Keen on learning of the Hallam Observatory near Staples he encouraged Randy to write a chapter for the book. Too good to miss, Randy took a few minutes to read it to members. It is probably the only place the history of the observatory is fully recorded for posterity.

## Minutes of the Sept. 18th Meeting (continued)

**Director of Observing, Randy** distributed a sky map and list of the many interesting objects visible in Fall skies. The “water constellations” were featured as well as views of them shown as classical figures.

**Coffee Break and 50/50 draw.** The surplus library books brought by Rick Marion were searched through by members for anything of personal interest.

**Main Program “Comet McNaught” by Steve Pellarin.** This was one of those wonderful “comets of the century” unfortunately visible only two or three nights locally low in the Southwest. Only two or three members saw it in poor circumstances. For those in the Southern hemisphere the comet was truly spectacular. Steve reviewed it’s various features, compared them to comets going back into the Seventeen Hundreds and showed dozens of gorgeous shots and the path of its orbit around the Sun and how it affected our view from Earth.

Pierre thanked Steve for his extensive presentation and reminded council members of the October 9th meeting.

Meeting adjourned at 10:25 p.m.

David Panton Recording Secretary

**Please Note: The Observer’s Handbook will be distributed to members beginning in mid-October. Your membership must be paid through October 31, 2007 in order to receive this year’s Handbook.**

## JUST ARRIVED!!!

### The 2008 RASC Calendar

Get yours now.  
**Supplies are limited.**

Only \$14.00  
at the meeting



## Mark Your calendar Meeting Schedule for 2007-2008

**All meetings are Tuesdays starting at 7:30PM**

September 18, 2007

October 16, 2007

November 20, 2007

**December 7, 2008 (FRIDAY) Christmas Pot Luck Dinner**

January 15, 2008

February 19, 2008

March 18, 2008

April 15, 2008

May 20, 2008

June 17, 2007

## Solar Cycle 24 (from the internet via Bert Huneault)

April 26, 2007 — The next 11-year cycle of solar storms will most likely start next March and peak in late 2011 or mid-2012—up to a year later than expected—according to a forecast issued by the NOAA Space Environment Center in coordination with an international panel of solar experts. The NOAA Space Environment Center led the prediction panel and issued the forecast at its annual Space Weather Workshop in Boulder, Colo. NASA sponsored the panel. Expected to start last fall, the delayed onset of Solar Cycle 24 stymied the panel and left them evenly split on whether a weak or strong period of solar storms lies ahead, but neither group predicts a record-breaker.

During an active solar period, violent eruptions occur more often on the sun. Solar flares and vast explosions, known as coronal mass ejections, shoot energetic photons and highly charged matter toward Earth, jolting the planet's ionosphere and geomagnetic field, potentially affecting power grids, critical military and airline communications, satellites, Global Positioning System (GPS) signals, and even threatening astronauts with harmful radiation. These same storms illuminate night skies with brilliant sheets of red and green known as auroras, or the northern or southern lights.

Solar cycle intensity is measured in maximum number of sunspots—dark blotches on the sun that mark areas of heightened magnetic activity. The more sunspots there are, the more likely it is that major solar storms will occur.

In the cycle forecast issued Wednesday, half of the panel predicts a moderately strong cycle of 140 sunspots, plus or minus 20, expected to peak in October 2011. The other half predicts a moderately weak cycle of 90 sunspots, plus or minus 10, peaking in August 2012. An average solar cycle ranges from 75 to 155 sunspots. The late decline of Cycle 23 has helped shift the panel away from its earlier leaning toward a strong Cycle 24. Now the group is evenly split between strong and weak.

The first year after solar minimum, marking the end of Cycle 23, will provide the information scientists need to arrive at a consensus. NOAA and the panel decided to issue their best estimate now and update the forecast as the cycle progresses, since NOAA Space Environment Center customers have been requesting a forecast for more than a year.

"By giving a long-term outlook, we're advancing a new field—space climate—that's still in its infancy," said retired Air Force Brig. Gen. David L. Johnson, director of the NOAA National Weather Service. "Issuing a cycle prediction of the onset this far in advance lies on the very edge of what we know about the sun."

Scientists have issued cycle predictions only twice before. In 1989, a panel met to predict Cycle 22, which peaked that same year. Scientists met again in September of 1996 to predict Cycle 23—six months after the cycle had begun. Both groups did better at predicting timing than intensity, according to NOAA

Space Environment Center scientist Douglas Biesecker, who chairs the current panel. He describes the group's confidence level as "high" for its estimate of a March 2008 onset and "moderate" overall for the two estimates of peak sunspot number and when those peaks would occur.

One disagreement among the current panel members centers on the importance of magnetic fields around the sun's poles as the previous cycle decays. End-cycle polar fields are the bedrock of the approach predicting a weak Cycle 24. The strong-cycle forecasters place more importance on other precursors extending over a several-cycle history. Another clue will be whether Cycle 24 sunspots appear by mid 2008. If not, the strong-cycle group might change its forecast.

"The panelists in each camp have clear views on why they believe in their prediction, why they might be wrong, and what it would take to change their minds," said Biesecker. "We're on the verge of understanding and agreeing on which precursors are most important in predicting future solar activity."

The NOAA Space Environment Center is the nation's first alert of solar activity and its affects on Earth. Just as NOAA's hurricane experts predict the upcoming season of Atlantic storms and forecast individual hurricanes, the agency's space weather experts issue outlooks for the next 11-year solar cycle and warn of storms occurring on the sun that could impact Earth.

Used with permission of the NOAA.

## Happy 10th Birthday—Cassini

Cassini rode into space Oct. 15, 1997 atop a USAF Titan IVB enroute to Saturn..

This picture of the Cassini launch was taken by Ken Sturgill of Marion, Virginia. From the NASA site with permission.

For more info go to: <http://www.nasa.gov/cassini> and <http://saturn.jpl.nasa.gov>



Continued > >



## A Little Fund Raising

Got any Canadian Tire money lying around that you'd like to get rid of?



Why not donate them to the Centre?

To date we've collected more than \$85 and of that, about \$65.00 has been spent on trees planted on the grounds, oil and gas for cutting the grass, chain lube for the dome and some bug spray.

Bring them along to any meeting and drop them off at the treasurer's table, and they will be put to good use.

## Time to Renew ??

Don't forget that you can renew your membership at the treasurer's desk, by snailmail to the National, or online at the RASC 'store' at

<http://www.store.rasc.ca/>

And don't forget that the printed Journal is now optional extra. Look for the option on your form.

## Time to Renew , too

If you are a subscriber of Sky and Telescope and have done your renewing through the Centre, you can now renew directly with S&T. You need not send your form and payment to the Centre.

If you are not a subscriber but wish to be, send your first payment to the Centre Treasurer for forwarding to S&T and you'll be able to renew directly after that.

## For Sale

### FOR SALE

6 inch **Meade Starfinder** Reflecting Telescope with Equatorial Mount. Package includes:

1 - Meade Multicoated 9mm eyepiece

1 - " " 12mm "

1 - " " 15mm Super Plossl eyepiece

1 - " " 25mm eyepiece

1 - 2x Telenegeative Amplifier (Barlow), 1 - Red flashlight, 1 - Instruction Manual

Price \$550.00 (new price)

If you are interested contact John Murray at 519-944-7052 or email at [jmurray100@cogeco.ca](mailto:jmurray100@cogeco.ca)

### FOR SALE

**Celestron Nexstar 114GT.** It is 2 years old and used once. Note this is a Goto computerized telescope and includes a 25mm eyepiece. Asking \$200

Contact Alan King at 519-326-1361 or at [jackall2@cogeco.ca](mailto:jackall2@cogeco.ca)

### FOR SALE

**Identiview 3 inch solar filter by J.M.B. Industies.** \$150.00

Contact Ken Rounq at 519-738-3479

### FOR SALE

**Skywatcher** reflector telescope in new condition having had very little use. It is a 150mm diameter tube and mirror and is 650 mm in length. It has 10mm and 25mm objectives with a 2x Barlow, a moon filter and a skylight filter. It is on an aluminum tripod with an equatorial mount and has a red dot finder scope.

Price - \$250.00. If interested, please contact Stuart Kelch by e-mail to [skelch@cogeco.ca](mailto:skelch@cogeco.ca)