Vol. 35, No. 12 December 2004

Forest of Telescopes at the Saskatoon Hobby Show

Thank you to everyone who brought telescopes for the display at the Saskatoon Hobby Show on November 5. It made for a very impressive display and made people stop and look and ask questions.



In this issue...

Membership Information, Bottle Drive & U of S Observatory Hours	2
RASC Calendar of Events; Books for Sale; Sky Buys and Mirror Cells	3
General Meeting: Meteor Counting; Good Heavens!	3
Minutes of the last General Meeting	3
President's Message	4
The Saskatoon Hobby Show	4
A Participant's View of Planning for the Future	5
The Watch Story Gets Better, or How to Get Caveat Emptored!	6
Activities Coordinator Report	7
The Okanagan Centre of the RASC is preparing to host you!	7
The Planets This Month, December 2004	8
The Messier, H-400 & H-400 II, FNGC, Binoc & EtU Club	9
RASC Observing Group Notes	9
Saskatoon Skies — Index to Volume 35 (2004)	10



Saskatoon Centre The Royal Astronomical **Society of Canada** P.O. Box 317, RPO University Saskatoon, SK S7N 4J8

URL: http://duke.usask.ca/~ges125/rasc E-MAIL: rmwaldron@shaw.ca

TELEPHONE: (306) 382-9428

Membership? It's never too late to join!

Regular: \$58.00/year Youth: \$31.25/year Lifetime: \$1000

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, Mike Clancy, or renew through the National Office and let Mike 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 (bimonthly)

- SkyNews Magazine (bimonthly)
- use of the Centre library
- discounts to Sky & Telescope Magazine
- free, no-cost, no-obligation,
 3-month temporary membership if you don't want to join right now!

Saskatoon Centre's main officers:

President – Ron Waldron Vice-President – Garry Stone Secretary – Al Hartridge Treasurer – tbd

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

About this Newsletter...

Newsletter Editors – Tenho Tuomi, Linda Janzen Copy – Brian Friesen & WBM Collate – Brian Friesen, Walter Essar, Jim Young, Les & Ellen Dickson, Yannis Pahatouroglou Labels & Temps – Mike Clancy Web Posting – Gord Sarty

Printing of this Newsletter is courtesy of



Copying is provided on a Risograph copier for a nominal fee.

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 articles. 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 – preferred as plain unformatted ASCII text files without line breaks. Images sent by e-mail should be attached .JPGs (.GIFs also accepted). Send e-mail submissions to the editor at <tuomi@sasktel.net>. Please send articles in "generic" formats with simple formatting - one tab at the beginning of paragraphs, one space after commas and periods. 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 stated), but source credit is requested. **DEADLINE** for submissions is the 26th of each month. Saskatoon Skies accepts commercial advertising. Please call the editor for rates. Members can advertise noncommercial items free of charge.



by Darrell Chatfield

Canadian Tire Money collected to date is \$50. Thank you to all who contributed to our fundraising for the Centre. Please bring your bottles and Canadian Tire Money to the General meetings. I will collect them after the meeting concludes. If you cannot make it to the meeting but would like to contribute, please call me at 374-9278.

2004 RASC Calendar of Events			
DATE	EVENT	CONTACT	TELEPHONE
Dec. 10	Observers Group – 8:00 p.m., Sleaford Observatory	Bill Hydomako	384-4781
Dec. 13	Geminid Meteor Shower Peak	Rick Huziak	665-3392
Dec. 13	RASC Executive Meeting – 6:30 p.m., 175 Physics, U of S	Ron Waldron	382-9428
Dec. 13	RASC General Meeting – 7:30 p.m., 175 Physics, U of S –	D W11	202.0420
	Meteor Counting by Tehno Tuomi; Good Heavens by Ron Waldron	Ron Waldron	382-9428
Dec. 21-22	Ursid Meteor Shower Peak	Rick Huziak	665-3392
Jan. 17	RASC Executive Meeting – 6:30 p.m., 175 Physics, U of S	Ron Waldron	382-9428
Jan. 17	RASC General Meeting – 7:30 p.m., 175 Physics, U of S – program TBA	Ron Waldron	382-9428



Monday, Dec. 15, 7:30 PM — Room 175 Physics, U of S

Presenting:

Meteor Counting by Tenho Tuomi Good Heavens! by Ron Waldron

So you think you may know a lot about astronomy? Here is a game to challenge all members in attendance at the December meeting. And best of all – there is a prize for the winner! (Ron Waldron will officiate.)

BOOKS FOR SALE

by Bruce Brandell, Sales Coordinator

Christmas Stocking Stuffer Special

Buy before Christmas and take \$2.00 off listed price of any item! Contact Rick Huziak 665-3392 or huziak@sedsystems.ca (since Bruce is still away on vacation).

Title	Author	No. Avail.	Price Cdn\$
Calendar, RASC 2005	Rajiv Gupta, Editor	23	\$14.00
Calendar, Skywatcher 2005	Stan Shadick	10	\$15.00
Beginners Observer's Guide	Leo Enright	7	\$18.00
Skyways — Astronomy Handbook for Teachers RASC Centennial Mug Messier Cards, laminated Messier Poster, colored Milkyway Poster Touring the Universe	Mary L. Whitehorne Sky Publishing Sky Publishing Sky Publishing	3 9 5 2 2	\$18.00 \$ 8.00 \$ 6.00 \$27.00 \$32.00
through Binoculars	Philip S. Harrington	1	\$58.00
The Moon Map	Sky Publishing	1	\$20.00
Pins SSSP 2004			\$ 5.00
Pins SSSP, other years			\$ 4.00

Minutes of the GENERAL MEETING Nov 15, 2004, 7:00pm – Rm 130 Physics, U of S

- 1. Meeting brought to order at 7:00pm.
- 2. Yahoo Observers Group List: Jeff Swick circulated a list for those wishing to sign up for this internet group.
- 3. Elections: The position of treasurer has been filled by Norma Jensen. Barb Young will assist in the transition to the treasurer's position. Jeff Swick has agreed to take the position of Events Coordinator. Both people were nominated by Jim Gorkoff and this was seconded by Yannis and carried.
- 4. Centre Web Site: has been upgraded by Brent Burlingham.
- 5. Reports: by Secretary and Treasurer are due to National by the end of January.
- Laser Pointer: this has been recognized as a very useful teaching aid. Moved by Bill Hydomako and seconded by Chris Martin and carried that the club purchase a green laser pointer.
- 7. Program: The "Planning for the Future" workshop. Directed by Ron Waldron, 7:30-10:00pm.
- 8. At one of our general meetings the flip charts and provocative statements derived from this workshop will be presented. Segments of results will be posted in the newsletter.
- 9. Meeting adjourned at 10:00pm.

SKY BUYS & MIRROR CELLS THE SASKATOON CENTRE'S SWAP AND SALE PAGE!

Drice

For Loan to Members: Slide set for talks on general astronomy and light pollution. You can borrow this set any time you want to give a talk to your favourite group. Contact Rick Huziak at 665-3392.

For Sale: RASC Royal Centenary coffee mugs. Pick yours up at the next General Meeting – \$9 each

President's Message by Ron Waldron



By the time you are reading this message, you will be well into the Christmas season with shopping, staff social events, family gatherings and best of all food and lots of it. It might be healthy to pause and

consider your family of friends and acquaintances in the Saskatoon Centre for just a moment.

As your incoming president I was impressed with the warm welcome I received at the November meeting and equally with the seriousness with which all present tackled the Planning Our Future workshop activities. The opportunity to communicate one-on-one and in small groups rarely occurs at our meetings and is relegated to events we plan at our Sleaford dark site. The data you uncovered will be scrutinized over the next few months by the new executive and a direction and action plan for

the future of our centre will be proposed to the members. Thank you all for your contribution.

There are many things being done and will continue to be done by individual members of our centre. What I would like you to consider is focussing and directing the activities of the group as a whole. If we do so, many projects such as education, the completion of the 16" telescope and dome, and improvements to our dark site may become possible. All it takes is direction and the will to do so by the members.

As you celebrate the holidays, don't forget to cast your eyes skyward occasionally and ponder the miracle of the Christmas "star" and gaze at the many planets now returning to our view. May I end this message by wishing each and every one of you the very best that the season has to offer and I look forward to meeting and working with you in 2005.

The Saskatoon Hobby Show by Rick Huziak

The revitalized Saskatoon Hobby Show ran on November 5-6 this year. The RASC was personally invited to attend the show, as the organizers wished to diversify the content of the show and put more emphasis on hobbies to balance the craft sector that has dominated for many years. As a carrot, the RASC received a reduced fee for a double booth, but due to reduced exhibitor entries we received a 10' x 30' triple booth that allowed us to comfortably spread out with book sales and an expanded telescope display.

The show began at 4:00 p.m. on Friday, and thanks to Jim Young and Al and Graham Hartridge leading the set-up crew, the display was ready and presentable when the doors opened. Friday evening was pretty slow with only a few hundred people coming by the booth until closing at 10:00 p.m. Member support was decent, with about 8 members taking turns in sales or explaining the telescopes.

Saturday was a longer day, beginning at 9:00 a.m. and running until 6:00 p.m. Again, traffic was much lower than expected,



Booth workers Al Hartridge, Graham Hartridge, Darrell Chatfield and Rick Huziak.



again with only a few hundred people making the stop at the booth. At times we were busy, but mostly we were not. Even so, we were short of members at times, with sometimes only three

members in the booth; too few for the job. However, we made do and everything worked out OK. On both days, I gave a talk on *Buying Your First Telescope* to supplement other talks at the show, and hopefully encourage the purchase of better quality (i.e. functional) telescopes as Christmas presents.

Despite the low attendance, possibly due to poor advertising by the Hobby Show, or maybe by a rumored craft show at the WDM* across the street, we made enough sales to pay for our booth and we did see a few new member faces helping out. I suspect that next year, we'll likely give it another try.



Barb Young helps out at the booth.
PHOTO BY CHRIS MARTIN

* WDM = Western Development Museum (not WMD = Weapons of Mass Destruction). Both could have caused low attendance, except that the weapons never existed.

A Participant's View of **Planning for the Future**by Chris Martin <comet_martin@hotmail.com>



Centre President Ron Waldron welcomes us to the AI workshop/meeting.

The November 15th meeting was not your average Centre meeting where one would sit back and be informed on things astronomical. Rather, Centre President Ron Waldron with the help of Al and Graham Hartridge, set up room 130 of the Physics Building by 7 p.m. for all members to become active participants in an Appreciative Inquiry (AI) Workshop. The first purpose of the "AI" format is to encourage all there to think and act constructively about future goals and directions for our centre. Secondly, the executive would then use the gathered collective thoughts in order to develop short and long

term plans and activities to fulfill those goals.

The method to fulfill the purpose wasn't pedantic discussion on what was best to achieve said goals but a refreshing change from the

ordinary. Before the meeting began, Ron had divided the members into groups of four with a couple of groups of three. Before each person was a file folder containing the outline for the evening's agenda. Each group had different colored file folders and a felt pen to match. ("Why" you ask? Stay tuned!) After a brief introduction, Ron then invited us to pair off with someone we didn't know that well and interview him or her! The idea behind the ten-minute interview was to see what enticed that person into astronomy, who or what

influenced them then and what they would like to see happen in the club now. Normally, we stand by someone's telescope or over a cup of coffee and gather snippets of each other's journey thus far. However, the interview was a pleasure since each of our unique stories were to be heard from the beginning, without interruption.

After the interview, we gathered back into our small "focus groups" and were given time for us to individually summarize the interviews in writing. Everyone there continued on in the small group context, sharing that person's story and the highlight of the interview for each other. Each group then translated the common themes, hopes and desires of the four stories onto easel-sized paper, using the felt markers. We had to title our page with our group's name. Naming each group was an easy task. Remember those file folders? Since our folders were red, our group became "The Red Giants." The blue folder group became known as "The Blue Dwarfs," and so on.

After a short break, we then perused the summaries of the other groups hanging on the wall nearest the group's table. This was both

helpful and essential in achieving the final but creative task ahead of us. Ron invited us to prepare a Provocative Proposition. In reviewing each group's themes, we then set out to propose what our group thought would be the best "mission" or "vision statement" based on all the summaries. The reason for calling it "provocative"? The statement, read by anyone seeing it, would provoke the response, "Do I ever want to join that club! Where do I sign up?" A representative for each group then stood up to read their statement.

It was at this point that Ron asked from those attending how best to organize the goals and statements into an action plan - would we like to tackle it as a whole group or let the Executive sum up the results of the evening and plan activities and goals accordingly? The general consensus was that the Executive would do the summation and planning with a view to presenting the results at a future general meeting in the New Year. It was at this point then that our facilitator adjourned the meeting at approximately 9:40 p.m.

During the whole of the evening, Ron shared stories and examples of how everything was to be done. Thankfully too, he did an

> admirable job of keeping us on time. To keep a room full of people actively engaged in such a wonderful discovery process for two and a half hours with nary a complaint was quite a feat. However, more to Ron's credit, his use of the Appreciative Inquiry format allowed even the skeptics among us to be nicely surprised by the positive outcome. There is an air of hope that passing on the torch to others in the pursuit of astronomy within our club is more than just plausible – it is possible



Pensive puzzlement over parchment pickings or, "What does that say???"

to share our (renewed) enthusiasm in a positive and practical way that many more will want to join us in our passion for the stars.

Hats off to Ron Waldron and everyone who took the time to participate in *Planning for the Future*. Also, "thank you" goes out to Marianne Hydomako, Myrna Stone and Barb Wright for bringing baked goodies. They were a pleasure to the palate!

PHOTOS COURTESY OF CHRIS MARTIN



The Magenta Group (I-r): Rick, Yannis, Ken and Tenho

The Watch Story Gets Better, or How to Get Caveat-Emptored!

This story is particularly for those who enjoy Murphy's Law of Irony. Some of you will be partly familiar with this story of which I will paraphrase the first part, which was told to us by Saskatoon Centre's new president, Ron Waldron, at our meeting on October the 18th:

Ron had read about and was very interested in a Casio watch, THE PATHFINDER, that would give the times of Sunrise and Sunset based on the GMT differential (how many hours away from Greenwich, + or -) as well as the longitude & latitude of the wearer. After checking around Saskatoon at various department and jewellery stores, none of the sales staff anywhere even heard of such a watch. "Either way, sir," Ron was told, "it would have to be specially ordered." Ron, ponderous and ever sagacious, would not be outdone. "Fine. I'll just check the 'Net on the computer." To his delight, E-Bay had it for about \$49.95 in U.S. funds. After shipping, handling and currency exchange, the final tally came to something like \$94.00 Canadian. So he bit the bullet and ordered the thing since it seemed like the only way to get one in Canada.

The next Saskatoon Centre function that Ron attended was the Sleaford Open House and – voila! – his watch had arrived in time to start showing off to all his RASC pals what a wonderful marvel that, oh surely, he was the only guy in the *province*, oh no, all of *Western Canada* that owned such a technical timepiece. Ron strolled over to…Les Dickson. "Who better than Les?" thought Ron. "You know, Les," Ron began, "You've got to see this new watch that tells me times of sunrise and sunset based on my global co-ordinates. It's really cool!"

However much Ron was elated, he was just as quickly and exponentially deflated with that classic Dicksonian smile and the simple words, "You mean like this one?" Les pulled up on his left sleeve to reveal the brownbanded, multi-symbolic casing of THE PATHFINDER. The object of Ron's long hunt glistened on Les's wrist. Ron was incredulous. "But, but...where?" he mustered. Les is neither ludite nor a consumer slouch. "Oh, at Safeway. They had a big bin of them with a bunch of other Casio watches for only \$49.95. I was just walking through the store to pick up a couple of things and there they were." Les beamed from ear to ear. Ron looked like a good imitation of a small-mouthed bass.

To his credit, our illustrious President could see the humour and related the story at our October meeting. However, I'm sure he took some consolation in his music afterward. Oh, that's right! Ron plays trombone. In fact, I see Ron on Monday nights (when there isn't a meeting) at a local high school. We pass in the hall – me, on my way out of practice with a beginning adult band and Ron on his way in to play with the very capable Wind Ensemble Band. I'm just learning the trombone myself. So the Monday one week after the meeting,

we were passing in the hallway again. I showed Ron something I had come into possession with. "Is this like yours, Ron?" He picked up my newly acquired watch and said "Yeah! This must be the one from Safeway for \$49.95, right?" I hesitated to respond. Going through my head is the thought "It's a good thing that Ron and I have astronomy and music in common, so I don't think he'll hit me!" I continued: "Well, er, uhh...yes, Ron, it is the one from Safeway. I was just in to pick up a couple of things when I noticed the bin of Casio watches. THE PATHFINDER is on sale today, Ron. *Twenty dollars off*. I picked it up for \$29.95."

I quickly turned and left the building. When I glanced over my shoulder, Ron, eyes glazed over, his six-foot-two frame was frozen to the spot, his face doing a **great** impression of a **large-mouthed** bass. Me? I was doing a great impression of Les Dickson: **beaming – from ear to ear!**

Addendum for the Article:

By the way, I ran into Ron again tonight, 8th November, both of us transiting to/from our common band room. It seems that Ron got a nice little note about a week ago from – are you ready? – Canada Customs and Revenue Agency! It seems they missed on sending Ron some necessary paperwork and found out he owed them some money...for GST! Ron's extra bill? Another seventeen dollars! The grand tally for Ron's watch hunt? (Feel sorry for him folks!) One hundred and eleven dollars!!! Now I feel really bad!

Sincerely sorry, Chris Martin.



Author of the "Watch Story," Chris Martin (on left), stands beside the good-natured Ron Waldron. Ron obviously has a "bone" to pick with Chris!

Activities Coordinator Report by Jeff Swick

In looking for ways to increase my volunteer time with the Saskatoon Center I've stepped into the position of Activities Coordinator. I see the role as not only coordinating events but also as a way to market the club to the general public in order to not only increase membership but make the club more accessible to the existing membership. To this end we have moved forward and formed a "Yahoo Group" for the center. You can link to it from the brand new web page that Brent Burlingham has created for our center or you can go there directly via the following URL http://groups.yahoo.com/group/rascstoon/.

For those of you unfamiliar with a Yahoo group it is a message board and also a place to store and share links, files and photos. There are several ways to receive email. Either direct into your email box or you can choose to receive the digest version or you can read online which is how I have my own set up. This group will serve to facilitate communication between members in between newsletters and should also be of great benefit to our members who live outside of the Saskatoon area. The

group is only available to members in good standing so any worries about spammers and email harvesting bots are eliminated. Members can either sign up themselves or email me at jjswickshaw.ca and I can do it for you. As more members start using the list it will of course evolve it's own "personality" so to speak. There is also a calendar there that sends out auto reminders for club events such as Bill Hydomako's observing group notices, etc.

I've been scanning newsletters from some of the other RASC centers as well looking for ideas to bring our club more into the public eye. I must say it was a real pleasure watching the members at the hobby show sharing their enthusiasm for the hobby with the public.

One question that I have is regarding some kind of club event over the holiday season. Whether it be some type of Gastronomy event or something at Sleaford I'd certainly be interested in hearing suggestions.

Best Regards Jeff Swick

The Okanagan Centre of the RASC is preparing to host you!

by Jim Failes, GA 2005 Publicity Committee

RASC members from across the country are warmly invited to join us in Kelowna, British Columbia, next May for General Assembly 2005. This springtime GA, on the Victoria Day long weekend, has a lot to offer. The four-day event includes a variety of tours, displays, contests, and lectures, plus plenty of great food and a sip (or two!) of Okanagan wine.

The Okanagan GA's roster of guest speakers is shaping up well. Confirmed presenters include Jack Newton, Andreas Gada, Tyler Foster, Rajiv Gupta and Jaymie Matthews.

Saturday evening, the 2005 GA offers a dinner cruise aboard the S.S. Fintry Queen – Kelowna's popular paddlewheeler. There's always a chance that the legendary lake monster Ogopogo will make an appearance, so keep a camera handy.

On Sunday afternoon, the Ruth Northcott Lecture will be presented by Jaymie Matthews, Mission Scientist for the MOST (Microvariability and Oscillation of STars) satellite. Dr. Matthews will bring us up to date on the latest results from Canada's own "Humble Space Telescope." Among MOST's scientific goals is direct detection of light from exo-solar planets – a very exciting and competitive area of research.

Astrophotographer Jack Newton is our banquet speaker Sunday evening at Gray Monk Estate Winery just north of Kelowna. Gray Monk boasts a first-class reputation for its wines and cuisine, all in a spectacular setting among vineyards overlooking Lake Okanagan. Jack's talk + planned to follow an optional tour of the winery + will feature many of his finest, and most interesting astrophotos. Crisp focus is required, so go easy on the wine!

On Monday, you can choose to journey south for a special insider's tour of the Dominion Radio Astrophysical Observatory near Penticton. Then, if you like, continue down the valley for an open-house at Jack and Alice Newton's Observatory Bed & Breakfast in Osoyoos.

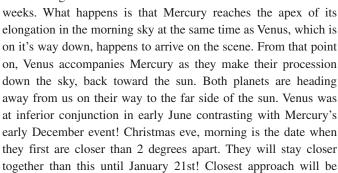
Of course, you can expect a variety of presentations, activities, and displays throughout the General Assembly at the event's home base among the pines at the North Kelowna Campus of Okanagan University College. Accommodation is available on site in the student residences. OUC is co-sponsoring the GA.

All in all, we think we have the makings of a very memorable and most enjoyable national convention. As more information becomes available, you can keep track by visiting the GA's web site, www.ocrasc.ca/qa.html.

The Planets This Month, December 2004

by Murray D. Paulson, Edmonton Centre

Mercury starts off this month plummeting back towards the sun as it speeds to its sixth and last conjunction with the sun for this year. This will happen on December 10th at which time Mercury passes only 1.3 degrees above the sun. This is an inferior conjunction, placing Mercury between the Earth and the sun. Mercury then swings into the morning sky headed for a fine elongation just in time for Christmas. This is a great morning apparition with a bonus of a conjunction with the planet Venus to boot! The motion of the two planets is almost in synch such that the pair will sit within 2 degrees of each other for over three



on January 12th when the pair are only 19 minutes of arc apart. In the eyepiece the pair will show very gibbous disks with Venus showing a 10.5' disk compared to Mercury's 5.4" disk. I encourage you to seek them out in a telescope. They are very seldom this conveniently close together, and to see two planetary disks in one high power field of view is pretty cool. Venus will shine at magnitude -3.9 contrasting with Mercury at magnitude -0.3. Over the period of December 23 to Jan 12, Mercury rises in brightness from magnitude -0.1 to -0.3 while it goes from a 7.6" half disk to a 5.4" almost a full disk. Venus stays fairly constant at magnitude -3.9. This will give you the opportunity to see how big a window you can keep track of Mercury over. I think my record is 10 days, but with the bright beacon of Venus nearby this should set records.



Moon/Jupiter conjunction November 9

Whilst this dance of Mercury and Venus has been going on, the planet **Mars** has been slipping by almost unnoticed. Mars, Venus and a slender 28-day-old moon join together in the morning sky of December 10. The moon will be the difficult one to see, 8 degrees below Venus in the twilight glare. Mars is still on the far side of the solar system, so it is fairly small and dim, but it's red color will be obvious. Mars shines at magnitude 1.7 at the beginning of the month, and will brighten very slightly to magnitude 1.5 by early January. The view in the eyepiece is a small 4" ruddy disk. Can you see a polar cap? We are now less than a

year away from the next opposition, so it will wind it's way slowly up the sky.

Jupiter has risen high into the morning sky, but will still rise well after midnight even by the end of December. On the morning of December 7th, you can see a 24-day-old waning moon less than 1/2 degree below Jupiter in the early morning sky. If you were out east you would see Jupiter occulted by the moon, but you would have to be east of the Manitoba border if you want to see the whole thing. Saskatoon will see Jupiter come out on the dark side of moon at 3:48 am, just after moonrise. You better have a clear

eastern horizon because the moon will only be 3 degrees above it! Other than this, if you need your Jupiter fix, or just need another target for that new piece of optics Santa left under the tree, head out some early morning and get a view of the giant. At months end, Jupiter is 37.5" in diameter and shines at magnitude –2.0.

Saturn is now a prominent object in the east of the late evening sky. At the beginning of the month, it shines at magnitude –0.1 and it will gradually brighten over the month to magnitude –0.4. Over this time interval, the planet increases in size from 20" to 20.6" and will be the darling of the evening in any telescope. The moon joins Saturn on the night of December 27th. The waning gibbous moon will pass 4-1/2 degrees above Saturn. Last year on January 6th, the full moon sat 4 degrees above Saturn accompanied by a full halo. Not the greatest for observing, but an unusual sight nonetheless.



Moon halo and Saturn, January 6, 2004

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 400 Herschel II, Explore the Universe, or 35 Binocular objects 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

C Cl	A12 11	110
George Charpentier	Applied!	110
Mike Clancy		97
Brent Gratias		96
Mike Oosterlaken		93
Lorne Jensen		88
Brent Burlingham		85
Wade Selvig		75
Les Dickson		70
Garry Stone		57
Kathleen Houston		57
Ellen Dickson		23
Brian Friesen		15
Barb Young		6

FINEST NGC CLUB Certified at 110 Objects: R. Huziak, D. Leffrey, G. Sarts

R. Huziak, D. Jeffrey, G. Sarty, D. Chatfield

Tenho Tuomi	Applied!	110
Scott Alexander		97
Bill Hydomako	Up!	55
Sandy Ferguson	_	23
Mike Oosterlaken		20
Larry Scott		15
Mike Clancy		4
George Charpentier	New!	4

Chatfield BINOCULAR CERTIFICATE

Certified at 35 Objects:

M. Stephens, T. Tuomi, M. Clancy,

R. Huziak

Brent Gratias	36
Mike Oosterlaken	32
Anna Clancy	24
•	

EXPLORE the UNIVERSE

Certified for Certificate:

M. Clancy, T. Tuomi

HERSCHEL 400 CLUB Certified at 400 Objects: D. Jeffrey, R. Huziak, D. Chatfield

Gord Sarty	251
Tenho Tuomi	143
Scott Alexander	117
Mike Oosterlaken	68
Sandy Ferguson	18

HERSCHEL 400-II CLUB Certified at 400 Objects:

Richard Huziak		211
Darrell Chatfield	Up!	196

The Messier & Finest NGC lists can be found in the *Observer's Handbook*. The Explore the Universe list is available on the National web site. The Binocular List & Herschel 400 lists will be available at each general meeting or can be mailed out on request to distant members. Each month I'll be posting updates.



RASC Observing Group Notes

by Bill Hydomako, Observing Group Coordinator

The Observer's Group on November 12 was well attended with fourteen members in attendance. We first toured the site and facilities. Five members received keys to the site after the tour. We then went through the most prominent constellations including the Summer Triangle, Pegasus, Andromeda, Cassiopeia, Perseus, Ursa Major and Ursa Minor. We also touched on some aspects of basic astronomy along the way.

Next Observer's Group will be on December 10 at 8:00 p.m. at the Sleaford Observatory. We will continue with more constellations and then get into double stars.

On-line Messier List – For those who'd like an electronic Messier list (with DSS images), check out:

http://www.seds.org/billa/dssm/messier.html

On-line Finest NGC List – For those who'd like an electronic FNGC list, check out the Edmonton Centre's version at:

http://www.edmontonrasc.com/catalog.html

On-line Herschel 400 List – For those who'd like an electronic Herschel 400 list, check out the official site at:

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

The Observer's Group session in January will on January 10. I don't think we will have a formal presentation because historically January has been cold and cloudy. However, I'll go out if conditions permit anyway.

For the following months Observer's Group sessions are planned for:

Feb. 11 • March 11 • April 8 • May 6 • June 3

Clear Skies!

Bill Hydomako, Observing Group Coordinator



Saskatoon Skies - Index to Volume 35 (2004)

In the following annual index, articles are grouped by subject and show the page and issue in which they appeared.

Club Activities and Announcements		Lunar Transit Phenomena Research Program	
Detecting Earth-like Planets Around Other Stars	4 Jan	Newsletters from Other Centres	4 Oct
Rick's Ramblings	5 Jan	Ask AstroNut	7 Nov
Should We Move Meeting Rooms	5 Feb	The Okanagan Centre of the RASC is preparing to host you!	7 Dec
RASC Saskatoon Centre Financial Report	12 Feb		
U of S Maps to get you to the next meeting1	5/16 Feb	News	
Rick's Ramblings Meetings Room & Light Pollution	5 Mar	Mercury, Venus, Mars, HUZIAK, Jupiter	
Message from the Prez		4179 Toutatis — The Doomsday Rock — Comes Near	8 Sep
The National Questionnaire & Other Club Stuff	4 May	Wow! A Dark Sky Preserve Here in Saskatchewan	6 Oct
A Busy Summer for Astronomy — Now Into Fall	4 Sep		
New Membership Fees	5 Sep	Observing	
A Loaner Presentation Slide Set for the Saskatoon Centre	3 Oct	Inconstant Moon — An Amateur's Perspective	
Planning for the Future by Examining our Successes in the Past	5 Oct	The AAVSO Year-end Report is out — how did Canadians fare?	11 Feb
Annual Elections — A Primer	5 Oct	Venus on the Half Shell	
Upcoming Events — Please help out if you can	6 Oct	My Big Fat Greek Transit	
Our 2004-2005 Executive	4 Nov	Quest for M101: Hard times for a Backyard Astronomer	
Even Cheaper Parking at the U of S	6 Nov	It's Noctilucent Cloud Season!	
President's Message	4 Dec	Comet C/2001 Q4 NEAT	6 Jun
The Saskatoon Hobby Show	4 Dec	The Big Fat Greek Transit	4 Aug
A Participant's View of Planning for the Future	5 Dec	Adventures in Planetary & People Motions	5 Aug
		Notes from a Backyard Astronomer	6 Aug
Contests and Certificates		On the Track of 4143 Huziak	8 Sep
Margo's Marathon Tips		It is Geosync Flare Month	10 Oct
Chatfield's Binocular Certificate — The Observing Session	6 Mar	Prospects for the Leonid & Geminid Showers	9 Nov
Confessions of a Messier Marathoner	7 Apr		
National Observing Certificate Stats — We're Still Doing Well!	6 May	Product Reviews	
Numerical Listing of Finest NGC Objects	9 May	Timothy Ferris's Seeing in the Dark — A Book Review	6 Jan
The Chatfield Binoc Challenge — Part 1	7 Aug	Free Planetarium Programs	7 May
Going from Messier and FNGC to Herschel 400 Club	8 Aug		
Errata note	4 Sep	Saskatoon Skies Newsletter	
The Chatfield Binoc Challenge — Part 2	7 Sep	On-line Saskatoon Skies Problems	
The Chatfield Binoc Challenge — Part 3	8 Oct	The Editor's Corner	4 Aug
The Chatfield Binoc Challenge — Part 4	8 Nov		
		Sleaford Notes	
Members		The Sleaford Page	6 Jun
Astronomy — A Personal Journey — One Year Later	4 Apr		
Confessions of an Amateur Astronomer: Keeping the Wife Interested	7 Feb	SSSP and Star Parties	
Confessions of an Amateur Astronomer: An Indirect		International Astronomy Day — April 24, 2004	
Introduction to the Sky		An Invitation to the Saskatchewan Summer Star Party 2004	
A stargazer's dreaming: Kathleen Houston's Mixed Media Artwork	6 Apr	SSSP 2004 Tentative Schedule of Events	
My First Ever Astrophoto		Northern Prairie Starfest	
The Watch Story Gets Better, or How to Get Caveat Emptored!	6 Dec	HELP WANTED — SSSP Volunteers Needed	•
Activities Coordinator Report	7 Dec	Synergy at SSSP 2004	
		Notes from the Meadows: SSSP 2004	
Miscellaneous		Planets at SSSP	
Newsletters from Other Centres		Northern Prairie Starfest 2004	5 Nov
More Boneheaded Moments in Astronomy		_	
Interesting Websites		Telescope Notes	
Newsletters from Other Centres		Garry Stone's Homemade Telescopes	
Newsletters from Other Centres		Fixing your Rigel QuickFinder	
Newsletters from Other Centres	3 lun	How Much Magnification	9 Sen

10