

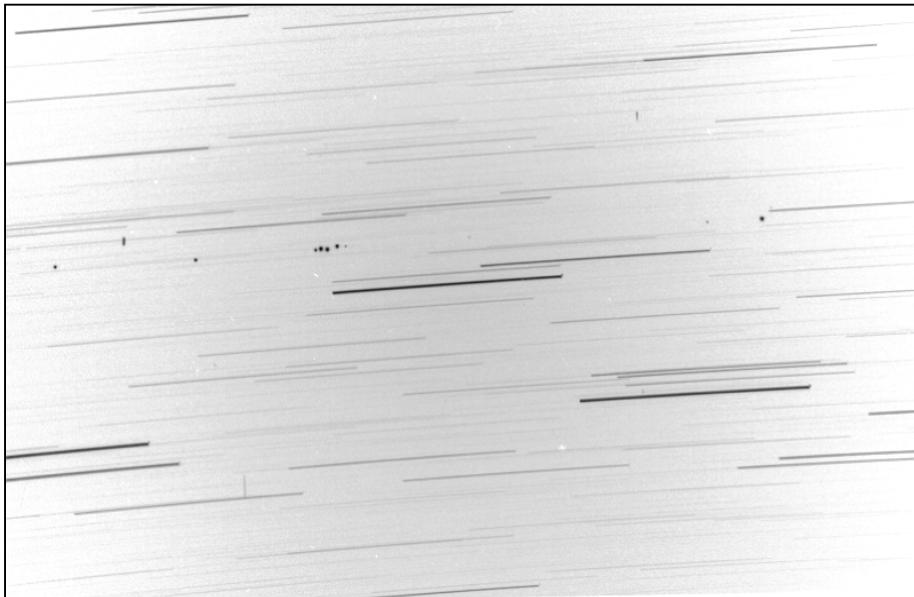
Saskatoon Skies

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

Volume 33

October 2002

Number 10



October is "Naked Eye Geosync Satellite Month". Although the bright moon is around for much of the month, keep an eye out for naked eye geosyncs. These will be hanging around $-7^{\circ} 30'$ S of the celestial equator and can easily reach 3rd magnitude as the sun flares off of the solar panels. Normally these satellites shine weakly at 13th magnitude. The photo at left was taken Oct. 10, 2001 at 12:19 a.m., and is a 10 minute exposure through a 135mm lens at f/2.8. Photo by the editor.

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Saskatoon Centre

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Membership?

Regular - \$52.00 per year
 Youth - \$27.50 per year

It's never too late to join!

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, Bob Christie, or renew through the National Office and let Bob 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 2003
- The Journal of the RASC (bimonthly)
- SkyNews Magazine (bimonthly)
- use of the Centre library
- discounts to Sky & Telescope Magazine
- discounts of Sky Publishing merchandise
- discounts to Firefly Books
- free, no cost, no obligation, 3-month temporary membership if you don't want to join right now!

U of S Observatory Hours

The U of S Observatory is open to the general public every Saturday in Oct. – Jan. from 7:30 p.m. to 9:30 p.m. Admission if free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear evenings visitors may look through the 6-inch refractor to the moon, star clusters, Jupiter, Saturn, and other exciting astronomical objects. For further information, phone the recorded Astronomy Information Line at 966-6429.

About this Newsletter

Newsletter Editor - Richard Huziak

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Collate – Brian Friesen, Bob Christie, Les & Ellen Dickson, Sandy Ferguson, Walter Essar

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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 .GIFs, .TIFs .JPGs or similar. Send e-mail submissions to the editor at <huziak@SEDSSystems.ca>. Please send articles in "generic" formats, with standard grammatical formatting appreciated - 5 spaces at the beginning of paragraphs, two spaces after periods, one space after commas. 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.

Bottle Drive & Canadian Tire \$ By Darrell Chatfield

Please remember our on-going bottle and now Canadian Tire money drive to fundraise for the Centre. Bring them to the October meeting. 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.

RASC Calendar Happenings

Date (2002)	Event	Contact	Telephone
Oct. 5-Nov. 5	Naked Eye Geosynchronous Satellite Month	Rick Huziak	665-3392
Oct. 18	Youth Group Meeting , Nutana Collegiate, 7 p.m.	Tyrone Klassen	652-4599
Oct. 21	Executive Meeting, Room 8313, City Hospital, 6:30 p.m.	Les Dickson	249-1091
Oct. 21	General Meeting, Room 8313, City Hospital, 7:30 p.m. – Executive Elections – more on SSSP and the Alberta Star Party – 7:30 p.m.	Les Dickson	249-1091
Oct. 31	Inferior Conjunction of Venus, 5-1/2° below sun	Rick Huziak	665-3392
Nov. 15	Youth Group Meeting , Nutana Collegiate , 7 p.m.	Tyrone Klassen	652-4599
Nov. 18 - 19	Leonid Meteor Shower Peak (after 2 a.m. local time & moonlite)	Rick Huziak	665-3392
Dec. 13	Youth Group Meeting , U of S Observatory, 7 p.m.	Tyrone Klassen	652-4599
2003	Youth Group Meetings – Jan. 10, Feb. 7, Mar. 14, Apr. 11	Tyrone Klassen	652-4599

Notice of the General Meeting of the Saskatoon Centre

**Monday, October 21st, 2002 at 7:30 p.m.
Room 8313 City Hospital**

Presenting:

*The Alberta Star-BQ & the Alberta Star Party – various members
What's Up With Light Pollution – Huziak in the News (Video)
The “Explore the Universe” Certificate
Annual General Elections*

We will have slides from the Alberta Star Star BQ and Alberta Star Party, and any other remaining summer festivities! Bring your talks for everyone to hear! Admission is free. Non-members are welcome to attend.

Executive Members – please attend the Executive Meeting at 6:30 p.m. in Room 8313.

Saskatoon Centre Books 4 Sale

The Saskatoon Centre has purchased a number of Sky Publishing & Firefly Books for SSSP sales, and these are available to general members to purchase at discount rates! Contact Debbie Anderson at 242-8854 or bazoo.inc@shaw.ca to see what is remaining from the SSSP and to see if any pricing discounts apply. Prices include GST, shipping and handling. Note: Debbie will not be renewing as the book coordinator this year. If you can help out, call Les Dickson.

- Touring the Universe thru Binocs (1) - \$54.00
- Build Your Own Telescope (1) - \$42.00
- Cambridge Star Atlas (1) - \$40.00
- Astrophotography (G.N.Patterson) (lots) - \$8.00**
- 2003 Skywatcher Calendar (5) - \$12.00



- RASC Stickers - \$0.50**
- Other Worlds (1) - \$7.00**
- Extraterrestrials (1) - \$6.50**

All prices include GST, by NOT shipping.
Prices at COST marked ** are reduced to clear.

REMEMBER - YOU CAN SIGN UP TO GET THIS NEWSLETTER ON THE INTERNET INSTEAD OF BY SNAIL-MAIL. CURRENT ELECTRONIC SUBSCRIBERS SAVE US OVER \$220 / YEAR IN MAILING COSTS.



Saskatchewan's weekly newswire

Maple Creek News

Dedication ceremony honours comet discovery

by Tom Pierson, Maple Creek News (News)

reprinted by permission from Aug. 20, 2002 edition

The Meadows Campground at Cypress Hills Park has a new signpost marking its entrance. It is a monument to the discovery of a comet at that location in 2001 by Regina resident Vance Petriew during the Saskatchewan Summer Star Party (SSSP).

The discovery led to international recognition for Petriew and Cypress Hills Park. Petriew was the first person in Saskatchewan and only the eighth Canadian ever to discover a comet. Adding to its rarity, his was only the second comet discovery ever made during a star party.

The annual Summer Star Party is hosted through the combined efforts of the Regina and Saskatoon Centres of the Royal Astronomical Society of Canada.

On hand for the ceremony were Vance, his wife Jennifer, daughter Emily, and parents from Radisson, Saskatchewan. Assisting Vance unveil the monument was Saskatchewan Environment Minister Buckley Belanger. John Froese President of Regional Parks Committee was also on hand.

Lorne Harasen of the Regina Centre officiated at the dedication ceremony and plaque unveiling. He referred to Dr. Les Dickson as 'Mr. Saskatchewan Summer Star Party himself'. Along with his wife Ellen, Harasen said, They really unselfishly work night and day to make this thing (SSSP) a success."

Dr. Dickson replied, I'm really just a front man for a very dedicated group of people from Saskatoon and Regina and other places, who spend months and months putting this together. I want to thank them very much for doing this every year for 6 years now.

I am very much appreciative of the fact that we've been up here in this beautiful park putting on a star party and we've given Vance an opportunity to find his comet. We are very glad that Vance did it and we are all horribly jealous. And we hope that if we keep putting on these star parties maybe we will be honouring someone else in the near future," said Dr. Dickson.

Cypress Hills Park Manager Brad Mason did more than coordinate the star party and the monument dedication, he used his woodworking skills in its manufacture.

We are Honoured to have our (Environment) Minister (Buckley) Belanger here. Minister Belanger has been a strong supporter of Saskatchewan parks," said Mason. He also had kind words for the Star Party executive. They've been very good to work with and it's been a very good relationship right from day one."

Harasen introduced Minister Belanger by saying, The minister has been very keen about being here for this event. He wanted to do this."

Minister Belanger welcomed the guests and stated, This is a very special day. On behalf of the government and the people of Saskatchewan, I want to recognize a special event that took place here last year. Vance Petriew, proudly, is Saskatchewan born and raised."

Leading up to Vance's discovery, Belanger said, Vance was about to score the astronomer's equivalent of a hole in one. It's a great triumph when an amateur astronomer discovers a comet. A triumph that we should all celebrate."

Talking about Vance beating the robot telescopes, Belanger said, Vance has clearly demonstrated that we humans are not yet ready to be replaced by computer technology. He and other amateurs continue to make valuable contributions to the science of astronomy. Vance's discovery also raised the public profile of his fellow astronomers.

I hope that when Comet Petriew returns to the neighborhood in a few years, Vance and many other astronomers will be back here in the park watching for it, and that your star party will be bigger and better than ever and that amateur astronomers will continue to have a role in furthering our understanding of the cosmos."

Belanger's final comment was a message, that by looking up, we realize how precious our own earth is and to take care of our environment."

Petriew said, I was testing it (monument) out. It seems to be the same size as my telescope (20" reflector). If someone would have told me a year ago that I would discover a comet at a star party I would have said you must be mistaken. But, the comet discovery is real, and I am proud to have discovered it no more than 200 meters from where we are standing."

A thank you was given by Petriew to Minister Belanger and his office for recognizing the discovery of Comet Petriew in the Legislature.

Recognition also fell upon Cypress Hills Park. Petriew gave his opinion as to why he considers the SSSP as one of the best star parties in the world. As the 200 people that were out last night enjoying the clear dark skies will attest, Saskatchewan truly is the '*land of living skies*'." Earlier, Belanger did his impression of David Letterman and gave his top ten list of reasons this park is the best location for a star party in Canada.

Petriew singled out his friend and fellow astronomer, Richard Huziak for special recognition. It was his knowledge and experience of the night sky that late August night last year that turned this comet discovery into a reality."



Summer Star Party welcomed astronomers to the universe

by Tom Pierson, Maple Creek News (News)

reprinted by permission from Aug. 20, 2002 edition

Almost 200 stargazers ascended the Cypress Hills at the Meadows Campground for the 2002 Saskatchewan Summer Star Party August 9th to 11th. The Saskatoon and Regina Centres of the Royal Astronomical Society of Canada (RASC) combine to host the yearly event. Everybody had a really great time," said Star Party Chairperson Dr. Les Dickson of the Saskatoon Centre.

The SSSP held at Cypress Hills Park is usually a party for stars in the sky, as opposed to earthbound celebrities. The 2002 theme, *Discoveries are Made Here*" was very appropriate. Vance Petriew of Regina is now a star of the earthly variety after discovering a comet at the star party in 2001.

Dr. Dickson said this about this year's party, The most special thing was the dedication of the marker at the Meadows Campground entrance commemorating Vance Petriew's discovery there last year."

Alan Dyer, a writer and producer of science shows at the Calgary Science Centre whose articles and photographs regularly find their way into North America's two major astronomy magazines, was on hand for Petriew's discovery.

During this year's star party Dyer said, The fact that amateur astronomers can still find comets inspires other amateurs to try and do the same." In the modern, computerized age, there are many high-powered robot telescopes and machines constantly monitoring the heavens. With Petriew's discovery Dyer says, Maybe the usefulness of amateurs is not yet over."

When Petriew brought his new Obsession telescope to the party last year, it was the most powerful of the party. This year about a half-dozen or more scopes of equal power were on the field.

Dr. Dickson rated the sky on Friday night to be 7 or 8 on a scale of 1-10. Saturday night, unfortunately, Mother Nature provided little more than sucker holes to peer through. Dickson said, Sunday night was probably the best of the three viewings," and added it rated an 8 or 9. The weather didn't always cooperate, but I think everyone got about 2 or 3 hours of viewing per night."

When one thinks of stargazing and looking for planets in a telescope, one usually thinks of it as a nighttime activity. Dyer knows otherwise. During the afternoon of August 9th, he enjoyed, and shared, a view of Venus.

If you know where to look, you can even see stars in the daytime", says Dyer. On a nice day you can see the sun and moon, but you can find other stuff, too." For daytime observing, a computerized finder is a helpful tool.

There are certain items which are standard equipment in star hunting. A viewing device can consist of the naked eye, binoculars or a telescope. The telescope can be home-made (there is always a wide variety of personally decorated ones on hand), or it can be store bought and straight from the box.

Maps and red flashlights are also standard equipment to help find your way in the sky and the dark (interference on night vision by the colour red is minimal). More and more laptop computers are also popping up. To ensure everyone's enjoyment, there are a list of rules published under the header, "Star Party Etiquette". No white flashlights are allowed and turning off all interior and trunk lights of vehicles are two of those rules. The last rule on the list for proper etiquette may seem amusing to some, "Have fun & tell wild stories about things you observed that are far too dim to have possibly been seen."

Sandy Ferguson took visitors on a guided tour of the heavens with a Binocular Starwalk. One of the first things she said was, Part of getting to learn the sky is getting out there."

Looking skyward is just the starting point. Ferguson said there is much in the way of mythology and religious beliefs surrounding constellations such as Cassiopeia and others.

Out of the darkness cries of, I've got myself a fuzzy," can be heard. It is not what it sounds like. To borrow a phrase from Blair Colborne in describing a fuzzy, It is just a cluster of stars, like a snowball, travelling through space."

Globular clusters, open clusters, galaxies, nebulas, planets, moons and orbiting satellites are some of the many heavenly, and heavily, hunted objects above earth's atmosphere at a star party. During daylight, seminars, discussions, an astrophotography contest, swap tables and much more are regular staples of its agenda.

A large contingent of amateur astronomers from Edmonton and another from Winnipeg were on hand to mingle with Saskatchewan stargazers. In fact, visitors came from throughout western Canada and the United States. One visitor, Dominique Devriendt currently of Winnipeg, is originally from Belgium.

One of the guest speakers this year was John Leppert of Bismarck, North Dakota. An eclipse chaser, he brought images and tales of his quests that have taken him to Zambia, Germany and other locales around the globe.

Having the party run smoothly involves the efforts of many RASC members. But Dr. Dickson said, I really want to single out Brad Mason and his staff at the Cypress Hills Park who makes sure everything runs smoothly and we have everything we need."

The 2003 SSSP is scheduled for August 23rd to August 25th. By coincidence, that is the time when the planet Mars will be at its closest to Earth for another 2000 years. As Dyer says about stargazing, There is never a dull moment. There is always neat stuff to see."

Visit to the Dominion Radio Astrophysical Observatory by Les Dickson

Late in September, Ellen and I traveled to B.C. to visit my parents, who live across the Lake Okanagan from Vernon. On the way there, we drove past Jack Newton's B&B above Osoyoos, down into the valley, and northward through the valley towards Penticton. Since we were in the area, we could not pass up a visit to the Dominion Radio Astrophysical Observatory (DRAO), a national facility for radio astronomy.

DRAO is located south of Penticton, B.C., off of Hwy 97 on White Lake Road. The location chosen for DRAO in 1950 is a valley ,ringed by mountains, that is protected from man-made radio emissions. When we arrived at the site, we had to park just off the road, and walk 600m onto the site proper. This is to reduce radio interference from automobile ignition systems. As we walked in, we passed over a Texas gate, as there are free-ranging cattle in the area. The signs mention to watch out for rattlesnakes, but fail to mention the cow patties.

Dominating the site is the 26 m steerable dish antenna, which is used to study the distribution of hydrogen, hydroxyl ions and methanol in our galaxy. On the left is the 600 m long Synthesis Telescope, an array of seven dishes, each 9 m in diameter, mounted on rails so that each can be moved to change the separation of the dishes from each other. The signals from each of the telescopes are combined to give an instrument with the apparent resolution equivalent to a telescope 600m in diameter. It is used to image clouds of hydrogen gas and emission from high-energy electrons in magnetic fields. On the right is the remains of the 22 MHz array; a radio telescope consisting of a huge array of wooden poles and wires strung between them. This was used for a survey of the sky in a project that ended in 1970. The other telescopes on the site include two used for monitoring radio emissions from the Sun.

DRAO provides a self-guided visitor's tour, which is open to the public year round. At each stop on the tour, there is a box on a pole, which will, when a button is pushed, describe the instruments one is looking at. If you can get to the site on Sunday afternoons during July and August, you can get a guided tour. The Visitor's Centre, located just past the 26m dish and just before the solar telescope dishes, is open during daylight hours. The Visitor's Centre has a number of displays describing the history of the site, the principles involved in radio astronomy, and a summary of the achievements of the scientists and staff who use the site. There is also a television hooked up to a television camera and a filtered solar telescope slaved to one of the Sun-monitoring dishes to give you a look at the Sun.

The site is worth a visit at any time, but I would suggest taking advantage of their guided tours if you can schedule your visit on a Sunday afternoon during the summer.

For more information, you can check out their website at <http://www.drao.nrc.ca/index_eng.shtml>.

The Very Best Iridium Evening Flares – by Les Dickson

Date	Local Time	Intensity (Mag)	Alt.	Azimuth	Distance to flare centre	Satellite
16 Oct	19:47:40	-4	42°	13° (NNE)	11.4 km (W)	Iridium 66
17 Oct	19:41:31	-8	43°	14° (NNE)	2.1 km (W)	Iridium 74
18 Oct	19:35:22	-6	45°	16° (NNE)	5.3 km (E)	Iridium 70
29 Oct	18:27:01	-5	13°	282° (WNW)	35.0 km (W)	Iridium 18
02 Nov	20:09:00	-7	29°	17° (NNE)	4.6 km (E)	Iridium 47
03 Nov	20:02:55	-5	31°	18° (NNE)	10.4 km (E)	Iridium 26
08 Nov	17:35:57	-8	74°	59° (ENE)	1.3 km (W)	Iridium 72

Please Bring ALL SSSP Photos to the October Meeting

We request that people who took pictures at the Saskatchewan Summer Star Party, if they would, bring them to the October meeting. Les Dickson would like to scan as many pictures as possible and burn them into a CD-ROM as a permanent record of the event. Media for the images is not important – we can handle photographs, slides or electronic photos. All pictures will be returned to their owners after scanning. If this project is successful, we may do the same for past years.

An Now...The Annual Elections.....

The Annual Elections for the RASC Saskatoon Executive positions will be held at the October General Meeting. An Executive position is open to any member of the Centre in good standing. Positions are chosen by democratic vote by the membership. Anyone can nominate anyone else *or* themselves for a position. Voting is done by a show of hands by those present at the General Meeting. In the event that you cannot attend the meeting, nomination by proxy will be gladly accepted. Please send these proxies to the Centre mailbox, or contact a member of the current Executive.

The following Executive positions are available:

President	Les Dickson (not vacant. 2nd year of two year term)
Vice-President	Darrell Chatfield (not vacant. 2nd year of two year term)
Secretary	up for grabs (currently Al Hartridge) standing
Treasurer	up for grabs (currently Barb Young) standing
Centre Rep.	up for grabs (currently Sandy Ferguson)
Newsletter Editor	up for grabs (currently Rick Huziak) may give up to become Observing Coordinator
Librarian	up for grabs (currently Sandy Ferguson & Ellen Dickson)
Councilor	up for grabs (currently S. Alexander, J. Young, M. Melby) nominated - Gord Sarty
Youth Coordinator	up for grabs (currently Tyronne Klassen) standing
Membership Coordinator	up for grabs (currently Bob Christie) standing
Activities Coordinator	up for grabs (vacated by Mike Stephens)
Observing Coordinator	up for grabs (temporarily filled by Darrell Chatfield and Rick Huziak)
Fundraising Coordinator	up for grabs (currently Darrell Chatfield) standing
Gen. Meeting Coordinator	up for grabs (currently Rick Huziak & Dale Jeffrey)
Sleaford Coordinator	up for grabs (currently Bill Hydomako) standing
Publications/Sales	up for grabs (currently Debbie Anderson) not standing

Fundraising Bits & Bites

By Darrell Chatfield <novachat@sasktel.net>

Fundraising efforts have netted a few noteworthy donations. I would like to thank Gord Sarty for the kind donation of approximately \$30.00 in Canadian Tire money. This brings our total Canadian Tire money fund up to around \$45.00! If anyone else would like to donate, please bring it to the next meeting and see me. Tim Horton's on 8th Street East has also donated empty bottles for recycling. This donation, which filled the entire box of my truck, turned out to be worth \$115.00!

All Those Mini-Starnights

By Rick Huziak

Since the September newsletter was published, we've had a number of "mini" starnights for both school camps and the general public. These starnights include W. W. Brown School in Langham, Forest Grove School, Saskatoon Open School, Montgomery School, V. C. Hugh Cairns School & Fairview School at Brightwater Camp, Venture Heights School in Martensville, and the Saskatoon Heritage Society at Sleaford. I'd like to thank Tyronne Klassen for helping out in Langham, Sandy Ferguson for organizing Martensville, Jim & Barb Young for helping there and Mike Clancey and Jim Young for helping at Brightwater. Altogether, these talks and starnights opened up a new view of astronomy to more than 450 people! The Hugh Cairns School starnight of October 5th marked my 100th visit to Brightwater. Camp director Marcia Klein and teacher Rob Friesen arranged to have a cake presented at this session – quite cool!

MINUTES OF THE EXECUTIVE MEETING

Held in Room 8313, City Hospital, Monday, September 16, 2002, 6:30 p.m.
Recorded by Al Hartridge, Secretary

1. Approval of minutes: There were no minutes of the June 2002 meeting to approve.
2. Treasure's Report: Present balance is \$15,904.92. Barb has started on the SSSP year end report.
3. Upcoming events: Rick would like help with a number of events. If you have time and wish to help him, see him about this. Two major events are Colonsay School on Oct.3 at Sleaford and an Open House at Sleaford Oct.26.
4. Partnership Agreement: has been signed by all parties.
5. Donation: Mike Stevens has donated money to our club for the purchase of a copy of *Sky Atlas 2000*. This will be kept at the Sleaford site. It will be identified as donated by Mike.
6. Membership: there are 79 members at present plus 6 temporary members.
7. Sleaford: there are still a number of things to be done at Sleaford, which will require small two or three person work groups.
8. Youth Group: Tyrone will organize this again this winter. It will be held at Nutana School.
9. Library: nothing new to report.
10. Executive Meeting: there will be an executive meeting before the next General Meeting. It will be held at 6:30pm.

MINUTES OF THE GENERAL MEETING

Held in Room 8313, City Hospital, Monday, September 16, 2002, 7:30 p.m.
Recorded by Al Hartridge, Secretary

1. Approval of Minutes: No minutes were taken at the June Meeting
2. Treasurer's Report: present balance is \$15,904.92.
3. Membership: 79 members to date, 6 temporary members. Renewal forms will be coming from National. Please let Bob Christie know when you renew.
4. Sleaford site: there are still jobs to do which will require small work crews. Bill will organize these.
5. Fundraising: Gord Sarty has donated \$30.00 worth of Canadian Tire money. The bottle drive is a continuous on going event. Please bring your empties to the meetings and Darrell will take them.
6. Youth Group: Tyrone will organize this again this season. Meetings will be held at Nutana Collegiate the last Friday of the month beginning in October.
7. Library: nothing to report at this time.
8. Partnership Agreement: finally both parties have signed and the agreement is complete. Would like to arrange to celebrate this event.
9. October General Meeting will include election of officers. We need new blood. Please let your names stand for election.

Nominations for executive officers are now open:

- Gord Sarty is nominated for Councillor
 - Ron Waldron is nominated for Councillor
10. Rick Huziak: needs help for up coming talks and star nites. Please see him if you can help.
 11. Mike Stephens: has donated money to the club for purchase of a copy of *Sky Atlas 2000*. This will be kept for use at Sleaford and designated as donated by him.
 12. Messier Certificate: several more members have qualified for this award.
 13. Membership List: if any one wants a copy, ask Bob Christie and he will e-mail you the file.
 14. Light Pollution: Rick has been interviewed by Shaw Cable. He will also start a petition to City Council. Gord Sarty has talked to Kate Wagood.
 15. Meeting Adjourned at 9:20 p.m.

Sky Buys and Mirror Cells

The Saskatoon Centre's Swap and Sale Page!

Wanted: Pre-1985 2"Visual Back or Diagonal for C-8. Years after this have different threads. Call Les Dickson at 249-1091.

For Sale: 11mm Televue Plossl eyepiece - used only 3 times, one year old, in excellent shape. Reason to sell – bought Radian. New was \$130. Will sell for \$90. Call Rick Huziak at 665-3392.

For Sale: Sky Catalog 2000 -Vol 2, by Sinnott - \$30.00. **Astronomy**, 2002, 320pp, by Robert Burnham - Color sky charts, planet information, etc., \$15.00. **35mm Bausch and Lomb Plossl eyepiece**, fully coated. Excellent shape; in original box with dust caps. - \$80.00. Call Darrell at 374-9278.

Wanted: Piggyback camera mount to fit C8. Call Darrell at 374-9278.

Wanted: Older opaque projector or the lens & lamp from one – Call Don Friesen at 343-4962.

The Planets this Month - October 2002

by Murray D. Paulson (Edmonton Centre)

As the sky gets dark in mid-month, **Neptune** and **Uranus** are near the meridian and **Venus** has disappeared into the glare of the sun. On October 31, Venus transits in inferior conjunction, 5-1/2 degrees below the sun. This is exactly one Venusian synodic cycle from the next time it transits in front of the sun, June 8, 2004. This conjunction will be worth watching, as it will be the last close approach that Venus makes before the transit itself. This event will look good in a telescope, but it is close to the sun! When you set up, you must ensure that the telescope is in a shadow of an awning so that there is no chance whatsoever of accidentally pointing the scope at the sun! A refractor is best, but if you are using a Newtonian or SCT, use an off-axis mask with a 3" or so aperture. First focus the scope at infinity with a low power eyepiece, (use a solar filter, or a distant object). Then use a shadow to line up the scope with the sun. Now point the scope 5 degrees directly below the sun in R. A. Put your hand up to the eyepiece to make sure that there is NO sunlight coming out the eyepiece. Then, and only then, look into the scope and scan to the east or west to search for Venus. What you will see is a very thin sliver of a crescent and you may see it extend more than 180 degrees around the disk. Tres cool! This is due to Venus's thick atmosphere ducting the light into the terminator regions. The next superior conjunction occurs next summer in mid-August, one half a cycle from now. In the month following, you will see Venus pop up into the morning sky. It is so bright that it shines on through the twilight glare. The morning ecliptic is vertical, so this will be a very favorable morning apparition. Venus will climb into visibility very quickly after the conjunction, quite the opposite of its slow September slide into obscurity.

Mercury has dived through its latest conjunction with the sun, September 27, and is headed into the morning sky. It is a very busy little planet, and it will be at greatest western elongation on October 13. Then it engages the sun in another conjunction on November 13. This one will be a superior conjunction where Mercury will actually pass behind the sun. You may have been lucky enough to see Mercury join Mars in the morning sky over the second week of October.

Jupiter rises just after midnight at month's end and will be a good late night target after a night's observing. It shines at magnitude -2.2 and shows a disk of 37.0". Check the *Observer's Handbook 2002* to see if there will be any interesting Jovian satellite events on the evenings you will be out. I haven't seen it yet, but I am intrigued as to what new changes it may have undergone over the last 5 months.

Saturn rises just after 9:30 p.m. in mid-October, and shows a disk 19.25". It shines at magnitude +2.3 from its lofty distance of 8.595 AU. Over the next month it will brighten to Magnitude +2.0 and its disk will expand imperceptibly to 20.17". By mid-November, Saturn will rise at 6:30 p.m. and sits at a reasonable height of 30 degrees by 10 p.m. Its place on the ecliptic will put it due east at this time of night. It is at such a steep tilt now that it wears a halo of moons about it.

The Alberta Star Party and the Ring Nebula

By Vance Petriew <vance.petriew@saskeds.com>

From the RASCals Discussion List RASCALS@ap.stmarys.ca 16 Sep 2002

I had a great time at the Alberta Star Party this weekend! The talks given by Alister Ling, Richard Huziak, Rene Plume and Alan Dyer were excellent and very inspiring. I especially enjoyed how the rolling thunder from passing thunderstorm fit in so well with some of the content of Rene's talk [on gas clouds and star formation]. Many thanks to the organizers of the Calgary and Edmonton Centres for putting on another successful star party!

We had some clouds roll in on Friday just before midnight but Saturday night was clear. Unfortunately, the aurora was "flaming" which made deep sky observing tough until after 2:00 a.m. when it settled down. Full winter gear was also in order since the temperature dipped to 1 or 2 degrees on both nights with lots of dew. The transparency was awesome earlier on but started to degrade after 1:00 a.m. Rick described the stars at 5:00 a.m. as "large beach balls". But that didn't take away from the dark dust lanes all over M31. Rick Huziak, Paul Campbell and I were able to trace the Andromeda a full degree past NGC 206, which is something you just don't see in pictures. Very cool! Bruce McCurdy and Alan Dyer stuck around to investigate G73, a globular in M110. Even fainter was G108 in Andromeda, which is catalogued at magnitude 15.8. The bright nucleus of CGCG 378-15 was also visible but unfortunately the seeing conditions wouldn't allow this to be resolved into Einstein's Cross. Maybe next time.

My question is, what is the magnitude of the 2nd star in the Ring Nebula? I was able to see this faint star after the line-ups to see the Ring at 1100x subsided. [You can put your fist through the Ring at 1100x – but boy, is it hard to show others who are not familiar with undriven Newtonian scope movements! – Ed.]

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Tenho Tuomi	Done!	110
Bill Hydomako	Wow!	110
Mike Oosterlaken		93
Wade Selvig		71
Lorne Jensen	Up!	54
Brent Gratias		39
Teresa Mulvenna		38
George Charpentier		30
Stan Noble		28
Tyrone Klassen		26
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Darrell Chatfield	Waiting!	400
Gord Sarty		251
Scott Alexander		102
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Sandy Ferguson		18

The first 2 lists can be found in the *Observer's Handbook*. The Binocular List & Herschel 400 list will be available at each general meeting for 50 cents (covers photocopying) or can be mailed out on request to distant members. Each month I'll be posting updates.

Chatfield BINOCULAR CERTIFICATE

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Mike Oosterlaken	32
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EXPLORE the UNIVERSE

No one yet	0
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I'd like to welcome newcomer Messier observer Brent Burlingham to the list, with an impressive start! I've also added a new observing challenge list to the group – the RASC's **EXPLORE the UNIVERSE** certificate. Some new members have asked about what is required when finding these certificate objects for documentation. This is easy.

There is **no requirement** to sketch the objects (though I like to, since it forces you to look longer and sort out faint details). You record date, time, telescope used, power, visual impression and whatever else you'd like to write down. You can do this in any type of record - serial booklet, scattered pages, laptop, cigarette package, blood on parchment. When you are completed, 2 officers from the club will verify: a) that you have the 'ability' to make the observations (ie. aren't blind), b) that you're a cool enough person not to have lied (too much) about what you saw. We then make an application for a certificate on your behalf to National. Usually no one actually counts the objects, though its fun to see how others (ie. you) record your observations. Everyone puts a new swing on observing records. The whole point of the exercise is to get astronomers observing!

If you promise to look at M45 (Pleiades) sometime in the next few months with eyeballs, I'll enter you onto the Messier Club as '1' object, and you can go from there!

Next month, I will begin to hound you to participate in **The Great Canadian Observing Challenge**. Gord Sarty has set up a web page to keep control of this challenge on the Saskatoon Centre website. Get a jump on next month, and visit this web page. It came about from a lot of whining on the RASCList Discussion Group. I have a lot of work to do to get everyone observing, so I will need your help!