

Saskatoon Skies

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

Vol. 45, No. 1

January 2014



Left: Member Tenho Tuomi proudly displays a sample of his astrophotography at the December Pot Luck Social. **Right:** Approximately 20 members attended the Pot Luck Social held on December 16th in Room 175 of the Physics Bldg.



Saskatoon Centre
The Royal Astronomical Society of Canada
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<http://www.rasc.ca/saskatoon>

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To view *Saskatoon Skies* in colour, see
our Website:

<http://homepage.usask.ca/~ges125/rasc/newsletters.html>

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MEMBERSHIP? JOIN TODAY!

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 National Office at <national@RASC.ca>!

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
- 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 – James Gorkoff, 644-1343
Secretary – Tenho Tuomi, 306-858-2453
Vice-President – Jim Goodridge, 370-8530
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.

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

Newsletter Editor – Ron Waldron
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 rmwaldron@shaw.ca as a .doc, no indents, no tabs, one line between paragraphs. Images: .jpg please, no larger than 1 – 1.5 MB, sent by e-mail as attached files. **Deadline for submission of all articles for an upcoming issue is the first Friday of the month!**

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 1st of the month. Saskatoon Skies accepts commercial advertising. Please call the editor 306-665-3392 for rates. Members can advertise non-commercial items free of charge.

RASC CALENDAR OF EVENTS

Dec. 16	Christmas Potluck Social – 6:30 PM – No Executive Meeting	Barb Wright
Dec. 28	Observer's Group at Sleaford	Larry Scott
Jan. 3	Quadrantid Meteor Shower	
Jan. 9	Summer Star Party Meeting SSSP Organizing Meeting	Jim Goodridge
Jan. 20	Executive and General Meeting – Rm 175 Physics	Jim Gorkoff
Jan. 25	Observer's Group at Sleaford	Larry Scott
Feb. 10	Executive and General Meeting – Rm 175 Physics	Jim Gorkoff
Feb. 22	Observer's Group at Sleaford	Larry Scott
Mar. 22	Observer's Group at Sleaford	Larry Scott
Mar. 29	Messier Marathon at Sleaford	Larry Scott

For a complete list of club events, please check out: <http://www.usask.ca/rasc/activities.html>



General Meeting for all members and guests

Monday, January 20th at 8:00 PM

Program

The excellent 2013 General Assembly in Thunder Bay

Rick Huziak will provide a summary of the 2013 General Assembly held in Thunder Bay and the concurrent opening of the David Thompson Astronomical Observatory. He will also reveal what spending 26 hours with Chris Beckett in a car is like.

Note: *there will be an Executive meeting at 7:00 PM*

Minutes of NAC132 Meeting – *Tenho Tuomi*

Minutes of National Advisory Council (NAC132) Meeting held on Saturday, 2013 November 30 at 17:00 EST entirely by teleconference

Meeting called to order at 17:00 EST by CoChair, RASC President Glenn Hawley, who welcomed the NAC Representatives and guests. A roll call was carried out.

Moved that the minutes of NAC131 of 2013 Jun 30 be accepted as corrected.

Society Update / Recent Survey – Deborah Thompson spoke about her report, explaining the recent survey results.

Strategic Plan Review – Colin Haig spoke about the process and activities that got us to where we are now. He expanded on the goals as developed by the Board, some of which need the input and assistance at the Centre level.

iMIS Project Update – Denis Grey gave a quick demo of the iMIS Centre-specific menu.

Recommendation for Honorary President and Committee Chairs Participation in NAC – A working group will make recommendations to the Board prior to the next NAC meeting.

Updating Key Centre Info – Colin Haig emphasized that it's critical to advise people at the Society Office and the National Secretary when Centre changes occur.

2014 Board Elections – Chris Gainor talked briefly about the upcoming election because of the major difference from last year – the entire Board will be elected. A schedule will soon be published.

Moved by the LPAC that the RASC Advisory Council recommend that the RASC BOD implement a program to produce education and outreach materials. These materials may be scheduled to take advantage of International Year of Light in 2015 with a focus on the solutions to LP in urban areas.

Report from Special Committee on Québec Centres – Colin Haig explained that the Board recognizes that the situation is not new, is a special situation, and is not ideal. Patrice Scattolin said he was pleased with the results of the report, and that the members in the CFdeM will work toward compliance.

Next meeting date 2014 March 15 at 11:00 EDT.

Christmas Giving by our Vice President

Editor's Note:

Santa Claus and Christmas Giving came to the Saskatoon Centre in the form of our Vice President Jim Goodridge. Jim gave a short summary of the activities of our Centre over the year and then proceeded to give out candy and chocolates to many members (including this editor) at December Pot Luck Social.



Trivia – Tenho Tuomi

I was scanning through the Herschel 400-II list and found that 52 of the objects are the same as, or parts of objects in the RASC Observer's Handbook lists:

- 33 objects are the same as David Levy's Deep-Sky Gems
- 14 are the same as or parts of the Finest NGC objects
- 2 are Wide-Field Wonders (206 & 6526)
- 2 are Deep-Sky Challenge objects (4236 & 5053)
- one is part of Messier M33 (604). I might have missed some.

At least 155 of the objects in the first Herschel 400 list are in the RASC lists:

- 58 are David Levy Gems
- One is a Wide-Field Wonder
- 96 are Messier or FNGC objects.

For details of the last two see the July/August 2004 newsletter, page 8 with a couple errors. 3558 should be 3556, and 650 should be 651.

An Archival Photo – Jim Young



Jim Young sent me this “ancient photo” showing members of a very early Saskatoon Centre – RASC. If you look closely you can clearly see a dapper looking Jim Young and Rick Huziak. Other people I can identify are Gordon Patterson, Doug Beck and Mike Wesolowski. If you are able to identify all persons in this photo, please send your identification to the editor: rmwaldron@shaw.ca

Why Not to Go Observing – *Norma Jensen*

Look outside - go outside; it's overcast and foggy. It's also the New Moon period, but observing tonight? - Hardly. The Clear Sky Clock shows clear over Sleaford as the evening progresses, so I pack up and go. At least it will be a drive in the country. As I drive east, there is deepening low cloud and fog through the hills to the Sleaford turnoff.

I arrive; deciding not to set up until the skies open up, but the site is ready, having been cleared of snow the previous weekend. The skies do clear and the night is great with steady temperature around -5 degrees, a bit of wind later to counter some frost. Even with average seeing and transparency there is a lot to explore.

M15 is sparkling; M33's spiral arms open. Andromeda with her two companion galaxies, NGC 891, nebulae M1, M76 (little dumbbell), and the open clusters of Auriga especially M37 with its garnet central star are wonderful to see after a month of thirst. There is a surprisingly similar loose structure to M38 and its companion NGC 1907. As always, I take a look at the double cluster in Perseus. I spend time at different powers and with various filters, or just look and look. Now I am waiting for Gemini, Orion and Jupiter to rise higher and then went in deep. M35 with NGC2158, the Trapezium in Orion rich in red, gold, yellow and diamond colors and varying magnitudes, and finally Jupiter - tonight a surprise of linear beauty with three moon on one side, one on the other and the bands on its surface also lying along the same plane. Beautiful!

Coyotes sing from time to time in the distance and one lone bird murmurs. Throughout the evening meteors flit here and there, mainly fast and short. There is one very bright yellow long-tailed meteor across the zenith from east to west - very nice. As often happens as the early morning hours arrive, so does the aurora with grays and greens.

While packing up, the skies, of course, look perfect. Cygnus dips its wings into the west. Jupiter and Orion are high and now Leo is coming up.

Another night caught and savored.

How to Get a Telescope Without Breaking the Bank – *Jim Goodridge*

Many people feel that they cannot take up astronomy as a hobby because they do not have a telescope and cannot purchase a telescope for one reason or another. While those of us who are already committed to astronomy as a hobby know that there are a million things you can do with the naked eye and with binoculars, there are folks who just think that they cannot participate without a scope and therefore forego the greatest hobby in the world. This does not have to be the case if you live in Saskatoon or area and are a member of RASC Saskatoon Centre. Here is a list of telescopes available for use and how to qualify to use them.

1. Loaner Telescopes from RASC Saskatoon - We have three eight inch Dobsonian telescopes available for rental for a monthly charge of \$10. In my opinion this is the greatest bargain ever. An eight inch "Dob" will enable you to do all of the deep sky objects in the Messier Catalog, The Finest NGC list and the Herschel 400 observing list. These telescopes are also good on the moon and planets. When I took up astronomy seriously in late 2011 I rented one for 5 months and did an absolute ton of observing with it. For information check out the RASC Saskatoon Website.
2. There are two very large telescopes available for use at RASC's Sleaford Observatory. There is the Meade 16 inch SCT and a really big Dobsonian telescope in the roll off building. The big Dob looks to be about a 12 inch and was built by members of the centre. There is also an eight inch SCT in the Pattison dome and hopefully that scope will become useable in the next couple of years. For information on these scopes check out the website and you will need to talk to Larry the observing co-coordinator. Also volunteering at the Sleaford Observatory to help out Darrell and Rick with building maintenance will help your cause considerably. If you own your own telescope but need serious aperture for a particular observation this is a really good way to get it. Dark Skies, Close to Saskatoon, Big Scope - No Cost. It doesn't get much better than that.
3. There is a classic 6 inch diameter, long focal length refractor at the University of Saskatchewan Observatory. Volunteers at the observatory can use it during non peak hours (peak hours are two hours every Saturday night) You need a buddy to observe with for safety reasons but this is a really neat scope and just being in the observatory building is a treat. There is no cost but you have to be a volunteer for Saturday night viewing. It is great fun to volunteer and you end up learning an incredible amount. You will also be amazed at the number of people who come through the door every Saturday. Typically you just need to volunteer one night a month. Contact Stan Shadick the observatory director, the number is listed in every issue of RASC Saskatoon's Newsletter.

There you have it, three ways to get your hands on a telescope with very little expense but with great opportunities for having fun with astronomy.

Observer's Group Notes – *Larry Scott*

Cloudy weather, cold weather, and good bye to Comet ISON sums up December for me. There had been an Observers's Group scheduled for December 28th but it was cloudy again. I did make it out to Sleaford on January 3rd for the Quadrantid meteor shower. Windchill that night was -41C so observing time was very limited, maybe 20 minutes all told and not one meteor to be seen. I will have to try that meteor shower again under better conditions. Next scheduled Observer's Group is January 25th with moonless evenings from January 19th till February 2nd.

The Five Visible Planets This Month

adapted from Earthsky.org

*Only one planet is easily visible in the evening throughout January 2014: **Jupiter**. Earth flies between the sun and Jupiter early this month, and thus Jupiter – our solar system’s most massive planet – shines from dusk until dawn and is at its closest and brightest for the year.*

*If you’re lucky and have a very clear sky to the west after sunset, you might also catch **Venus** in early January, before the sky’s brightest planet disappears in the glare of sunset after the first week of January*

Mercury - will present a fine evening apparition for several weeks the Northern Hemisphere, centered around January 31. Look for the solar system’s innermost planet to become visible in the western evening twilight sometime in the latter part of January 2014. Try using the slender waxing crescent moon to spot Mercury on January 31.

Venus - beams in the west at dusk in the first part of January. It sets about one hour after sunset on New Year’s Day. This dazzling object quickly sinks into the glare of sunset, day by day, as 2014 opens. Use the slender waxing crescent moon to help you find Venus in the evening sky on January 2. In the first few days of January 2014 you might be able to see the thin crescent Venus with binoculars – or even the unaided eye. Venus will pass between us and the sun on January 11. It’s illuminated half – its day side – is facing mostly away from us all through January 2014. This month, Venus’ disk starts out about 4% illuminated in sunshine. Venus will become visible in the eastern sky before dawn after mid-month, probably around January 20. It will be rising approximately two and one-half hours before the sun by the month’s end.

Mars - becomes easier to spot before sunrise in January, as it climbs a higher into the predawn sky and brightens all month long. Keep in mind that Jupiter shines many times more brilliantly than Mars does. At or near dawn, as Jupiter sits low in the west, look for Mars to shine at or near its highest point in the sky. Mars *transits* -reaches its high point – around 6 a.m. on New Year’s Day and around 5 a.m. at the month’s end.

Jupiter - is the planet to watch in January 2014. It replaces Venus as the brightest beacon in the evening sky in January 2014. But, while Venus was in the west at nightfall, Jupiter is in the east. No star outshines Jupiter or Venus. Earth flies between the sun and Jupiter on January 5, 2014. This is Jupiter’s yearly opposition – when it’s opposite the sun – rising in the east as the sun is setting in the west. Thus, in January 2014, Jupiter is at its best. Look for it, come to know it and keep your eye on Jupiter as this brilliant world shines from dusk until dawn all month long.

Saturn - rises in the east around 3 to 4 a.m. local time in early January and about 1 to 2 a.m. local time by the month’s end. This golden-colored world shines in front of the constellation Libra the Scales. Saturn is rising earlier day by day, and will rise before midnight by March 2014. Saturn will be out all night long and at its best in May 2014.

Observing Clubs and Certificates

Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or II, 140 Lunar, 154 Sky Gems 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, K.
Houston*

Norma Jensen	110
complete	
Ron Waldron	105
Wade Selvig	75
Garry Stone	57
Bernice Friesen	45
Wayne Schlapkohl	43
Barb Wright	40
Ellen Dickson	34
Jeff Swick	24
Graham Hartridge	9

Chatfield BINOCULAR CERTIFICATE

Certified at 35 to 40 Objects:

*M. Stephens, T. Tuomi, M. Clancy,
R. Huziak, K. Maher*

Jim Goodridge	Up!	12
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FINEST NGC CLUB

Certified at 110 Objects:

*R. Huziak, D. Jeffrey, G. Sarty,
D. Chatfield, T. Tuomi*

Larry Scott	Done!	110
Scott Alexander		97
Norma Jensen		66
Sandy Ferguson		23
Kathleen Houston		23
George Charpentier		13
Mike Clancy		7

EXPLORE the UNIVERSE

Certified at 55 to 110 Objects:

*M. Clancy, T. Tuomi, K. Maher,
B. Gratias*

Wayne Schlapkohl	Done	55
Sharon Dice		31
Jim Goodridge	Up!	35

Isabel Williamson Lunar Observing Certificate

Certified at 140 Objects:

T. Tuomi

Norma Jensen	133
Jeff Swick	29

HERSCHEL 400 CLUB

Certified at 400 Objects:

*D. Jeffrey, R. Huziak, D. Chatfield, T.
Tuomi*

Gordon Sarty	251
Scott Alexander	117
Sandy Ferguson	18
Larry Scott	20

HERSCHEL 400-II CLUB

Darrell Chatfield	Done!	400
Rick Huziak		246

LEVY DEEP-SKY GEMS

Certified at 154 Objects:

Tenho Tuomi	150
Darrell Chatfield	70



The Messier, Finest NGC and David Levy's Deep-Sky Gems 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: <http://www.rasc.ca/observing>

On-line Herschel 400 List: <http://www.astroleague.org/al/obsclubs/herschel/hers400.html>

Binocular List is at: http://homepage.usask.ca/%7Eges125/rasc/Chatfield_Binocular_List.pdf

"Isabel Williamson Lunar Observing Program Guide:

<http://www.rasc.ca/observing/williamson-lunar-observing-certificate>

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