

Saskatoon Skies

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

Vol. 36, No. 10

October 2005



Monthly Meetings

The Astronomy Club holds monthly meetings on the third Monday of each month at 7:30 p.m. (except July and August), in room 175 or the Physics building on the U of S campus. Come and enjoy a wide variety of speakers. Bring your friends. Visitors are welcome.

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Saskatoon Centre

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Membership? It's never too late to join!

Regular: \$65.00/year Youth: \$34.25/year Lifetime: \$1100

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!

* 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 fax 306-659-2170.

About this Newsletter...

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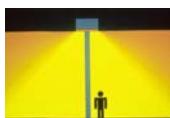
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Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 100 copies per issue. *Saskatoon Skies* welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science articles. 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 non-commercial items free of charge.

Saskatoon Centre's main officers:

President – Ron Waldron
Vice-President – Garry Stone

Secretary – Al Hartridge
Treasurer – Norma Jensen



**Light Pollution Abatement website at:
www.ras.sk.ca/lpc/lpc.htm**

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


Bottle Drive & Canadian Tire \$

by Darrell Chatfield

\$13.35 in Canadian Tire Money received from Jim Wood. Thank you very much. The total collected to date is \$65.60. 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.

DATE	EVENT	CONTACT	TELEPHONE
Oct. 17	Executive Meeting – 6:30 pm, 175 Physics, U of S	Ron Waldron	832-9428
Oct. 17	General Meeting – 7:30 pm, 175 Physics, U of S – Annual General Election of Executive	Ron Waldron	832-9428
Oct. 20/21	Orionid Meteor Peak (moon will interfere a bit)	Rick Huziak	665-3392
Oct. 21	Prince Albert Public Star Night – 7:30 pm, Prime Minister Park	Kathleen	922-8836
Oct. 28	Observer's Group Session – Sleaford Observatory at dusk	Bill Hydomako	384-4781
Oct. 28/29	Sleaford Annual Open House – Rain or Shine, 7:30 p.m.	Rick Huziak	665-3392
Oct. 29	Prince Albert Trip to Sleaford Open House – Leaving 3 p.m.	Kathleen	922-8836
Oct. 29	Sleaford Helpers Potluck BBQ – 4:30 p.m. (in conjunction with Open House)	Rick Huziak	665-3392
Nov. 4	Observer's Group Session – Sleaford Observatory at dusk	Bill Hydomako	384-4781
Nov. 11/12	Saskatoon Hobby Show	Jeff Swick	373-3902
Nov. 16/17	Leonid Meteor Peak (full moon interferes)	Rick Huziak	665-3392
Nov. 19	Lakewood Civic Centre Public Starnite – TENTATIVE, SUBJECT TO CHANGE	Jeff Swick	373-3902
Nov. 21	Executive Meeting – 6:30 pm, 175 Physics, U of S	Ron Waldron	832-9428
Nov. 21	General Meeting – 7:30 pm, 175 Physics, U of S	Ron Waldron	832-9428
Dec. 2	Observer's Group Session – Sleaford Observatory at dusk	Bill Hydomako	384-4781
Apr. 2006	George Moores Astronomy Workshop – Edmonton Centre – TBD	TBD	

MEETING!!

Monday, Oct. 17, 7:30 PM, Room 175 Physics, U of S

Presenting:

Annual General Election of Executive

A Personal Australian Star Party

My first professional observing trip to Siding Spring Observatory to use the 40-inch telescope there. – by Gord Sarty

Travelling Sask and Alberta in the Name of Dark-Sky Parks and Star Parties

The summer was a blurred series of Provincial Park talks and the three Alberta star parties! Come see how we survived! – by Rick Huziak

Note: There will be an executive meeting at 6:30 p.m.



BOOKS FOR SALE

by Bruce Brandell, Sales Coordinator

Some of the items are left from the Star Party. All will be available at our next meeting. Call 249-1119, or email <bruce_brandell@yahoo.com>

Title	Author	No. Avail.	Price Cdn\$	Title	Author	No. Avail.	Price Cdn\$
Calendars				Books continued			
RASC 2006	RASC	15	\$14.00	The Beginner's Observer's Guide	L. Enright	4	\$19.00
Skywatcher's	Stan Shadick	12	\$18.00	Astrophotography	G.N. Patterson	lots	\$ 5.00
Books				Charts			
The Backyard Astronomer's Guide	Dickinson & Dyer	3	\$45.00	Milkyway Poster		1	\$25.00
Nightwatch	T. Dickinson	2	\$27.00	The Moon Map		1	\$15.00
Night Sky Atlas	R. Scagell	3	\$27.00	The Mars Map		1	\$15.00
The Moon Observer's Guide	P. Grego	3	\$13.00				
The Sun Observer's Guide	P. Spence	1	\$13.00	Miscellaneous			
Firefly Astronomy Dictionary	Firefly	3	\$13.00	RASC Centennial Mug		6	\$ 8.00
Exploring the Sky by Day	T. Dickinson	1	\$ 9.00	RASC Stickers, blue or white		lots	\$ 1.00
Skyways – Astronomy Handbook for Teachers	M.L. Whitehorse	5	\$20.00				

Minutes of the EXECUTIVE MEETING

Sept. 19, 2005, 6:30 pm – 175 Physics, U of S

1. Meeting called to order at 6:30 p.m.
2. Approval of Minutes of the June Meeting as published. Moved by Norma Jensen, seconded by Jim Young and carried.
3. **Treasurer's Report:** There is still \$5400.0 in the chequing account. Ivan Semeniuk's airfare has not been paid yet.
4. **Science City:** Bill Brooks (Science West) is asking the centre to set up a display. Rick Huziak will set up a light pollution display.
5. **Sleaford Open House:** Will take place on the 28th and 29th of October.
6. **Planning for Elections:** It was moved by Ron Waldron and seconded by Les Dickson and carried that a Nominations Committee be set up. The three people on the committee will be, Les Dickson, Ron Waldron and Darrell Chatfield.
7. **Events Committee:** Jeff Swick will organize a public star night at Lakewood Civic Centre for Saturday October 15th.
8. **Fundraising:** The draw for the raffle will take place at tonight's general meeting. All tickets have been sold so a profit of approximately \$1000.00 is expected.
A steak night is also being organized for November.
9. **Sleaford Site:** Not much activity since the weather has been so poor. The outside door to the toilet will be replaced soon.
10. **Sask. Light Abatement Committee:** More projects planned for the fall. Members should go out to Hampton Village subdivision and take a look at the lighting.
11. **Newsletter:** Sept. 26 is the deadline for articles, etc for the next newsletter. Linda Janzen will be resigning from the newsletter.
12. **Hobby Show:** Need to get the entry form in.
13. **Dark Sky Association:** Membership dues need to be paid (US \$50.00).
14. **Centre Insurance:** Norma will continue to look around for a new broker.
15. Meeting adjourned at 7:30 p.m.

Minutes of the GENERAL MEETING

Sept. 19, 2005, 7:30 pm – 175 Physics, U of S

1. Meeting called to order at 7:40 p.m.
2. **Highlights of the executive meeting** given by Ron Waldron.
3. **Messier Certificate:** presented to George Charpentier.
4. **Presentations:**
 - Rick Huziak interview on Shaw Cable
 - Rick Huziak – Forty-eight and still chasing Julia
 - SSSP 2005 Revisited – A potpourri of photos and experiencesTenho Tuomi's Photo in Sky and Telescope
5. **Ticket Draw for Raffle**
Winner of: portable DVD player – Gord Sarty
digital camera – Darrell Chatfield
Schrimshaw print – Keith Armstrong (Alberta)
6. **Correction** to the minutes of the executive meeting June 2005. The amount for the membership for 2005 should read as \$65.00.
7. Meeting adjourned at 9:23 p.m.

OCTOBER ELECTIONS

Each year at the October General Meeting, elections are held for places on our Executive Council. Positions are open to any member in good standing, and are nominated then elected by show of hands by the general membership. All positions except President & Vice-president (two-year terms) are up for grabs. If you are interested in any Executive or Councillor position, please contact one of the nominating committee: Les Dickson, Ron Waldron or Darrell Chatfield. Nominations will be taken from the floor as well.

Executive:

- President Ron - Waldron
- Vice-President - Garry Stone
- Past President - Richard Huziak
- Newsletter Editors
- Secretary
- Treasurer
- National Council Representative

Councillors:

- Events Coordinator
- Fundraising Coordinator
- Membership Coordinator
- Observing Coordinator
- Sleaford Site Coordinator
- SSSP Coordinator
- Councillor at-large
- Councillor at-large

SKY BUYS & MIRROR CELLS

THE SASKATOON CENTRE'S SWAP AND SALE PAGE!

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: One Concord 60 mm x 900 mm focal length refractor on an equatorial mount, complete with finder scope. One Tasco 60 mm refractor (about 700 mm focal length) on an alt/az mount. Both are in new condition. **Doug McMillan 382-0846.**

For Sale: Celestron G8N Telescope with a CG-5 Equatorial mount for sale, 8" main mirror, focal length 1000mm, F/5 focal ratio, comes with 20mm eyepiece (50X), paid \$1200.00, asking \$650.00, awesome deal, reason for selling, I bought a 10" Dobson. Also 10mm Speirs Waler eyepiece for sale, \$100.00. Anyone interested can call **Bob Johnson at 955-4618**, or email **bjohnson53@shaw.ca**

For Sale: Complete Telescope Package one year old (\$2400.00 new) Sale Price \$1400.00 obo – phone **306-665-6085** or **306-222-6883**. Package as follows:

Sky watcher Maksutovs mak127 • EQ3-2 mount • Dual axis Clock Motor Drive (with gel battery pack & 110 volt charger) • EQ3 polar scope • 9 x 50 finder scope with adjustable mount • Case for scope • Case for EQ3 mount • Hard Case for accessories

Accessories: Sky watcher dual led light • Seven piece stargazers filter set in a case (Skyglow broadband, Variable polarizing filter, Four color filters, Plus Moon filter and Antares ND 13 filter in case) • 2x Barlow lens 1.25 • Antares 2x barlow 1.25 fully multi coated • 6mm ultra wide angle long eye relief m/c • Plossl 10mm multi coated • Plossl 25mm multi coated • Plossl 32mm multi coated • Maxview 40 multi coated eyepiece/camera adapter with Sony 45-52 adapter • 1.25 – 45° diagonal • 1.25 – 45° erect image diagonal • eye piece reliefs

Books: *Night Watch* 3rd edition and *Backyard Astronomy Guide*



The Oct 28 & 29 Sleaford Open House (and BBQ)

The Annual Sleaford Community Open House and Star Night will be held two nights this year, on Friday, October 28 and Saturday, October 29. We always need member volunteers to man telescopes, displays and the snack bar. Depending on weather, we have had anywhere from 25 to 300 attendees from Saskatoon, Colonsay and area. If you can help out, please do so. On Saturday only, the starnight will be preceded by a Centre-member/family barbecue beginning at 4:30 p.m. This will be a potluck event. Bring what you can, though the event might be supplemented by some surplus (but previously frozen) SSSP delicious wienies. We'll provide cook-stoves on site. The starnight will begin once the public begins to arrive, about 7:30 p.m. on both nights. **This event goes snow, rain or shine!** Once we advertise, people will come, so please don't cancel your appearance due to inclement weather without letting us know first. Bring your scope, and visit with your Centre members and the public and show them the amazing views of Mars, which will be at opposition on the nights of the open house. The University will supply additional tour guides both nights and have the roll-off observatory buzzing too! We also will need speakers to give short general astronomy presentations on both Friday and Saturday nights which are intended to be given whether it is clear and especially if it is cloudy.

Please RSVP to Rick Huziak (665-3392) if you plan to, or even think you might, help out. We need an approximate head-count to make sure we have enough staff to cover the event. to help out. If things are busy, we could use 10 or 15 telescopes and their operators. If any changes occur, they will be announced at the October General Meeting.

The Saskatoon Hobby Show Nov. 11 & 12 – Rick Huziak

Complete details of the hobby show are currently unknown, but we will have firmer details by the October General Meeting. The show runs from 1:00 p.m. to 10:00 p.m. on Friday, Nov. 11 and 9:00 a.m. to 6:00 p.m. on Saturday, Nov. 12, so please plan to work one or both of these days. All in all, it will be like a really big Astronomy Day display, but expect 50,000 people over the two days! With this large amount of traffic, we will be very busy, and will need a lot of volunteers to help man the booth and we may also need a speaker or two to give a talk on the free stage. We could also use your telescopes for display, if you don't mind. Telescopes will be behind ropes for their protection, and will always be accompanied by a Centre member. We could use anything for wall-decorations – posters and the like, that you might want to lend us. The more stuff we have on display, the better we will

look. We will be able to sell books and calendars or similar merchandise. We will also need some people a bit earlier to help with booth set-up, which has to be done before the doors open. The Hobby Show tentatively takes place at Trade Center Hall D, Exhibition Grounds – check before going in case we have the wrong venue. As always, we need a head-count of all who will help out, or if you have display material we can borrow or if you will give a short talk. Please RSVP to Rick Huziak (665-3392) as soon as you can.

The National RASC Observing Web Page – Rick Huziak

I'm not sure how many of you visit the National RASC website (www.rasc.ca), but it now has a set of great web pages created to promote observing of all types. The RASC recognized a while back that although they have in excess of 4900 members nationwide in 27 Centres, precious few were doing any observing beyond the Messier list or the RASC's 110 Finest NGC programs. Worlds other than faint fuzzies are foreign concepts to many. To promote observing, an identity had to be given to those other "non-fuzzy" sky objects. The first victim was Variable Stars. That module was started a few years ago. Later, a few other modules, featuring Asteroids, Comets and Special Observing Projects were added, and over time, others will appear. The main web page can be found here:

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

The web pages give excellent instructions for beginning and intermediate observers to get started on these new adventures. The pages also emphasize that while you are making an observation, you might as well make it scientific, with the intent of reporting your observations one day. As a result, other organizations that can help you along with further observing projects and would like your observations are featured on these pages. While these pages were being designed, the RASC saw no reason to recreate RASC 'commissions' to gather up observations, since those other organization already do such a good job of it, and are international in scope, accepting observations from anyone willing to send them in. As a result, organizations like the American Association of Variable Star Observers (AAVSO), the Association of Lunar and Planetary Observers (ALPO) and the British Astronomical Association (BAA, who operate several observing commissions) are prominently featured.

Whether or not you want to submit observations for science, these observing pages are top rate, and National RASC Observing Committee member Chris Fleming, the page designer and major contributor deserves a great round of applause!

Prince Albert September Report

by Kathleen Houston, 922-8836, e.b.e@sasktel.net

Kathleen's travels south for M 62!

My family and I finally took the plunge south of the border, something we have been dreaming about since we moved out west 7 years ago. Mountains and canyons were calling to us, big time! Curiously I was in a position to compare Cypress Hill's skies to places like Yellowstone in Utah and Chaco Canyon in New Mexico. At Cypress I had forgotten how bright the Milky Way really is, and found many of these sites comparable.

We were fortunate in Yellowstone with clear skies, though this is a mixed blessing for a family learning to figure out their "new" and very used tent trailer. Clear skies also meant frozen water. I ventured out with my binoculars and the sky was gorgeous!

Chaco Culture, north west of Santa Fe, is a world heritage site with spectacular ruins aligned to the cardinal points. This was and continues to be an astronomically wild place! The visitors' centre is equipped with an observatory and they hosted a public slide show, talk, and star night with a fleet of amateur astronomers and their moderate scopes. (I was intimidated to get out my lowly 6" dob). The moon was parading over Fajada Butte, the site of a solar / lunar marker. This unique structure at the summit has enormous strategically placed stones, leaning against a cliff enhanced with a spiral petroglyph. At summer solstice, light peeks through the stones and glides through the spiral's centre. Solstice would have been an important time for the Chacoans. This site is the fruit of continuous and thorough astronomical observation. The marker even shows the lunar "...northern minor and major standstills – in the 18.6-year north-south cycle..." [People of Chaco, Kendrick Frazier. 2005. P. 197]. This is an astro-archaeologist's dream place!

On the last night at Chaco, with Fajada Butte whispering to me nearby, I dug out my scope from the van and set myself up at a local vacant campsite. My mission was to nab a Messier that evaded me at Cypress this August, M 62 in Scorpius. I felt the power of the place, with the moon vaguely illuminating the local rodents scurrying about. I worried about my eyepieces being carried off...hoping that rattlesnakes sleep at night. The moon was no longer virtually on top of M62 like the previous night, but adjacent. Perhaps almost giving up was a sign I needed to use another star hopping pathway taught me. When I finally found the sucker, I had to quell my delight, to not wake up the other campers. A few colourful metaphors slipped out, under my breath! I went on to find the Little Dumbbell in Andromeda, my treasure find for the night.



Ken's fabulous "Bino Frame"

Prince Albert hosted its first astronomy slide show, on September 23rd at Ken Maher's church, thanks to the club's excellent library of images. We had a few members join us and Ken's brother was our guest. I also announced the acquisition of the keys to the gravel pit, and plan to make trips out there in the near future! I am really excited about heading out to the gravel pit, knowing our group is welcome there!

Ken showed us an unusual creation of his; fresh out of the wood shop, that was the hit of our binocular tour at Prime Minister's Park. He dubbed it the "Bino Frame", and said he found the plans for it in the October issue of *Sky and Telescope*, under "Amateur telescope making". The author Alan MacRobert said the lengthy rectangular wood structure was intended for "Image stabilized binoculars".

The structure must be about 5 feet long, and it takes a little bit of playfulness to try it out. The bino frame rests on the shoulders, and is especially successful when butted against something in behind you, like a tree! Ken made two frames, and there we were, in the dark, careful not to look Laurel and Hardy-ish about the structure's rear extension. A group of 10 kids, fresh from a birthday party visited, tried out said frames and checked out the scopes. I had visions of War of the Worlds sci-fi movies as we used these low tech binocular stabilizers, pointed to the sky! The bins are strapped onto the pivoting frame in front, freeing our hands to hold the wood structure at a comfortable position. Comments were very positive. The next best thing is a tripod, of course.



Sandi and I attended an International Master Gardener Convention in Saskatoon, Saskatchewan, Canada, last July. While it had been on the agenda for months, it was only three days prior to our departure that I began to wonder if there might be an astronomy club in the vicinity. Thanks to the Web, I discovered that there was, indeed, an astro-group in town, the Royal Astronomical Society of Canada – Saskatoon Centre. I e-mailed the President, Ron Waldron, in hopes of having an opportunity to have a cup of coffee with him and compare notes on amateur astronomy.

Ron was enthusiastic in his response and we arranged to get in touch upon our arrival in Saskatoon. When we checked into Radisson Hotel I found a message from Ron, who had planned to get together with us the next evening. But the evening turned out to be much more than a casual cup of coffee. Upon his arrival at the hotel at 8:00 pm, Ron took us to the campus of the University of Saskatchewan – Saskatoon. There, we met fellow RASC member, Rick Huziak, who was on hand to open up the educational observing site on the roof of the five-storey physics building. The large observing area on the roof was surrounded by a 12' parapet enclosure that had once shielded the heating system from public view. Several scopes were in place with permanent

Observing Up North

by Forrest Lockhart

roll-off covers to protect from the harsh winter snow and winds. Many of the scopes were equipped with high quality photometric gear for variable star studies.

After saying goodbye to Rick, Ron then drove us 45 miles across the prairie east of Saskatoon to Sleaford Observatory, a multi-building observing and educational complex jointly developed and operated by the RASC-Saskatoon Centre and the university. When we arrived we were met by RASC Observatory Director, Bill Hydomako, who had driven out from town to give us a tour. Although we arrived at 10:00 pm the only objects visible in the still-bright sky were the two major planets, so we had a good opportunity to discuss construction techniques and observing in the far north. Due to the intense winter cold, which can reach -40° F, the frost line can reach 8 to 10 feet, and frostbite can occur in only minutes. Deep pilings and a warming room are a necessity. Need I mention that the mosquitoes were as big as sparrows?

Once it had gotten dark enough to see the stars, we noticed a soft green glow on the northern horizon. This was the first view of the Aurora Borealis for Sandi and I. As we watched, the glow became much brighter and began to climb up from the horizon. Soon, sheets of green fire swept across the sky and a pulsating green arc seemed to surround the polar region. All thoughts of stargazing were swept away we stood mesmerized by the glory of the sight. Bill noted that, during solar maximum, the intensity and extent of the aurora frequently wipes out most astronomical observing plans.

By about 1:00 am the aurora had faded and so had we. With a goodbye to Bill, we headed back to our hotel with heads full of wonderful hospitality and memories of our first aurora.

Since returning home, I have been in contact with Ron, Rick and Bill, and have invited them to visit us for some observing at HGO. We hope they can come someday. While an aurora isn't in the cards, we can assure a field full of S.V.A.S. scopes and friendly folks to offer them a peek at our (southern) stars.

John Dobson turns 90 (inventor of the Dobsonian)

From AAVSO Discussion List aavso-discussion@mira.aavso.org, Aug. 30, 2005

By Michael Linnolt <linnolt@hawaii.edu>

This past weekend (Aug 27) was Mr. Dobson's 90th birthday! While not an active variable star observer, I think most would agree he has probably done more for popular astronomy in general than anyone. I wonder how many amateurs and professionals got their start in some way due to Mr. Dobson's influence?

The AANC hosted a major birthday party at the Randall Museum in San Francisco. Some highlights:

- SF Mayor Gavin Newsom proclaimed August 27 "John Dobson Day".
- "Valley of the Dobs" featured some of the SF Sidewalk astronomer's original scopes (which were laughed out of RTMC at their debut, but now have taken over amateur astronomy!)

• Showing of the first full-length documentary film about Dobson "A Sidewalk Astronomer", followed by a lively question and answer session with Mr. Dobson fielding questions from the audience, ranging from intelligent life in the Universe to refuting the Big Bang and String theories!

I have placed some photos from the event here:

<http://pg.photos.yahoo.com/ph/mlinnolt/album?.dir=/f0ce&.src=ph&.tok=phHRkiDBR8N9v9X1>

I hope we can look forward to his 100th celebration!



The Planets This Month, October 2005

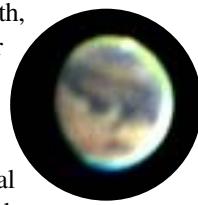
by Murray D. Paulson, Edmonton Centre

Mars is upon us, and the view even now a month in advance of the opposition is great. October is generally a good month for observing, so I heartily recommend that you get out and catch it while you can. November may come in like a bear and steal away those nice views of the red planet with a wreath of clouds.

Last month **Mercury** was in superior conjunction with the sun, and that means that it is now headed into an evening apparition. The ecliptic is so turned over in the fall and Mercury is sitting below it, a serious double whammy, so your only chance of seeing it over October and early November is using setting circles or a Goto scope in the daytime. Mercury arrives at the greatest elongation on November 3rd, 5 days before its dichotomy on November 8th. Early in the month its disk is at 5" and shines at magnitude -0.2, and it slowly increases in size to 7.23" at dichotomy and fades slightly to 0.0 magnitude. If you were placed in the southern hemisphere, you just might glimpse M4 only 2 degrees south of it while checking in on the dichotomy.

The ecliptic has laid **Venus** slowly into the twilight, and I have been watching it low in the west in the twilight glow. The great brilliance of the planet makes it shine though the glow, giving you a fleeting glimpse in the early evening before it is lost. In the early part of October, Venus shines at Magnitude -4.2 and will show you a 20" gibbous disk in the eyepiece. It sets one hour and eleven minutes after sunset. As we slide toward the Martian closest approach, coincidentally on October 30th, Venus expands and heads to its Greatest elongation around the same time. You can witness Venus's dichotomy on November 1st -2nd, which coincides with the greatest eastern elongation. This is quite unlike Mercury which is also undergoing elongation and dichotomy over this same week, but 5 days apart. Venus will shine at Magnitude -4.4 and show you a 25" half disk at this time. On November 5th a 2 day old moon passes below Venus, and you can use the magnitude -4.4 beacon to help find the ghostly moon. This is a repeat of the October 6th event.

I have been watching Mars over the last month, and it has been a great sight. The south polar cap has dwindled to a mere speck, and the North cap is tilting away from us. You can see the North polar hood, a brightening on the north end of the planet. As we roll into the final weeks before opposition, you will see the gibbous phase give way to a full disk. As of the last weekend in September, the Gibbous phase was still quite striking. On evenings when the atmosphere is still, the features are quite distinct, but you do have to give your eye some time to catch the details. Despite all you see of clearly defined features on images of Mars in magazines and on the web, they are just well crafted



artifacts of image processing. With a well trained eye, you can see most of it, but the first time out, the subtle details will elude you, so keep trying, and the details will come. Don't expect to see much with a short look in the eyepiece, give yourself lots of time. This also gives you the chance to see the rare good to great seeing moments. In any 5 minute session, the seeing generally can go from ok to awful and back to good. A 30 second glance won't give you the chance to catch the good moments. Take your time.

What is the best planetary telescope; refractor, Newtonian, Cassegrain???, Well, the best is the one you have, and the one you use. If you optimize it a bit, it will do even better for this opposition. If you have unlimited money, get a big refractor or Maksutov or a Takahashi Mewlon. If not, collimate your scope, or pick up a good Newtonian with a small secondary and a good mirror. (see Barry Arnold about that one)

Once the scope is under control, the next item is the eyepiece. For Mars, you need lots and lots of power. I push my 90 mm scope into the 200 to 300 power range when the seeing holds. My 130 mm scope and my 12.5" see powers from 220, 330 to 500+ power. Did I mention that you need lots of power? Use a barlow if necessary, and see where the power advantage breaks down. You want to be just below that threshold. The seeing has to be there, or you are just looking at the pink fuzzy tennis ball on close approach. Now these magnifications present the issue that you need wide field eyepieces to catch Mars for even a short time, or you must use a tracking mount... Equatorial or Ponct. Ah, what the heck, it's only money!

Contrast is important with Mars, so the eyepieces should not degrade the image. Eyepiece choices seem to suggest simpler eyepieces, like Orthoscopics and similar simple designs. Plossls can be very clean, and I have enjoyed the images through 3 mm Radians. The Abbe orthoscopics from Zeiss are the stuff of legend. At \$2500 for a set of 4 eyepieces, they sure are! Strangely enough, my mainstay for planetary observing with my 12.5" Dob was a 4.7 Ultrawide with all 8 elements. No simple design here, but it worked. I do admit that the contrast is better in my Takahashi 5 mm and 2.8 mm orthos, but you do need to track! (Presto gonzo!)

Filters will improve the contrast of various phenomena on Mars. A red filter will improve the contrast of the Maria to the ruddy desert features. With a smaller scope, 6" and under, I recommend using an Orange (Wratten 21) filter. It doesn't dim the image too much, but improves the contrast. Yellow, Green and Blue filters enhance atmospheric phenomena, from ground hazes and frosts with yellow to clouds with the blue filters. In

continued next page

The Planets This Month continued

blue, you seldom see the surface of Mars. The longer the wavelength, the farther down in the atmosphere you penetrate. The last word on filters though, some of us prefer to see the unfiltered image, and in time you get good at discriminating the colors of the clouds and other things. Filters do get you the final edge on things, but the esthetic is not as pleasing. The first time I saw Mars with Calgary's 8" f15 refractor (opposition 99) I was struck by the little white clouds that were visible in the eyepiece. I would not have seen them in a red filter!

Mars starts in October at magnitude -1.8 and will show you an 18.8" gibbous disk in the eyepiece. The side of Mars just after 11pm will show Solus Lacus, a rather conspicuous round "eye" like feature. The Handbook has a nice map on page 189, so take it out with you when you are observing and you will know what to look for. By the middle of October, (same time of night) we are looking at the Argyre and Aurorae Sinus region. The third week of the month, we see the Sinus Meridiani region, a rather obvious club feature with a roundish knob on the end of it. On the week of closest approach, we see Syrtis Major front and center. This has to be the most recognizable feature on Mars, and combined with closest approach, will be a treat. Mars now is at magnitude -2.2 and has grown to 20.16". At the Martian opposition on November 7th, we will be looking at the mare Cimmerium – Sirenum region, the blankest face of Mars. If you

get some great seeing and contrast, you may glimpse some of the cool and subtle features in the north side of the planet. Mars actually brightens to magnitude -2.3, even though its disk shrinks slightly to 19.97".

One interesting note on Mars is that its rotation period is 41 minutes longer than earth, so over a 39 day period you get to see the full surfaced of the planet. The long and the short of it is that you get about two rotations of Mars in the "Sweet spot" when it is close, and then it shrinks back.

This will be the best opposition of Mars until 2020, so enjoy it! The great altitude in our night sky combined with its size really is unbeatable. So, enjoy!

Jupiter is in conjunction with the sun on Oct 22, so you must look to **Saturn** for another well located planet for your late night enjoyment. By early October, it shines at magnitude 0.3 and the disk is 17.6" in diameter. It rises at 1 am, so it will be a late night view. By the Martian opposition, things have improved a bit and Saturn now rises at 10:30 pm (now standard time!) The disk has grown slightly to 18.5" and it has brightened slightly to 0.2 magnitude. The rings are tilted back down quite noticeably since last year. So, Saturn is the nightcap for the observing session, but do have a last glance at marvelous Mars. Till next month, clear skies!!!

A Midsummer Night

by Mike Clancy

An early July, 2005 visit to Christopher Lake was a perfect opportunity to try out my 90mm Celestron Maksutov-Cassegrain travel scope under what would turn out to be nearly ideal conditions. It was a Friday night filled with football, chicken wings (I heartily recommend the Cajun wings at the MacPherson Point Bar) and clear skies. I began observing at 2300 hrs, searching for M102 (Draco) and M106 (Canes Venatici). An attempt at M75 in the Sagittarius region was blocked by a forest of unkempt trees, so I concentrated on the western horizon. Although the skies were never really free of low clouds, the western horizon was mostly open, and all the stars of UMin were visible to the naked eye (approximately magnitude 5). Chart 2 of my trusty Sky Atlas 2000.0 showed the stars to 'hop' from UMaj to find M106, and a dim smudge soon swam into the field of view of my 15mm Plossl. From Phad (gamma-UMaj), follow a short line of stars to the left, terminating in a magnitude 5 star labeled '5' on the star chart. Hop 'down' to the star labeled '3' (magnitude 5.5) on the same chart, then hop one field of view 'down' from that. You'll see a magnitude 7 star, near which is the 'faint fuzzy' known as M106. There are several other NGC objects in the same field which would probably be visible in a larger instrument, but I saw none of those.

As for M102, drat the luck, there are no such well-defined guiding stars. You start from Tau-Bootes (55° , 15 hr 5 min right ascension, magnitude 5.5) and try to place an 8 power finder

scope about 2 minutes east and 2° north near where a magnitude 8 star (invisible, of course) sits vaguely near a magnitude 7.5 star (also invisible). Having found these two dim stars, that somewhat-out-of-focus faint smudge near the dimmer star is actually NGC 5866, which some authorities hold is the Missing Messier, M102. Slap a few mosquitoes in triumph, during which your telescope is nudged off line, and attempt the whole thing again. I found M106 in about 15 minutes; it took me about 2 hours to find M102 ... or at least the area where I'm certain I saw a faint smudge near two dim stars. Still, it was a fine night, the young couples trying to make out just down the beach were more comic than hindrance, and the aurora display didn't really bother me at all. I did see one fireball near Antares, which I observed playing 'hide-and-seek' in the trees until it disappeared below my horizon. I got to use the little Mak to check out the doubles in Lyrae, as well as the stars of the summer triangle, and I was fairly pleased with the results; it's not a bad little scope for the money! Mind you, a better tripod and finder scope would be of benefit.

In researching this article, I came across a website with quite a dissertation on whether M102 is actually NGC 5866; for those of you wishing to enter this somewhat esoteric arena, check out www.seds.org/messier/m102d.html. As for me, I'm taking iron pills to rebuild my blood supply, and I'm claiming both M102 and M106!

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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 Herschel 400 list is available at the web site listed below. The Binocular List will be available at each general meeting or can be mailed out on request to distant members.

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>



Events Coordinator Report

by Jeff Swick

Well it's shaping up to be a busy autumn season.

As you have read elsewhere in the newsletter, we have our open house out at the Sleaford facility in conjunction with the U of S Astronomy Dept on the 28th and 29th. Saturday of course there is the BBQ for members and their families. It's a great opportunity to show your friends and family what it is you do at night. **If you could spare an hour or more to volunteer please call Rick Huziak at 665-3392.**

Also coming up is the Hobby Show. At this writing the dates are not yet confirmed but we will need volunteers there as well. Last year was loads of fun with a high traffic volume and it can only get better this year. We will need telescopes for display so if you can help out please drop me a line at 373-3902.

The *Isabel Williamson Lunar Observing Program* will be ordered following the October General meeting so if you wish to participate there is still time to sign up. You can email me your request at jswick@shaw.ca. Those wishing more details on the program can download the pdf version here: <http://www.rasc.ca/observing/moon.html>

Not so nice weather for the Observing group this new moon, lets hope the weather smartens up for the next session. New members who wish to come out should contact Bill Hydomako for details.

Newsletters from Other Centres...

Here are the newsletters that have been received during the past month.

- Sep/05 • **Regulus** (Kingston Centre) – "Observational Astronomy for the Novice (N.O.V.A.) Program"
- Aug-Sep/05 • **The StarSeeker** (Calgary Centre) – "Dr. Steven Squyres Interview", "SSSP 2005"
- July-Aug/05 • **Scope** (Toronto Centre) – "Hunting Herschels", "Galileo's Starry Nights", "GA Report"
- July-Aug/05 • **The StarSeeker** (Calgary Centre) – "Alberta Star Party", "New Solar System Object Discovered"