

AURORA



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The Royal Astronomical Society of Canada - Windsor Centre

January 2012

Bert Huneault by Randy Groundwater



Bert and his wife Triena at their home in Riverside.

On December 3, 2011, The Windsor Centre lost one of its oldest and dearest members, when Bert Huneault passed away. He was 82.

Bert was born in Montreal on February 9, 1929. Early on it was clear that he had a special intellect, for when he graduated from high school in 1946, he received an award from the Lieutenant-Governor of Quebec for having achieved the highest secondary school marks in the Province.

Before that, as a young teenager and with World War II raging, he was mesmerized as he watched the daily routines of the countless military training flights over the city, and also in the skies over the Ottawa Valley, where he'd spent his summers on a farm. In 1944 he'd saved the sum of \$2.00 for a little mail order book titled "Aircraft Navigation", a book that he'd later credit, in his own words, "the start of an adventure which would lead to a forty-

year career in electronics and a lifelong enjoyment of engrossing hobbies". So even at this early age he was already looking up and dreaming of aviation, the airwaves, and things above and beyond the earth during those dark wartime days.

In the early 1950's Bert relocated to Toronto to study radio and the new technology of television at the Radio College of Canada. On graduation, he moved to Windsor and started a career as a radio and TV technician, becoming a successful businessman. During these years he saw the potential of shortwave radio, so he built his own radio transmitter and went on to make contacts with it around the world.

In the early 1960s, he sold his TV service business to begin a career as a teacher, which turned out to be his lifetime calling. He worked tirelessly developing the courses for his students, some of whom had come from hard-luck backgrounds and who were being offered real direction for the first time in their lives from this very gifted man. Perhaps the greatest gift that a teacher can receive is the accolades of students, and Bert was the recipient of many; even from one who, with a past history which had included incarceration, would credit Bert's teaching skills and enthusiasm with setting him on a new path and a chance for a productive life again.

With the establishment of St. Clair College, Bert continued his exceptional teaching skills with that

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Calendar of Events

Our next meeting...

Tuesday February 21, 2012

7:30 p.m.

at

Ojibway Park Nature Centre

5200 Matchette Road

Main Speaker...

TBD

Topic...

"TBD"

Activities...

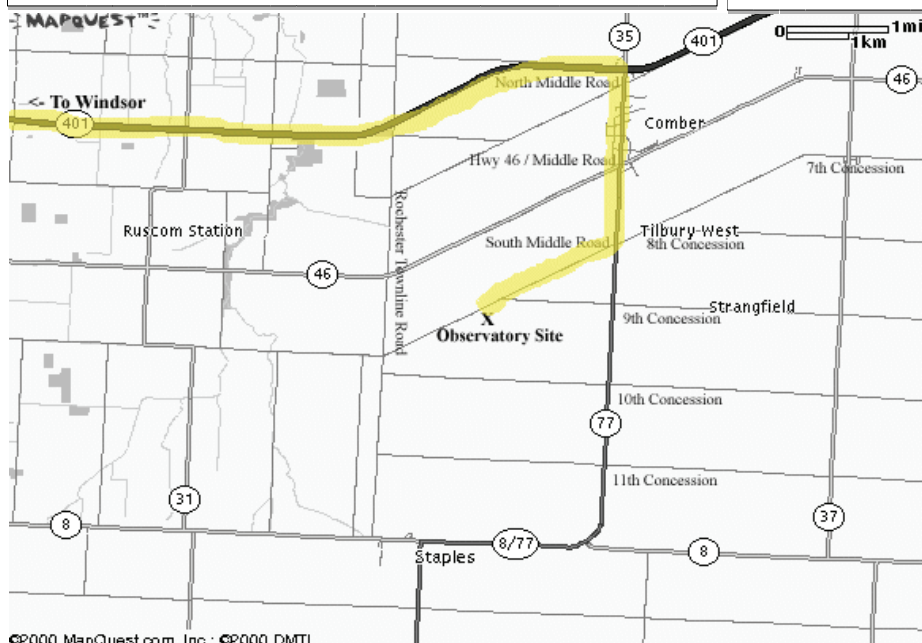
Open House Night at Hallam: The next open house night at Hallam is on Saturday January 28 at 7:00 p.m..

Eros: On January 31 asteroid 433 Eros will be 0.18 astronomical units from Earth.

Comet Garradd (C/2009 P1): On February 3 Comet Garradd will be 1/2 degree from M92 in the predawn sky.

Venus and Uranus: On February 9 Venus will be 18 arc minutes from Uranus in the evening sky with a gibbous Moon 7 degrees below.

Council Meeting: Our next Council meeting will be held on Tuesday February 14 at Steve Mastellotto's house. The meeting begins at 7:30 p.m..



Hallam Observatory Site

Directions: The map at left 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 Highway 401 East to Highway 77 South to South Middle Road. Turn right onto South Middle Road and go about 1 kilometer and just after the point where Concession 9 joins it (it is hard to see this intersection) you will find the observatory site on the South side (left) of the road. 3989 South Middle Road.

If you hit the Rochester Townline Road (you come to a stop sign) you have gone too far.

Submissions

Aurora is published monthly except for July, August and December. The September, October, January, March and May issues are full newsletters (usually 6 pages) with a number of member submitted articles. The November, February, April and June issues are short flyers (2 pages).

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: Steve Mastellotto Email: mmastellotto@cogeco.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, a subscription to SkyNews magazine and access to the Centre's library and telescopes. And optionally the RASC Journal in print form—online version free.

Annual Membership Fees: Please see the RASC website at www.rasc.ca for current rates.

Contact Greg Mockler at (519) 326-7255 or visit our website at: <http://www.rascwindsor.com> for more information.

November 2011 Meeting Minutes by Art Rae

The monthly meeting of The Royal Astronomical Society of Canada - Windsor Centre was held at the Ojibway Park Nature Centre on November 15, 2011.

Windsor Centre **Past President Pierre Boulos** chaired the Meeting. Pierre called the Meeting to order at 8:00pm and welcomed members and guests to the Ojibway Park Nature Centre.

Motion to **accept the Minutes of the October 18, 2011** meeting moved by Brian Thomas, Seconded by Tina Chichkan.
MOTION CARRIED.

Pierre Boulos read a notice of the upcoming **December Social** and introduced the three speakers for the evening: Steve Mastellotto on calibration of astrophotos, Dave Panton on the construction and installation of the Hallam Observatory flat field lightbox and Brian Thomas on his new collection of astrophotos taken at Hallam Observatory.

Image Calibration for Astrophotos by Steve Mastellotto

The image calibration step process was discussed and explained which included the image histogram and how to read it, the light frame, dark frame, flat field and bias frame images. He then demonstrated why they are all necessary and the results of following the process to finished image.

Light Box Construction for the Hallam by Dave Panton

Building a electroluminescent panel for Hallam Observatory proved not practical due to size constraints. The light box device must be short, lightweight and provide an evenly illuminated field to be functional. A construction detail plan was shown which included the materials styrofoam for the mounting tube and special adhesive to secure the translucent face. Panel lighting consisting of 88 LEDs in groups of 4 were installed in the device. In research for a light source it was discovered that white LEDs are actually ultraviolet emitters that excite doping in them to create white light. After assembly and testing out at Hallam a usage problem was that with the tight fit of the light box holder, trapped air wouldn't let it be installed or extracted and resulted in the fix of adding side vents to let out/in air.

A Slide Show of Astrophotos Taken at Hallam by Brian Thomas

A demonstration of imagery captured using the Hallam Observatory instruments and subsequent processing of those images was shown in a finished slide show. Images included many Messier and NGC targets such as M15, M5, Pleiades, M13, M31, M104 Sombrero, the Draco galaxy group, M65-66, M51 Whirlpool, M17 Swan, M8, M16 Eagle, M20 Trifid, M42, Rosette and the Horsehead in Orion. NGC objects included Double Cluster NGC869, NGC4216, NGC253. Solar prominence images were also included.

After the slide show Brian Thomas and Steve Mastellotto took questions from the audience to answer on topics such as why cutoff filters need to be removed from DSLRs for astrophotography, what are useable DSLRs for astrophotography and differences in image processing software including ImagesPlus and Registax.

Pierre thanked the speakers on behalf of the Windsor Centre RASC.

Business Reports

Treasurer, Greg Mockler: Current bank balance is approximately \$5,700. Current Windsor Centre membership is 97 members.

Public Education, Randy Groundwater: The Year End Report will be published in the January issue of Aurora.

Light Pollution Abatement, Dan Taylor: The Monthly Report has been filed on the Windsor Centre website.

National council Representative, Mike Mastronardi: Items of interest include the Minutes of the recent National Council Meeting published on the National Members' website and the National Insurance Review.

Observatory Director, Dave Panton: The Centre-owned data projector has been successfully installed in the Hallam warm room and has already been

used for an Open House. Dead trees have been removed from around the Observatory property.

Membership Director report not available but Vice President Steve Mastellotto pointed out that the Observatory Key Fee was due in October.

Windsor Centre Executive and Council Elections

Pierre Boulos chaired for the election proceedings. Pierre called for nominations of the Executive:

Nomination for President: Paul Pratt by Steve Pellarin, seconded by Randy Groundwater. CARRIED

Nomination for 1st Vice President: Brian Thomas by Steve Mastellotto, seconded by Greg Mockler. CARRIED

Nomination for 2nd Vice President: Sue Iihola by Dave Panton, seconded by Steve Mastellotto. CARRIED

Nomination for Secretary: Arthur Rae by Dave Thomas, seconded by Joady Ulrich. CARRIED

Nomination for Treasurer: Greg Mockler by Rick Marion, seconded by Donna Ronconi. CARRIED

Nomination for National Council Representative: Mike Mastronardi by Tina Chichkan, seconded by Brian Thomas. CARRIED

The proposed slate for **Windsor Centre Council for 2012** was presented (see page 5). Motion to accept the Windsor Centre Council slate for 2012 by Brian Thomas, seconded by Phoenicia Boulos. CARRIED

The slate of **Appointed Positions** are also on page 5.

Pierre Boulos introduced this month's Director of Observing reporter, Matt McCall

Director of Observing Report, Matt McCall:

Matt showed member images of the October burst of aurora, a 4mm eyepiece image of lunar crater Copernicus taken at lunar sunrise capturing the central twin peaks and the November 6th photo session on the Hallam C-14 telescope capturing sunspots by Brian Thomas and Dave Panton.

Matt then described upcoming astronomical events to watch for: Asteroid 2005YU55 close pass November 8th within 302,000Km of Earth
Leonid Meteor Shower November 17, 18th
Saturn and Moon early morning of November 22 and also January 16.

Matt presented a handout of the night sky for the period.
Mercury is at greatest angle from the Sun on December 22.
Double transit shadow of Europa & Ganymede on Jupiter December 27-28th,
Quadrantid meteor shower peaking at 3am on January 4th.
Venus within 2° of Neptune after sunset on Friday January 13th.

In the news: Russian Mars probe "Phobos Grunt" has failed to leave Earth orbit and is expected to fall out of orbit in January.

Pierre Boulos thanked Matt McCall for his presentation.

After two brief announcements:

1. an upcoming panel discussion at the Windsor Science Centre with participants Windsor Centre members Dr. Baylis and Randy Groundwater
2. a reminder of the Windsor Centre December Social

Pierre thanked the audience for attending and reminded everyone of the next meeting on January 17, 2012 at the Ojibway Nature Centre.

The Meeting was adjourned at 9:56pm.

Hallam Happenings by Dave Panton

Courtesy of John Marn's efforts our ceiling mounted digital projector now has a 110 volt ceiling outlet providing power exactly where it is needed. On completion a data cable was routed down to the computer. The system works and was used to good effect at the November open house when visitors were treated to a show of member's astrophotos. The remote control has unfortunately quit working for reasons unknown. The projector has to be switched on by standing on a chair to reach the switch located on top.

A great display of Northern Lights was witnessed widely over Essex County and especially from Hallam where some excellent images were caught by Scott Stuckless. On the opposite end of the brightness scale in daylight a number of sunspot imaging sessions were done via DSLR cameras mounted at prime focus in the C14 telescope fitted with its solar filter. The Sun is still very active at this writing and it offers interesting observing and imaging targets even on days when the sky hazy. How long the current activity will last is problematical and it may be years before so many are visible at once (one day, Al counted 33 using the 40 mm eyepiece (98x magnification) in the C14.

Brian Thomas has managed to get in several sessions of astroimaging through the Fall, most of the time trying to fit his efforts into rare "windows" of open sky. Our Summer was poor for Hallam and at this writing it looks like Winter observing will be infrequent even when one accepts some sessions will have to be held under bright Moonlight. Double stars are good targets in these conditions.

A bit of piggyback photography was also done with camera mounted on one of the three available mounts. Note also there is

a ball mount for those wishing to target a little way from the direction the C14 happens to be pointing (dome slot being the limiting factor).

Al DesRosiers made his last grass cutting run on November 11th so the grounds will look great through Winter. Moe Trepanier's old corn crib near the road gave in to time and weather, collapsing toward the driveway but leaving lots of room for access to the site. This is a sad loss for observers who set up along the tree line behind the warm room as it blocked yard lights from that direction. Ray Drouillard's row of young pine trees intended to compensate for the cribs expected demise will become effective some years ahead.

There is a suspicion our Paramount ME mount is not being guided as accurately as it should. To start the trouble shooting process, Al cleaned and re-greased the Right Ascension worm drive gears. The Dec drive is not accessible without doing a major tear down. The next thought is the telescope mount may not be perfectly polar aligned, a factor the autoguider cannot manage. Polar alignment can be checked fairly easily and if found inaccurate, adjustments can be made to bring it back into correct alignment. Unfortunately this may trigger need to do run a new T-Point model to restore the pointing accuracy we have enjoyed for quite some time.

Were we merely using the telescope for observing these measures would not be necessary. Doing high quality astroimaging demands the telescope guide very accurately on targets where exposures are more than a minute or two long. We have a World Standard telescope mount at Hallam that appears to need a bit of tweaking to restore its excellent performance.

Public Education Report - 2011 by Randy Groundwater

Public Education is a cornerstone responsibility of the RASC, and in 2011, the membership of the Windsor Centre once again acquitted itself well through numerous activities and programs that collectively exposed hundreds in Windsor-Essex to the glories of the night sky.

As Director of Public Education for 2011, I had the opportunity to make several presentations on behalf of the Windsor Centre this year. Two very different and particularly memorable ones included a morning presentation to approximately fifty enthusiastic Grade nine students of Essex High School on May 25th as part of their astronomy unit in the science curriculum; and an informal night sky presentation in the DeLaurier Campground at Point Pelee National Park, on Saturday, October 22nd. This latter event, called a "Good Old-Fashioned Campfire" and co-ordinated each year by park staff, exposed some 45 participants, young and old, to fine views of stars, constellations, and the planet Jupiter from deep within this designated dark sky preserve.

For nearly a decade, our Hallam Observatory has been a focal point of many public education activities, and 2011 was no exception. A tradition since it first opened its door, the monthly Public Open House has been a key activity where Windsor Centre members meet with and share the thrill of the night sky with visitors. Because of its attractive and accessible location, providing some of the darkest skies obtainable in the region, it's become one of the very best ways we reach out to introduce people of all ages to astronomy and at the same time raise awareness of issues concerning the night time environment, such as light pollution.

Hallam Observatory also was the location that served for a number of special presentations during the year. Typically guiding and scouting groups were hosted on their particular meeting nights, mainly during the spring and fall; and were a big hit not only for the youngsters themselves, but for their leaders and parent helpers as well. We also hosted two church groups during 2011, with the latest one combining with the most recent Open House of Saturday, November 5th, which swelled the overall attendance on that clear and mild evening to about 35 visitors.

2012 Council of the RASC - Windsor Centre

Elected Officers

President	Paul Pratt
1st Vice-President	Brian Thomas
2nd Vice-President	Sue Iihola
Secretary	Art Rae
Treasurer	Greg Mockler
National Council Rep.	Mike Mastronardi

Councilors

Tina Chichkan	Dave Gabriele
Randy Groundwater	Steve Mastellotto
Steve Pellarin	Dave Panton
Paul Preney	Susan Sawyer-Beaulieu
C. Joady Ulrich	

Appointed Officers

Honorary President	Dr. William Baylis
Past-President	Dr. Pierre Boulos
Librarian	Rick Marion
Recording Secretary	Art Rae
Public Education Director	Matt McCall
Public Relations Director	Sue Iihola
Directors of Observing	Steve Pellarin
	Juliana Grigorescu
	Matt McCall
Light Pollution Abatement Dir.	Dan Taylor
Hallam Observatory Director	Dave Panton
Aurora Editor	Steve Mastellotto
Webmaster	Steve Mastellotto

For Sale

Celestron CPC-800 with tripod - all original equipment with extra eyepieces: Orion Q70 32mm, 2" Orion 2x Barlow, Antares W70 8.6mm, Antares W70 25mm, Orion 2" prism diagonal, Epic ED2 3.7mm and scope cover. Used very little - in mint condition. Asking \$1,400.00. Call Bob Bezeau after 1:00 p.m. to view scope (519) 736-8543

Seldom used **Celestron 9.25" Optical Tube Assembly** on Losmandy dovetail bar. This 2008 model has StarBright XLT Coatings, 6x30 finder, standard visual back and 1.25" star diagonal. Excellent condition. Offering it to Windsor Centre members first at \$900. For more information or pictures please contact Brian Thomas at brithomas@live.ca.

Meade Deep Sky Imager with Autostar Suite. Sony Super HAD Colour CCD sensor, 510 x 492 pixels (9.6 x 7.5 microns), 16-bit, USB 2.0 and 1.1 compatible. Please see Steve Mastellotto (mmastellotto@cogeco.ca) if you are interested in this one-shot colour imager for only \$100.

Public Education (continued)

Another opportunity for public education in astronomy happened on Friday evening, June 3rd, when a large group of members of the Tai Chi Association of Windsor once again held what has become an annual practice on the observatory lawn, with sky observation afterwards.

On Saturday, May 7th Windsor Centre members once again participated in Science Rendezvous, hosted that morning and afternoon by the University of Windsor. In addition to our centre's indoor exhibit, telescopes specially fitted for outdoor solar observation were enjoyed by the large crowds attending this very popular annual event on campus. That evening, at the monthly Hallam Open House, we saw a few extra guests that were inspired to make the drive out to the observatory.

The weekend before Science Rendezvous, on Sunday, May 1st, we were once again part of the exhibits, as we have been for many years now, at the yearly Earth Day celebration at Mic Mac Park. Threatening weather resulted in somewhat smaller crowds there this year, but as always we had many encounters with folks of all ages who were keen to know about the planets and stars.

Although primarily considered an annual fundraising event, on Saturday evening, October 1st members of the Windsor Centre once again hosted a successful evening of stargazing (and wine tasting) in conjunction with Aleksander Winery and its representative, Nathalie Constantineau. Twenty-seven guests enjoyed an educational talk and some sky observing under a partly cloudy sky. Again, this event coincided with the scheduled monthly open house at the observatory, and a few of the winery guests made the trek afterwards to experience the astronomical ambiance that Hallam has to offer.

Obviously to have such a successful and active outreach requires the hard efforts of many, many centre members throughout the year. We are fortunate indeed to have so many dedicated and enthusiastic volunteers who give of their time and resources to share their love of all things astronomical with our community. You know who you are! What we have to offer ultimately, I think, is a very positive and uplifting message that gives people pause to think about their world and their place in it in a truly unique way. This happens every time we introduce a family member, a neighbour, a friend, or complete stranger, to the wonders of the night sky.



Jupiter by Brian Thomas



Bert with Paul Preney, C. Joady Ulrich, Randy Groundwater and Pierre Boulos.

institution until his retirement in 1988, ending more than a quarter century as an educator. But he continued enjoying and growing in all the hobbies he'd honed through his life: aviation, shortwave, meteorology, computers, and astronomy.

In the early 1950's Bert had joined the Windsor Chapter of the Royal Astronomical Society of Canada, as that little book about navigation and meteorology he'd mail-ordered for \$2.00 as a youth had also introduced him to navigation by the stars. Bert's astronomical interests thrived even greater in the atmosphere and camaraderie he'd found with the fellow astronomers there. He became a key member, serving on council over many years including two terms as its president.

When I became a member of the RASC Windsor Centre in 1977, Bert impressed as just filled with astronomical knowledge and he loved to share it, especially when it came to the sun, for he was an expert on solar astronomy and the many ways the sun affects the earth and our technologies. His enthusiasm and energy, helping out and being involved with the varied activities of the Centre in those days, to me, knew no bounds.

In 1993, Bert and I were asked to each write a monthly astronomy column for *The Windsor Star*. Writing was another natural talent of Bert's, and in his typical fashion, he jumped at the challenge. During those early years our columns appeared side-by-side, and from the outset the two of us had agreed that he would highlight the technical aspects of the science, while I would focus on the things that could be seen in the night sky from the backyard. I recall some great conversations the two of us had when preparing our articles! Bert was never at a loss for things about which to write and he did so with such perfection and attention to detail. His many written contributions which also appeared over the years within the pages of this newsletter

will also be missed.

It was Bert's teaching connection with St. Clair College that saw the monthly meetings of the RASC Windsor Centre located there for nearly 15 years. Also, early in the 1970's, the President of St Clair College at the time, Dr. R. C. Quittendon, approached Bert with an intriguing idea. He had seen an observatory located on another campus, and knowing Bert's keenness and involvement with the local astronomical community, asked him to look in to the possibility of one for the College.

Bert made that observatory happen, and he arranged for access to be had to it for our membership, and as a result, from 1973 and many years after, that little domed building on the southwest side of the College campus, with its 8" Celestron telescope, saw many lucky visitors enter through its door to be introduced to the wonders of the night sky. And being the solar enthusiast and expert that he was, Bert made sure that the telescope was able to be fitted with a proper, safe filtering material so that people could see the phenomena on the sun's surface that influence the atmosphere, weather, and our communication and electrical grids down here on earth.

In the spring of 2001, the observatory happily came into the ownership of the RASC Windsor Centre, and as we all know, it has been expanded and used intensively under our stewardship for nearly a decade now, becoming the centrepiece where we show the celestial sights to so many, every year.

Though Bert's health in recent years prevented him from attending many meetings, he never relinquished his enthusiasm for the Windsor Centre and the work and activities its membership continues. He lived his life with integrity, respect for others, inexhaustible energy and boundless enthusiasm in whatever he did. He never approached anything by half-measure; it was all or nothing. He loved his family and the company of his colleagues and his friends. The eternal optimist, he didn't waste a day in a life that was lived to its fullest, and I'm proud to be one of the many who called him a friend. To his wife, Triena, son Dan, and daughters Joanne and Kristina, we extend our deepest sympathy in your loss.