

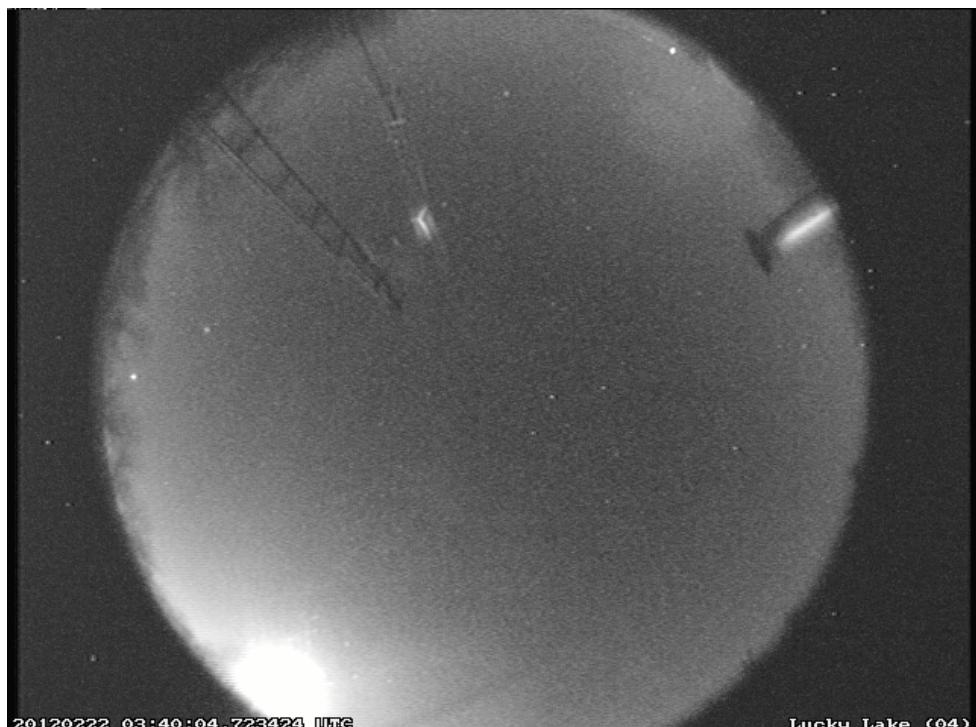
Saskatoon Skies

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

Vol. 43, No. 03

March 2012

Rockhaven Fireball Excitement



February 22 brought a lot of excitement, and media frenzy when the Lucky Lake (picture left) and Calgary fireball cameras recorded a fireball at 9:40 PM, with a potential for meteorites around Rockhaven. That hit the news, and all next day I got calls and emails asking for more information. I kept repeating that I know nothing about it, that the camera at my place is operated remotely from Saskatoon by Gordon Sarty.

Tenho Tuomi

On March 19 come to hear Richard Huziak's talk about the efforts to find the exact location of the fall.



Saskatoon Centre

The Royal Astronomical Society of Canada
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Saskatoon, SK S7N 4J8

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

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

Bottle Drive & Canadian Tire \$

By Colin Chatfield

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

Newsletter Editors – Kathleen Houston & Tenho Tuomi

Copy & Collate – Les & Ellen Dickson

Labels & Temps – Mark de Jong

Web Posting – Gord Sarty

Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 100 copies per issue. Saskatoon Skies welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science material. **Articles can be sent by mail in any format to the Centre's mailbox.** Submitted materials can be returned upon request. Submissions may also be sent by e-mail to the editor at e.b.a@sasktel.net 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.

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.

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

RASC CALENDAR OF EVENTS

Mar 17	Observers Group – Dusk, Sleaford Observatory	Larry Scott	934-5801
Mar 19	RASC Executive Meeting – 6:30 pm, 175 Physics, U of S	Jeff Swick	373-3902
Mar 19	RASC General Meeting – 7:30 pm, 175 Physics, U of S	Jeff Swick	373-3902
Mar 24	MESSIER MARATHON! Sleaford Observatory.	Larry Scott	934-5801
Mar 31	Earth Hour Public Star Night – See details below	Barb Wright	249-1990
Apr 14	Observers Group – Dusk, Sleaford Observatory	Larry Scott	934-5801
Apr 16	RASC Executive Meeting – 6:30 pm, 175 Physics, U of S	Jeff Swick	373-3902
Apr 16	RASC General Meeting – 7:30 pm, 175 Physics, U of S	Jeff Swick	373-3902
Apr 21	April Lyrid Meteor Shower – peak at 11 pm	http://www.imo.net/calendar/2012#lyr	
May 11	Public Star Night, Lakewood Civic Centre – 8:30 pm	Barb Wright	249-1990
May 12	Astronomy Day. Farmer's Market – 8:00 – 14:00	Barb Wright	249-1990
May 12	Alan Dyer, "The Transit of Venus", 8:00 - 9:00 pm Venus gazing, 7:00 - 8:00 pm, Star Gazing , 9:00 - 11:00 - Bethlehem Catholic High School theatre and grounds	Kathleen Houston	665-3392
May 14	RASC Executive Meeting – 6:30 pm, 175 Physics, U of S	Jeff Swick	373-3902
May 14	RASC General Meeting – 7:30 pm, 175 Physics, U of S	Jeff Swick	373-3902
May 19	Observers Group – Dusk, Sleaford Observatory	Larry Scott	934-5801
May 20	Partial Eclipse of the Sun – 6:10 to 8:13 PM		
June 28 –	2012 General Assembly - Edmonton	http://www.rasc.ca/programs/ga2012	
July 2			
Aug 16-19	Saskatchewan Summer Star Party – Cypress Hills	http://www.usask.ca/rasc/starparty.html	

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

RASC SASKATOON CENTRE GENERAL MEETING

MONDAY, March 19, 7:30 PM
Room 175, Physics Bldg., U of S



Speaker: Richard Huziak

"A -15 magnitude fireball lit up Saskatchewan and Alberta at 9:20 p.m. The Lucky Lake fireball camera video showed it to be a 'mini-version' of Buzzard Coulee and we immediately speculated there were meteorites on the ground. Rick summarizes the efforts to find the location of the fall."

NOTE: There will be an executive meeting at 6:30 PM

Earth Hour, March 31

Lights will be shut off all over the world for one hour beginning at 8:30. Bob Johnson at Circle Mall has arranged again this year to have the parking lot lights shut off for one hour. This gives us an excellent opportunity to demonstrate the difference light pollution makes in our city. We typically have a great public response to this event, so we need at least 6 scopes set up, plus we will have a table set up for RASC handouts. We will be setting up at the east entrance of Circle Mall, to catch the lounge or movie goers. Please let Barb know that you are able to come out to be part of this sidewalk astronomy event.

PRESIDENT'S MESSAGE

by Jeff Swick



Well it's really been something to watch the western sky these last two months as Jupiter Venus and Mercury do their dance. I also saw Mars very briefly on my last trip to Sleaford just before a very heavy fog rolled in. It was so bad my travel speed back to town averaged about 25km/hr. I had a coyote run across the road and I missed it by inches.

One thing I like about March is that Orion is now in position that I can view it from my place in the city.

Speaking of stars, our activity coordinator Barb Wright will be shining brightly these next couple of months as the club event calendar fills up. We have the Messier Marathon, Earth Hour at the Circle Center Mall with Bob Johnson, Astronomy Day events in

May, it's just a fun time for our center. Keep an eye on our club calendar for dates. Don't forget that in between all the activities we have our regular Observer Group with Larry Scott out at Sleaford.

Due to travel for business I haven't been able to make it to the last two SSSP meetings but Les Dickson has been sending me the updates and the committee has been busy indeed.

Our new home on the web is just about complete. Please visit Great White North Astro at <http://www.gwnastro.ca/> and create your account (no charge). Be sure and email me when you do so I can get you access to the Private Saskatoon Area.

Our speaker this March at the general meeting will be Richard Huziak. He will be talking about what goes into finding a debris field when a fireball is suspected to have survived entry into our atmosphere.

Minutes of the Executive Meeting, January 16, 2012

by Ron Waldron

- 1 Meeting begin at 6:35 PM
- 2 Adoption of minutes from the November meeting – moved by Ron Waldron, seconded by Les Dickson
- 3 Committee Reports – to be given at the General Meeting only this month.
- 4 Newsletter – we have no editor for our monthly newsletter as Kathleen found it necessary to resign. To date no one has come forward. Barb Wright suggested that it may be easier to obtain an editor if the newsletter changed from monthly to quarterly. Jeff Swick suggested that if no one steps up to do the newsletter that its publication will be suspended until someone does. Ron Waldron offered to become the newsletter editor as of July, 2012 if he could leave his secretarial duties at that time. Discussion followed. Failing any members coming forward at the General Meeting to follow this one, Ron will become editor beginning in July. At that time his secretarial duties will be filled on an ad-hoc basis until a new one is elected in October.
- 5 Fundraising – Darrel Chatfield for Colin Chatfield – Colin e-mailed the Winnipeg club to find out who their fundraiser was to obtain ideas. The reply was that they do not have anyone in charge of fundraising. An idea of setting up a photo booth of club members' astronomy pictures at the Farmer's Market was mentioned. Kalium mine was mentioned as a possible corporate donor if approached.
- 6 Darrell presented a cheque to the club in the amount of \$220.00 from bottles donated by club members
- 7 Rick Huziak made a motion for \$250 from the club to bring the three Dobsonian loaner telescopes up to par for loaning. Seconded by Les Dickson. Discussion followed. Carried.
- 8 Rick also plans to purchase Mylar film for the upcoming transit of Venus. This would then be sold at a small profit to club members. Advertising could be done on our Google site.
- 9 Motion to adjourn by Rick Huziak.

Minutes of the General Meeting, January 16, 2012

by Ron Waldron

- 1 Meeting began at 8:49 PM
- 2 Adoption of minutes from the November General Meeting – moved by Barb Wright seconded by Jim Gorkoff
- 3 Committee reports
 - a) Activities - Barb Wright
 - Barb asked the new members what they would like for the new members night – Ideas suggested included Know Your Constellations, Planetarium Programs, Know Your Scope, etc. Barb will announce the date by the February meeting.
 - Earth hour is happening again at Circle Park Mall on March 31.
 - Astronomy Day will be combined this year with the Alan Dyer talk on Saturday, May 12. Farmer's Market has been booked
 - Sleaford Open House this year may be moved from October into September
 - b) Newsletter – see minutes of the Executive Meeting
 - c) Richard Huziak gave an update on the City SEAC meeting held Thursday for City dark-sky Policy. By March of this year we should have an actual working Dark Sky policy for the city. The city has been convinced to change existing lights through attrition to full cut-off lights. The Dark Sky Committee is currently lobbying for LED signage at street sides to have controlled lighting standards enforced.
 - d) Sleaford site committee – Darrell Chatfield
 - Darrell updated us on his garage packages at Sleaford. The price on a 24' X 26' garage minus any wiring is \$21000. This is well within the club's affordability. He estimates wiring costs would be around \$5000.00 depending on the placement of the garage.
- 4 Open questions from membership
 - Has anyone considered moving the Sleaford School House on to a new pony wall structure? This has not been considered due to mice in the walls and the fact that the university owns the land.
- 5 SSSP Update – Les Dickson
 - Vance Petriew will be the keynote speaker for the second time as his comet discovered at SSSP will be returning
 - Ron Waldron will be doing the Binocular Stargazing Walk on the Friday evening and has offered to do it Saturday night if Friday is overcast
 - Ron Waldron will also act as Master of Ceremonies this year.
 - Volunteers to assist before or during are always welcome. See Les Dickson or he may be calling you for your assistance in some capacity.
- 6 Presentations
 - Chandra in the (Google) Sky – presented by Dr. Rainer
 - Tracking a solar flare from the sun to the lens Jeff Swick / Colin Chatfield
 - “Integrating Starry Night in the Classroom” by Ron Waldron

Note: The next meeting will be moved up one week to Monday, February 13 to avoid any conflict with Family Day on the 20.

Minutes of the Executive Meeting, February 13, 2012

by Les Dickson

- The meeting was chaired by James Gorkoff in the absence of Jeff Swick
1. Meeting began at 6:42 pm.
 2. Approval of the Minutes of the January Executive Meeting – moved by Les Dickson, seconded by Norma Jensen. Carried.
 3. Reports
 - a) Treasurer – Norma Jensen

- The Financial Statement for 2010-2011 was presented.
 - Approval of the statement was moved by Normal Jensen, seconded by James Gorkoff. Carried.
- b) Sleaford – Darrell Chatfield
 - Darrell reported on discussions at the recent Sleaford Committee meeting.

- There was a discussion on different options for a garage package. More research will be needed before any decisions can be made.
 - c) Fundraising – Colin Chatfield
 - Colin will be contacting local mining companies for donations towards building at Sleaford.
 - Steak nights are popular and will likely be held every 18 months.
 - d) National Rep – Rick Huziak
 - Rick reported that the next National Council Meeting will be March 10. The main topic of discussion will be the changes to the federal Not-for-Profit legislation.
 - e) Events – Barb Wright
 - The Messier Marathon is March 24.
 - Astronomy Day is May 12 and will include a talk on the Transit of Venus by Alan Dyer to be held at the Bethleham Catholic High School. On the 11th, viewing at Lakeview Civic Centre. On the 12th, viewing will be at the school. National Council has approved travel funds for Alan Dyer. A brunch with Alan is possible on Sunday morning before he leaves.
 - f) SSSP – Les Dickson
 - The next meeting will be Feb 16th.
4. Graham Hartridge demonstrated webcasting of our meeting using “Ustreamtv”.
 5. Meeting adjourned at 7:30 pm.

Minutes of the General Meeting, February 13, 2012

by Les dickson

The meeting was chaired by James Gorkoff in the absence of Jeff Swick

1. Meeting began at 7:50 pm.
2. The meeting order was reversed to accommodate the evenings's speaker, Dr. Rainer Dick of the U of S Physics and Engineering Physics, on "Astronomical Evidence for Dark Matter."
3. No minutes were available for review and approval.
4. Reports
 - a) Treasurer – Norma Jensen
 - Norma gave a short overview of the Financial Statement for 2010-2011.
 - b) Events – Barb Wright
 - The Messier Marathon is March 24.
 - Astronomy Day is May 12 and will include a talk on the Transit of Venus by Alan Dyer to be held at the Bethleham Catholic High School. On the 11th, viewing at Lakeview Civic Centre. On the 12th, viewing will be at the school. National Council has approved travel funds for Alan Dyer.

A brunch with Alan is possible on Sunday morning before he leaves.

- c) Fundraising – Colin Chatfield
 - Colin will be contacting local mining companies for donations towards building at Sleaford.
 - Steak nights are popular and will likely be held every 18 months.
- d) Newsletter – Tenho Tuomi
 - Deadline for the March newsletter is March 1.
- e) Sleaford – Darrell Chatfield
 - Darrell reported on discussions at the recent Sleaford Committee meeting.
 - There was a discussion on different options for a garage package. Darrell noted that we may consider building a garage without heat, insulation and drywall to start. More research will be needed before any decisions can be made.
5. Other

There was some discussion of using the Great White North Astro website www.gwnastro.ca as an alternative to the Yahoo Group.

SKY BUYS & MIRROR CELLS The Saskatoon Centre's Swap and Sale Page

FOR SALE: Two 7x50 Newtonian-view straight-through spotters c/w dovetail mounts. (No scope-side dovetails, though). \$40 each obo. Contact Rick Huziak 665-3392. Proceeds to the RASC.

RASC Saskatoon Centre Financial Report

October 1, 2010, to September 30, 2011

by Norma Jensen, Treasurer

	Current Year 2010-11	Previous Year 2009-10
Revenue		
Membership fees	\$ 2,371.30	\$ 2,583.15
Public Education	-	-
Retail Sales	1,138.25	537.00
Donations	3,768.53	-
Fundraising		
Star Party	12,004.50	12,257.20
Dinners, Raffles, etc.	299.95	61.00
Telescope Rentals	115.00	-
Advertising	323.00	180.00
Interest	524.86	416.89
Total Revenue for the Year	<u>\$ 17,233.86</u>	<u>\$ 16,326.24</u>
Expenses		
Public Education	\$ 2,243.24	\$ 631.95
Taxes & Licences	-	10.00
Star Party	11,273.19	10,651.13
Utilities	1,225.00	-
Insurance	1,116.00	1,105.00
Repairs & Maintenance	616.93	1,158.12
Office Supplies & Postage; Newsletter	829.37	1,291.07
Retail Sales	1,217.72	933.33
Depreciation	-	250.00
Miscellaneous	-	657.56
Fundraising	-	-
Total Expenses for the Year	<u>\$ 19,327.85</u>	<u>\$ 19,858.91</u>
Net Surplus (Deficit) for the Year	<u>\$ (2,093.99)</u>	<u>\$ (532.67)</u>
Assets		
Cash	\$ 3,532.77	\$ 32,727.73
Term Deposits	35,056.97	19,771.91
Raffle Fund	430.14	313.84
Fixed Assets		
Equipment	15,340.60	15,737.95
Other Assets - Retail Inventory	1,205.00	1,500.00
Total Assets	<u>\$ 55,565.43</u>	<u>\$ 55,806.93</u>
Liabilities		
Accounts Payable	1,852.64	\$ -
Surplus (Deficit)		
Balance Forward	\$ 55,806.43	
Current Year Surplus (Deficit)	<u>(2,093.99)</u>	
Balance end of Year	<u>53,712.94</u>	
Total Liabilities and Surplus	<u>\$ 55,565.48</u>	<u>\$ 55,806.93</u>



Royal Astronomical Society of Canada General Assembly

June 28 to July 1, 2012 Edmonton



Details can be found in the following locations:

GA Website: <http://edmontonrasc.com/2012ga>

National GA Page: <http://rasc.ca/programs/ga2012>

Feb 2012 JRASC (page 42 of course): <http://rasc.ca/sites/default/files/private/jrasc2012-feb-lr.pdf>

Stardust February 2012 (Edmonton Centre Newsletter):

<http://edmontonrasc.com/public/download/stardust201202.pdf>

Invited Speakers

Dame Jocelyn Bell Burnell

Helen Sawyer Hogg Public Lecture

Dr. Martin Connors

Athabasca University

Earth's Trojan Asteroid: A Space Odyssey to a Space Oddity

Dr. Christopher Herd

University of Alberta

When the Sky Falls: Meteorites as Probes of Other Planetary Bodies

Tours

Our tours are designed for offer fun for the whole family. Choose among three full-day tours and four half-day tours. One of the full-day tours is a guided tour of the Whitecourt Meteorite Crater impact crater.

Contacts

GA Chair: 2012ga@edmontonrasc.com

Papers & Posters: papers2012ga@edmontonrasc.com

Registrations & Accommodations: register2012ga@edmontonrasc.com

Transportation: transport2012ga@edmontonrasc.com

Interested? Here's how to find out more:

1. Check out the Edmonton Centre website for complete information on the GA and to plan your visit.
2. If you're ready to register, then go here to complete your on-line registration - you can pay by Visa, MasterCard or cheque.
3. If you want to participate in a paper, poster, or other session, then go here and submit your proposal for consideration.

Important Dates:

- 2012 March 31 - Cutoff for Early Bird Registration - save \$25.00 by registering and paying before this date!
- 2012 April 1 - Cutoff for paper and session proposals
- 2012 May 24 - Cutoff date for souvenir merchandise orders
- 2012 June 1 - Late registration fees begin
- 2012 June 18 - Last day for on-line registration
- 2012 June 28 to July 2 - General Assembly



The Planets for March 2012

Mercury hurried into March with a Greatest Eastern elongation (evening) on the 5th and will quickly swing back down to the next conjunction with the sun on the 21st when it passes between the Earth and the sun. On March 1st, it shone at magnitude -0.7 and dimmed to -0.2 by the 5th. Over the next week it will continue to fade until by the 12th it will shine at magnitude 1.6 and sits only 14 degrees from the sun. At conjunction, Mercury will pass 3 degrees above the sun, but unlike Venus, it will only shine at magnitude 5.0 and be totally lost to the sun's glare. Just like its quick exit from the Greatest eastern elongation, it will swiftly swing back into the morning sky only to be lost in the poorly situated morning ecliptic which is almost parallel to the horizon.

Venus is one of my favorite evening objects, its brilliant white a jewel in the twilight sky. We have all been watching the approach of Jupiter, anticipating the conjunction on the 13th. Jupiter will pass only 3 degrees below Venus and the pair will shine at magnitudes -2.1 and -4.2 respectively. In the eyepiece Jupiter will show a 35" disc while Venus will show a 20.6" 57% illuminated phase. Jupiter is about 11 times the diameter of Venus, an interesting thing to ponder while at the eyepiece. Over the next two weeks, Venus climbs toward the apex of its trip into the evening sky, passing a crescent moon on March 26th and arriving at Greatest Elongation on March 27. In an eyepiece you will see the brilliant, whitest of white 50% illuminated phase. This half phase is interesting in that it is as far as it can get from the sun and in exactly 10 weeks Venus will transit the sun. Venus shines at magnitude -4.3 and shows a 23.7" "quarter" phase in the eyepiece. It will change more rapidly as it moves toward the sun and you will see it change on a weekly basis. At the beginning of next month, Venus will shine at magnitude -4.4 and will have expanded to 27.7".

Mars comes home to roost in the month of its namesake, and was at opposition on the 3rd of March. On that date, Mars was a brilliant magnitude -1.2 and unmistakeably RED. An eyepiece would have shown you a 13.9" disc. By March 15, Mars will dim slightly to magnitude -1.0 and the disc will shrink slightly to 13.7". On this night you can try and see M96 in the same high power field of view as the red planet. At magnitude 10, it will be a bit of a challenge, but a worthy challenge. Mars's north pole is tilted at 22 degrees toward us and it is the northern summer. The images I have seen of it are great and in an eyepiece you can see lots of details. One of the few good things about aphelion, (the farthest point from the sun in a planet's orbit), is that Mars's atmosphere is calmer and less dusty. You should see good

**Murray Paulson,
RASC Edmonton Centre**

contrasty details on the surface. In mid March you will see the blander side of Mars with Mare Cimmerium facing us. If you wait up late, Syrtis Major will rotate on. By the end of March we will be looking at the Solus Lacus side of Mars. Mars is now 12.7" and the brightness has faded to magnitude -0.7. By the first week of April, we will be looking at the Mare Erythraeum with Mare Acidalium in the North hemisphere. For Mars, I advise using as much magnification as the circumstance will bear. I routinely use 330 power if the atmosphere is stable. If you want to improve the contrast of the features, try using an orange filter to increase the contrast between the Maria and the pinkish regions. Orange filters work well with smaller scopes. With larger scopes, you can also use a red filter to maximize this contrast effect. Blue filters will enhance the visibility of clouds and hazes. You will usually note some Limb haze. Enjoy! These apparitions are a long way apart, the next one is in 2014 at the end of April.

Jupiter is sliding down the sky and soon we will lose it. Enjoy while we still have it. The month starts off with Jupiter shining at magnitude -2.1 and in the eyepiece you will be treated to its 35.6" belted diameter. Venus will slowly catch up to Jupiter and the pair will sit together in the sky for the better part of a week centered about the 13th. It isn't a close conjunction, but it is impressive none the less. Jupiter is about 2 months from conjunction with the sun, so get in a few more good looks before it is gone. We get another of the conjunctions with Jupiter and the moon, but joined by Venus for an excellent photo op on March 25th. Mark it down. The 3 will be spread out over 10 degrees of sky and it should be quite impressive.

It is nice to have a few planets up in the night sky and **Saturn** makes it 4. It is about a month off its opposition so it will rise late and be low in the south east, but it is there if you wait for it. At the beginning of March Saturn shines at magnitude 0.6 and shows a 18.6" disc in the eyepiece. It rises around 10 pm. The rings are tilted up at 15 degrees now and are quite spectacular. Over the month Saturn will expand slightly to 19" and it will brighten slightly to magnitude 0.2. At the beginning of next month, Saturn will rise at 8 pm, and will be well placed for Astronomy days.

Uranus finally is caught up by the sun and will be in conjunction with the sun on March 25. It joins the rest of the distant planets, and we will wait for late summer to reacquaint ourselves with them.

Till next month, clear skies.

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

Kathleen Houston	Done!	110
Norma Jensen		109
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

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		58
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

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	7

HERSCHEL 400-II CLUB

Darrell Chatfield	395
Rick Huziak	246

LEVY DEEP-SKY GEMS

Certified at 154 Objects:

Tenho Tuomi	Up!	99
Darrell Chatfield	Up!	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.astroloegue.org/al/obclubs/herschel/herschel400.html>

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

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

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

Observers Group

by Larry Scott



The February 11th Observers Group ran as scheduled with three members in attendance. Skies were average and temperature was around -17C with very little wind. Not a bad night with all things considered.

Just before packing up we caught Saturn rising in the east. Not much to look at as it was very low, but the opening rings were readily apparent.

We have relatively moonless evenings from March 10th to about the 25th with the next Observers Group scheduled for March 17th. Also in March will be the annual Messier Marathon on the 24th. If you plan on giving it a try you need to be set up and ready to go shortly after sunset. We have a list with the objects in order for those interested. This is a fun event when the weather cooperates so mark this one on your calendar, daytimer, IPOD, or whatever else you may use.