

Saskatoon Skies

The Newsletter of the Saskatoon Centre of the Royal Astronomical Society of Canada

Vol. 41, No. 12

December 2010

The Passing of the Gavel



Barb Wright, our past president, passing the gavel to Jeff Swick, our new president, at the October annual meeting. Jim Gorkoff, the new vice-president, making a presentation to Barb for her hard work over the last two years as president.

Photo by Tenho Tuomi



Saskatoon Centre

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To view *Saskatoon Skies* in colour, see our Website:
<http://homepage.usask.ca/~ges125/rasc/newsletters.html>

Happy Hol i days!

MEMBERSHIP? IT'S NEVER TOO LATE TO JOIN!

Regular: \$80.00 /year

Youth: \$41.00 /year

Associate: \$33 /year

The Saskatoon Centre operates on a one-year revolving membership. You will be a member for the next 12 months no matter when in the year you join. If you do not want to join at this time, ask to get onto our FREE 3-month Temporary Membership list. You will receive regular mailings of our Saskatoon Skies newsletter and will be invited to participate in Centre activities. Members are encouraged to renew early to avoid disruption in publications. Renew through the membership coordinator, Mark de Jong, or renew through the National Office and let Mark know that you did!

Benefits of Membership in the Saskatoon Centre

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the U of S Observatory (after training)
- Saskatoon Skies Newsletter
- Observer's Handbook
- The Journal of the RASC (electronic format)
- SkyNews Magazine (bimonthly)
- use of the Centre library
- rent the Centre's Telescopes
<http://homepage.usask.ca/ges125/rasc/telescopes.html>
- discounts to Sky & Telescope Magazine*
- free, no-cost, no-obligation, 3-month temporary membership if you don't want to join right now!

*New subscription or renewal of Sky & Telescope? Send new info or renewal notice, plus credit card # to Norma Jensen, 128 – 4th Street East, Saskatoon, SK S7H 1H8, or email her at norj@sasktel.net.

U OF S OBSERVATORY

The U of S Observatory is open to the general public every Saturday of the year. Admission is free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear nights, visitors may look through the vintage 6-inch and tour several displays. Current events are recorded on the Astronomy Information Line at 966-6429.

Observatory Hours:

January-February	7:30-9:30 pm
March	8:30-10:30 pm
April	9:30-11:30 pm
May-July	10:00-11:30 pm
August	9:30-11:30 pm
September	8:30-10:30 pm
October-December	7:30-9:30 pm

SASKATOON CENTRE'S MAIN OFFICERS:

President – Jeff Swick, 373-3902
Secretary – Ron Waldron, 382-9428
Vice-President – James Gorkoff, 644-1343
Treasurer – Norma Jensen, 244-7360

Bottle Drive & Canadian Tire \$

By Colin Chatfield

If you cannot make it to a meeting but would like to contribute your Canadian Tire money please call me at 934-7046.

Newsletter Editor – Tenho Tuomi
Copy & Collate – Les & Ellen Dickson
Labels & Temps – Mark de Jong
Web Posting – Gord Sarty

Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 100 copies per issue. Saskatoon Skies welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science material. **Articles can be sent by mail in any format to the Centre's mailbox.** Submitted materials can be returned upon request. Submissions may also be sent by e-mail to the editor at ttuomi@yourlink.ca – any format, but preferred as plain unformatted ASCII text files without line breaks. Images sent by e-mail should be attached files.

A separate by-mail subscription to Saskatoon Skies is available for \$15.00 per year. Saskatoon Skies is also posted on our Saskatoon Centre homepage as a .pdf file and can be downloaded free-of-charge. Members may choose to receive the newsletter by regular mail or via the Internet. Articles may be reprinted from Saskatoon Skies without expressed permission (unless otherwise indicated), provided that proper source credit is given. DEADLINE for submissions for each month's issue is the 20th of the preceding month. Saskatoon Skies accepts Commercial advertising. Please call the editor 306-858-2453 for rates. Members can advertise non-commercial items free of charge.

LIGHT POLLUTION ABATEMENT
WEBSITE AT:
www.ras.sk.ca/lpc/lpc.htm

RASC CALENDAR OF EVENTS

Dec 20	Christmas Potluck Social - 6:30 pm, 175 Physics, U of S	Jeff Swick	173-3902
Jan 17	RASC Executive Meeting - 6:30 pm, 175 Physics, U of S	Jeff Swick	173-3902
Jan 17	RASC General Meeting - 7:30 pm, 175 Physics, U of S	Jeff Swick	173-3902
Jan 29	Observers Group – Dusk, Sleaford Observatory	Larry Scott	934-5801
Feb 26	Observers Group – Dusk, Sleaford Observatory	Larry Scott	934-5801

MONDAY, DECEMBER 20, 6:30 PM

Room 175, Physics Bldg., U of S

RASC Saskatoon Centre's Christmas Potluck Supper

Bring the Family!

Bring a favourite dish to share.

Paper plates, cutlery, tea, coffee, and soft drinks will be provided.



November FUNdraiser

by Colin Chatfield

Nov. 27th was the night of the steak night at Haywood's Grill. By all accounts, it was a really good night of fun, food, and fundraising. The food was decent and in my opinion was a good deal. The restaurant was small and cozy, allowing the 33 of us who went to sit in close proximity, making it easy to visit. There was a good mix of members and non-members, with one person expressing interest in joining the club. There was a number of books sold, to the tune of \$180 going to the Bill Hydomako Fund. Thanks to Barb for setting up the table of books.



There were two pictures donated by Tenho Tuomi and Bob Johnson for the silent auction, as well as other items donated by Darrell and Bev Chatfield (my parents). Thanks to all of them for donating, as well as to my brother, Cory Chatfield, who donated two ball caps as door prizes. A photo of mine was won by a non-member as a door prize. Norma did a great job helping to sell 50/50 tickets, so thanks to her for that.

All-in-all, the evening was a successful one, with a total of \$272 being raised, in addition to the amount from the book sales. Thanks to everyone who was able to make it. It's because of you that we can count this event as a success. Special thanks to my Dad, Darrell, for helping with different aspects of the night. If I've missed anyone in the thank-you's, please accept my apologies. Thanks for the opportunity to organize this event and hopefully we will be able to do this all again.

Photo by Tenho Tuomi

Minutes of the Executive Meeting, Nov 20, 2010

by Ron Waldron

1. Meeting began at 6:30 PM
2. Approval of Minutes of October Executive Meeting – Moved by Barb Wright, seconded by Jim Young
3. Treasurer's Report – Norma Jensen – see minutes of November General Meeting
4. Fundraising Report – Colin Chatfield – absent
5. Events Co-ordinator Report : Patricia Gakis – absent
6. Observers Group – Larry Scott – absent
7. Site Co-ordinator report – Darrell Chatfield – absent
8. Membership: Mark de Jong – absent
9. Light Abatement – Rick Huziak – Attended the Saskatchewan Environmental Committee meeting to go over draft copy of a Dark Sky Policy. Some progress is being made. City of Saskatoon has asked Sask. Power to comply with the dark sky policy. They responded with a request for more money from the city in order to comply. A letter will be drafted to say that no extra money is needed to implement dark sky changes.
10. National Rep Report – Rick Huziak – Rick showed members a Power Point of National's new Strategic Plan. There are 7 Strategic Objectives identified which will be given to the new Executive Director to organize their implementation. Many questions were raised and

discussed. Rick asked that we send any concerns or comments about the Strategic Plan to Debra Thompson at national office.

11. Membership Fees Report – Rick Huziak and committee (Christine Kulyk and Jeff Swick)
 - Rick showed a spreadsheet outlining our fee structure and showing our essential revenues and expenses. It showed a deficit of \$35 per year if we make no changes to our fees whatsoever. Any non-essential, i.e. luxury items are coming out of fundraising.
 - The committee's recommendation was that we should not decrease our local fees in light of the information presented.
 - Motion – Jim Young made a motion that we accept the committee's recommendation. Seconded by Les Dickson. Carried
12. Newsletter Costs – Motion by Les Dickson that only 40 “extra” copies of the newsletter be printed per month. Seconded by Norma Jensen. Carried.
13. User fees for Sleaford/speakers – Jeff suggested that in the future when we are requested to give talks that maybe half of the monies given should go toward Sleaford.
14. Meeting was adjourned at 7:28 PM

Minutes of the General Meeting, Nov 20, 2010

by Ron Waldron

1. Meeting began at 7:45 PM
2. Approval of Minutes of October Meeting – Moved by Rick Huziak. Seconded by Barb Wright. Carried.
3. Treasurer's Report
 - A copy of the last fiscal year (Sept. 2009 – Sept. 2010) financial report was distributed. Motion to approve as circulated – Colin Chatfield. Seconded by Ellen Dickson. Carried.
 - Request that we wave an audit of the financial statement. Moved by Norma Jensen. Seconded by Jim Gorkoff. Carried
4. Fundraising Report – Colin Chatfield – Steak Night will be November 27th at Haywood's Grill

in the Eastview Shopping Centre. Currently there are 13 registered. We need 30 to make it happen. Cost will be between \$15 and \$16.

5. National Rep Report – Rick Huziak – see minutes of November Executive Meeting.
6. Events Co-ordinator's Report – Patricia Gakis
 - Facebook page for our club is up and running. Questions about it should be directed toward Patricia.
 - Children's Day at Market Mall is on as scheduled. The date is Saturday, November 20th from 10 - 5 PM. We are not obligated to stay the entire day although we should. More help is still needed for

- this to be successful. Let Patricia know if you can help.
- We are still thinking about having Lunar Observing Nights as an attraction to some of our new members. A central location would be determined.
 - 7. Observer's Group – absent
 - 8. Site Co-ordinator's Report – Darrel Chatfield
 - Sleaford Renos – wiring is done, walls are still exposed but the facility is entirely usable. Insulation and poly will be added shortly. Covering of the walls will likely wait until spring. Members are asked not to "play" with the breaker panel.
 - Now work can begin on the 16" telescope and later on the Patterson Dome
 - 9. Membership Report – Mark De Jong – Current membership is 72 members. The database from national is being distributed to executive members.
 - 10. News Letter Report - Tenho Tuomi – Deadline for December newsletter is November 22nd.
 - 11. Membership Fees Report – Rick Huziak – see minutes of November Executive Meeting.
 - 12. Presentations
 - Under the Living Skies Olympic Video – shown by Rick Huziak
 - Are We in for Another Maunder Minimum? – Dr. George Sofko, Institute of Space and Atmospheric Studies
 - 13. Meeting was adjourned at 9:47 PM.

In Praise of Early Morning Observing

Copied from the rasctoon list, Nov 5, posted by Jeff Swick

Well all this past week I got up at 5:00 am to do some observing. Here's what I've found.

Firstly the night prior I've been working on Cygnus and after observing, I set up everything for 5:00 and Orion. I'll admit it feels weird looking at the summer triangle then a couple of hours looking in the same region at stars I don't usually get to see from home until mid-March

Well, I find that in the morning session I'm much more relaxed and productive. I've been working on my double star program and have much more patience for star hopping. I've found several doubles on my list buried in M42, in the winter I'd never have the patience for scoping them out, I'm not cold and I don't worry so much about folks coming down the alley.

One real highlight (and I admit I used the goto for this one) is McNeil's nebula. It's an HH object that I should never be able to see from the city. All I really saw was the dimmest of smudges and in fact had to jiggle the scope to be sure I'm seeing it, nothing to write home about other than the fact that I saw something.... barely.... maybe. Now I've seen it before at

Sleaford and it was actually fairly detailed for such a small object. What that tells me is that it must be in outburst to be able to see it from the city because it's damned tiny to begin with, I'll check that later today.

Also the city seems less light polluted at 5:00.... not sure that is fact or perception. I also find my walk to work in the morning much more relaxed as I'm already awake.

I happened to have Pink Floyd's Dark Side of the Moon on the iPod and chuckled to myself at the lyric "The Lunatic is on the grass" and wondered if Tenho and I just may be a little crazy getting up so early..... the test will come at 30 below.... I suspect there is only one person in the club that will be crazy enough to crawl out from a warm bed at 5 and I'm pretty sure it won't be me.



M78 with McNeil's Nebula, photo January 17, 2010 by Tenho Tuomi

That said I've truly enjoyed my early morning astronomy this week and like my gentleman farmer friend Tenho says "you gotta make hay while the sun shines", I've made my astronomical hay this warm week before the sun rose. Very rewarding and very productive.

RASC Saskatoon Centre Financial Report

October 1, 2009 to September 30, 2010

By Norma Jensen

	Current Year 2009-10	Previous Year 2008-09
Operating Statement for the Fiscal Year		
Revenue		
Membership fees	\$ 2,583.15	\$ 2,249.24
Public Education	-	-
Retail Sales	537.00	1,048.33
Donations	289.00	3,768.53
Fundraising		
Star Party	12,259.20	30,722.07
Dinners, Raffles, etc.	61.00	-
Advertising	180.00	450.00
Interest	416.89	550.60
Total Revenue for the Year	\$ 16,326.24	\$ 38,788.77
Expenses		
Public Education	\$ 631.95	\$ 1,864.90
Taxes & Licences	10.00	10.00
Star Party	10,651.13	26,443.25
Insurance	1105.00	1,084.00
Repairs & Maintenance	1,158.12	366.22
Office Supplies & Postage; Newsletter	1,291.07	1,484.32
Retail Sales	933.33	741.65
Depreciation	828.31	824.54
Miscellaneous (GA expense)	250.00	-
Fundraising	-	-
Total Expenses for the Year	\$ 16,858.91	\$ 32,818.88
Net Surplus (Deficit) for the Year	\$ (532.67)	\$ 5,969.89
Statement of Assets and Liabilities		
Assets		
Cash	\$ 5,527.36	\$ 8,975.85
Term Deposits	32,727.78	29,312.34
Raffle Fund	313.84	313.80
Fixed Assets		
Equipment	15,737.95	15,666.26
Retail Inventory	1500.00	2,071.35
Total Assets	\$ 55,806.93	\$ 56,339.60
Liabilities		
Balance Forward	\$ 56,339.60	50,369.71
Current Year Surplus (Deficit)	(532.93)	5,969.89
Balance at End of Year	\$ 55,806.93	\$ 56,339.60

Events Coordinator – Year-End Report

by Patricia Gakis

Once again, we've reached that time of year when we all tend to look back at what we've done, where we are, and where we are going. For me, 2010 marks my first full year as event coordinator. Compared to 2009 which was of course International Year of Astronomy, this was a fairly quiet year. Admittedly a number of events such as Wintershines and Relay for Life ended up being cancelled due to Mother Nature's desire to drown us but we also had some successes this year too in spite of the weather. Here's a quick recap of the year.

Earth Hour at Centre Mall is fast becoming a new tradition for our club. This is the second year we were out and once again, the public was enthusiastic. On March 27th, people around the world were asked to turn their lights off for 1 hour to show their commitment to combat global climate change. But this event also presents a wonderful opportunity for us to educate the public on light pollution, an issue that many people simply do not understand. Over 200 people looked through our telescopes and saw not only the beauty of the sky but how much that beauty is obscured by harsh city lighting. Hopefully we can continue this theme of night sky preservation at next year's Earth hour (hint, hint Bob Johnson!)

One of the best events we do every year is Astronomy Weekend which was held this year on April 23rd and 24th. Unfortunately, I was personally unable to attend both the Lakewood Civic Centre public astronomy night on the Friday night as well as the Farmer's Market set up on Saturday afternoon but was pleased to hear that they were well attended by the public. Even our usual Saturday night at Beaver Creek attracted a decent sized crowd despite the cold windy weather.

Late in 2009, a number of newer members brought up the desire for events that would better integrate beginners and newcomers into both our centre as well as astronomy as a whole. We are still working on setting up more events but on June 17th of this year, we managed to have our first beginner's night at the University of Saskatchewan Observatory. The focus of this night was to educate our new and temporary members on choosing the right telescope and getting started on the Explore the Universe certificate. It was

also a great night to meet everyone and really get a chance to talk to our new members. I sincerely hope we can do this again as it not only a wonderful opportunity for our new members to learn about astronomy but gives everyone a chance to ask questions and learn a bit about what other members are doing. Ideas have been put forward for a lunar observing group as well as an astrophotography workshop that would both be geared towards newer/beginner members and I hope to get those going in the new year. Please feel free to contact me with any suggestions or if you are able to help out.

After finally drying off from SSSP this summer, we kicked off fall with an invitation from Lakewood Civic Centre to come out again for another sidewalk astronomy event. Despite a little miscommunication with the organizers, we had just under 100 people including two Girl Guide groups come visit us on September 29th and look through our telescopes. But I was most proud of the participation of our own members. It was wonderful to see so many of our people come out for the evening and I hope everyone enjoyed themselves!

Our last event of the year was our annual open house at Sleaford. Last year for IYA, we had a two night event. With both nights clouded out and raining, we still had roughly 100 people both nights and we were stunned at the turn out. This year on October 17th, we were shocked again when after devouring our very delicious potluck dinner/BBQ, we saw car after car after car come down the road towards us. At least 300 people joined us on a tour of Sleaford and while this record setting turnout seems surprising, I hope it is proof to our members of just how much interest there is in Saskatoon for astronomy.

There have been many discussions at our meetings this year about increasing (and inevitably maintaining) our membership. Events like the ones we have done this year will be an integral part of this growth. But we cannot do this without the participation of all our members and I would like to thank everyone who volunteered this year. Your help and support have been greatly appreciated. Let's keep up this momentum in 2011!

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CELESTRON

Wanted: SSSP Organizers

The SSSP Committee requests volunteers to help with planning of the ever-popular Sask Summer Star Party. We are about to start planning for the next (hopefully rainless) SSSP and we can use your organizing talents! We meet about once a month, and more frequently closer to the party. If you would like to help out (we provide cookies!) please contact Rick Huziak at 665-3392 or rickhuziak@shaw.ca

SKY BUYS & MIRROR CELLS

The Saskatoon Centre's Swap and Sale Page

FOR SALE: Discovery 12.5" f/5 PDHQ Split-Tube Dobsonian. Bought in 2007 and used six times. Made some modifications to stiffen the box. Nice views from an excellent mirror but too much scope for me. Will ship at buyer's expense, or willing to deliver for gas money. Scope currently lists for \$1,699; I would like \$1,000. Contact Norma: norj@sasktel.net

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The Planets This Month, December 2010

by Murray D. Paulson, RASC Edmonton Centre

The beginning of December was marked by an evening elongation of **Mercury** where it crested to an elongation of 21 degrees from the sun and shone at magnitude -0.4. Mercury will slide quickly back into the twilight and will be at inferior conjunction with the sun on December 19th. It will pass 1.8 degrees above the sun at 5 pm local time, just two days before winter solstice. Over the next three weeks Mercury will swing out to the Greatest Western elongation on January 9th. This will be a Morning apparition. Mercury will shine at magnitude -0.2 and will show a 64% illuminated half disc. This will be an easy apparition to see with Mercury rising 1 hour and 20 minutes before the sun.

In the first week of December, **Venus** sits 41 degrees from the sun and shines at magnitude -4.6. In the eyepiece it now shows a fat 39" crescent. Over the next month, Venus will dim slightly to magnitude -4.4 and in the eyepiece you will see it shrink to 25" by January 8th. At this time, Venus will sit at Greatest Western Elongation, 46.9 degrees from the sun and it will display a 50.19% illuminated disc.

Mars is low in the twilight glare, only 14 degrees from the sun, and shines at magnitude 1.2. We won't see it again until next summer due to the conditions of the spring ecliptic. It sits at 2.37 AU and exhibits a 3.95" diameter; not much larger than Uranus in the eyepiece.

December finds **Jupiter** sitting just below the circlet of Pisces and shining at magnitude -2.4. At the beginning of the month, it displays a 42" disc in the eyepiece. As we have seen for quite some time, Jupiter's South Equatorial Belt has disappeared, but there is sign that it may be returning. A South equatorial disturbance has been observed, and the last time Jupiter did the disappearing belt show, a similar type of occurrence heralded the return of the South Equatorial Belt. The next few months may be quite exciting in the re-development of this feature. Over the month, Jupiter will noticeably shrink, and by the beginning of January it will shine at magnitude -2.3

and subtend 38" of arc. You will probably notice that Jupiter is sneaking back up on the planet Uranus as you line Jupiter up in the finder. Over the last days of December, and early January, you can watch the two planets close in on one another until on January 4th, they are only 31' apart. You should be able to compare the discs of Jupiter's large moon Ganymede, 1.4" diameter, with the planet Uranus, 3.6" diameter.

Saturn now rises just before 3 am, but is still a little late for observing. It starts off the month 4.5 degrees east of gamma Virginis and it will move toward theta Virginis over the next month. Saturn shines at magnitude 0.8 and its disc is 16" in diameter for those of you who are up late or are early risers. By the beginning of January, Saturn will rise at 1 am, still too late in the evening to wait for decent views, but you could catch it in the morning hours to see the rings tilted up at 10 degrees and the disc of the planet which will swell to 17 3".

Uranus is well placed for observing and will reveal itself to anyone with binoculars and the interest in finding it. It shines at magnitude 5.8 and will show a 3.6" blue green disc in a high power eyepiece. Be sure to watch the show of Jupiter closing in on it over the last week December and the first week of January. It may make a nice photo op with the two so close in a high power field.

Neptune sets at 10:30 pm, so is still placed for easy observation if you have a good south Horizon. At the beginning of the month, it sits only 14 minutes of arc above 5th magnitude mu Capricorn. It shines at magnitude 7.9 and in a high power eyepiece will show you its 2.2" bluish disc. Neptune sits at the lofty distance of 30.72 AU from Earth.

The next stop out is **Pluto** which sits at 32.85 AU from Earth. Pluto comes to conjunction with the sun on Boxing Day, December 26th. At a distance of only 4.25 degrees above the sun, I don't think anybody will be trying to observe it, so it won't interfere with your boxing day engagements.

The Messier, H-400 & H-400-II, FNGC, Binoc & EtU Club

Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or II, 140 Lunar, or 35 Binocular objects, or Explore the Universe and earn great OBSERVING CERTIFICATES!

MESSIER CLUB

Certified at 110 Objects:

R. Huziak, G. Sarty, S. Alexander, S. Ferguson, D. Jeffrey, D. Chatfield, B. Christie, K. Noesgaard, M. Stephens, B. Hydomako, T. Tuomi, L. Scott, G. Charpentier, B. Johnson, M. Clancy, L. Dickson, B. Burlingham

Ken Maher	Done!	110
Norma Jensen		108
Ron Waldron		105
Kathleen Houston		90
Margo Millar		77
Wade Selvig		75
Garry Stone		57
Barb Wright		40
Wayne Schlapkohl		36
Ellen Dickson		34
Jeff Swick		24



The Messier & Finest NGC lists can be found in the *Observer's Handbook*.

The Explore the Universe list is available on the National website.

On-line Messier and Finest NGC lists, charts and logbooks – check out:

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

On-line Herschel 400 List – check out the official site at:

<http://www.astroleague.org/al/obsclubs/herschel/hers400.html>

The Binocular List will be available at each general meeting or can be mailed out on request to distant members.

Copies of the Isabel Williamson Lunar Observing Program Guide can be purchased at meetings.

Program details can be found at: <http://www.rasc.ca/williamson/index.shtml>

Observers Group

by Larry Scott



Our November 6th Observers Group was cancelled due to weather conditions. One of our stalwart members made it out despite my pessimistic forecast. Although I've yet to hear his report, I do applaud that kind of enthusiasm. I did get out to Sleaford for a night of sky watching on November 4th and was joined by Norma, Rick and Darrell. The boys turned out to be not much fun that night as they were working on the renovations

despite the clear sky. Thanks guys, really, really appreciate your efforts.

Next Observers Group is scheduled for January 29th. That skips over the dark sky period from December 25th till January 8th due to the Holiday Season (Cheers everyone!). Given opportunity and clear skies I hope to be out during the holidays maybe once or twice, check our Yahoo! site for updates.

Season's greetings to all and to all a good night.