

# *Saskatoon Skies*

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

**Volume 31, Number 12**

**December 2000**



The December 25<sup>th</sup> partial solar eclipse is a mirror image of July 30<sup>th</sup> eclipse, occurring at sunup instead of sundown. Open your presents early, then watch the full sun rise and then diminish to only 45% of it's self. See the details in Murray Paulson's article on page 7 or in your 2000 Observer's handbook! Photo of the July partial eclipse by Rick Huziak.

**RASC Calendar Happenings**

<b>Date (2000-01)</b>	<b>Event</b>	<b>Contact</b>	<b>Telephone</b>
Dec. 18	<b>Executive Meeting - Room 8313 - 6:30 pm</b>	Les Dickson	249-1091
Dec. 18	<b>General Meeting - Room 8313 - 7:30 pm</b>	Les Dickson	249-1091
Dec. 25	<b>Partial Solar Eclipse at Sunrise</b>	Rick Huziak	665-3392
Jan. 4	<b>Quadrantid Meteor Peak (ZHR=120)</b>	Rick Huziak	665-3392
Jan. 15	<b>Executive Meeting - Room 8313 - 6:30 pm</b>	Les Dickson	249-1091
Jan. 15	<b>General Meeting - Room 8313 - 7:30 pm - Rick Huziak - <i>Discovering New Variables</i></b>	Les Dickson	249-1091
Jan. 19	<b>Youth Group Meeting -Nutana - 7:30 p.m.</b>	Andrew Krochko	955-1543
Feb. 2	<b>Youth Group Meeting -Nutana - 7:30 p.m.</b>	Andrew Krochko	955-1543
Feb. 19	<b>General Meeting - Room 8313 - 7:30 pm</b>	Les Dickson	249-1091
Mar. 19	<b>General Meeting - Room 8313 - 7:30 pm - Paul Campbell, Edmonton Centre</b>	Les Dickson	249-1091

## **Sky Buys and Mirror Sells**

## The Saskatoon Centre's Swap and Sale Page!

**For Sale: Brass lined trunk for SC-8 or SC-10: 9 mm Kellner eyepiece; 7X35 Marksman binoculars with case: and some very good astro books: *Skywatching* and *Advanced Skywatching*, by David Levy, *Nightwatch* by T. Dickenson, National Audubon Society *Field Guide to the Night Sky*; *the Pocket Guide to Astronomy* by I. Ridpath. All books are in excellent shape. Call Darrell Chatfield for prices at 374-9278.**

**For Sale: Nearly new Meade 10" LX200 with accessories. Hardly used. Includes 2 power supplies, 3 eyepieces, carrying bag, Meade dew shield. \$3000.00 OBO. Call Richard Allen at 665-5769.**

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## *Gastronomy Anyone?*

**We're planning one last RASC get-together before Christmas - if there is interest.  
We'll phone around when details are firmer!**

## **Saskatoon Centre**

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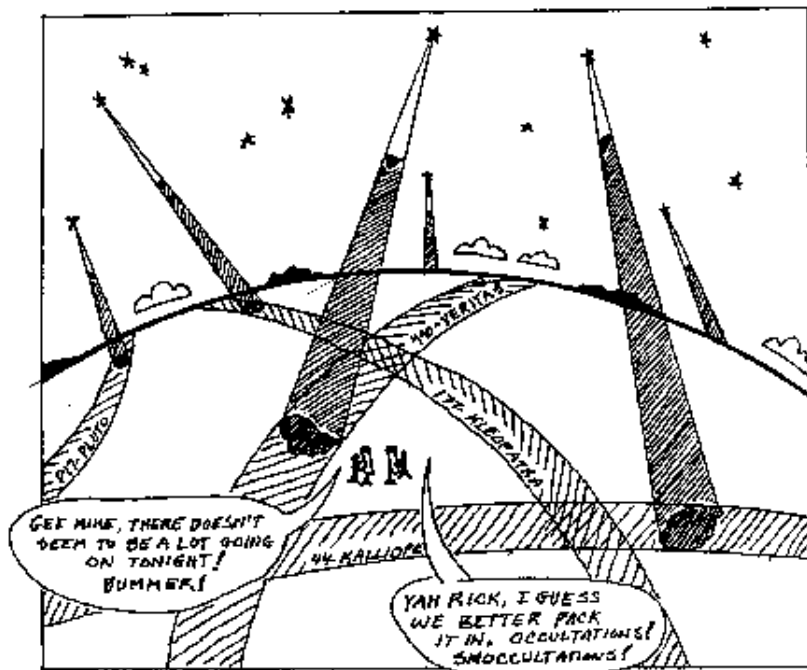
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## **The Story of The Eclipse that Never Was**

**by Rick Huziak**

Why I torture myself with no sleep and a perfect record of failures, I'll never know, but hitting yourself on the head over and over with a hammer made of asteroids seems quite fun anyway! I am, of course, talking about our most recent attempt to observe an asteroid occultation - an eclipse of the distant star mu Geminorum (Tajet) by the asteroid 752 Sulamitus.

This event held great promise since the eclipse paths across the earth were thought to be known reasonably certainly and besides, an occultation (eclipse) of a 2.9 magnitude star by a 13.5 magnitude asteroid ought to be exciting enough by itself. The 10 magnitude near-instantaneous drop would have been easily visible even to the naked eye and would stay dim for up to 13 seconds! To add to the drama, the star itself is a red supergiant that subtends a measurable diameter in the sky of 0.013 arc-seconds - large enough to cause a slow fading at the edges of the eclipse of about one second duration. This event would allow us to measure the diameter of the asteroid *and* the diameter of the star by accurately timing the passage. To make the event even more attractive, the southern edge of the occultation was predicted to pass over the Sleaford Observatory. As a downer, the event was to occur just before morning twilight was to set in. (See details of this event in your *Observer's Handbook 2000*, pp. 196 & 198).



The very early morning of November 20th began with an annoying alarm waking me up at 4:00 am. Just as annoying was my phone call to Sandy Ferguson to make that she was up, too. (I wasn't going to do this alone!) I also woke up Paul Soron, a friend of mine visiting from Port Coquitlam, BC; he is also a closet astronomer. I was going to suffer this early torture - everyone was!

By 4:30 am, we had picked up Sandy and were off to Sleaford. We arrived at about 5:10 am, and hurriedly began setting up. We thought we'd use the University's scopes, since they were already set up. This would save hauling and setting up our scopes early in the morning. Bad move Number 1! When we rolled back the roof, we found that the scopes were not configured as we thought they would be. The Meade 8 was missing the diagonal and was about a hundred turns out of focus. I got Sandy our diagonal, and she set out at breakneck speed rewinding the focus. The C-14 had the photometer attached - but luckily, the flip mirror eyepiece sufficed for Paul. I thought I'd use the LX-200, but it had been reconfigured with the CCD camera and no flip mirror. So, with the occultation now fast approaching, I dashed for Eetook, and hauled the 12.5" scope into the roll-off shelter with Paul's help. By this time, it was 5:45 am, only minutes before the occultation was scheduled to occur.

We weren't the only ones trying. All over North America, Dedicated Occultation-Ready Keeners (DORKs) were up and at it - at least 50 observers in all. Observers in Virginia, Ohio, Manitoba and Alberta, and surely elsewhere were also geared up to watch the shadow pass over them. *Oooohs* and *aaahhs* were being rehearsed. Tape recorders and WWV time signals were counting down the seconds. The Edmonton Centre had mustered

up two crews to monitor this event. They had planned to spread observers across the path at Meadow Lake, SK and south of Fort McMurray, AB. With a line of observers perpendicular to the on-coming shadow, possibly only about 60 kilometers wide, different "slices" of the asteroid profile would be seen. Edmonton is very organized in this way - even that early in the morning. (However, Bruce McCurdy supposedly forgot his telescope in the morning confusion)! To make their job even more difficult, the head of the International Occultation Timing Association (IOTA), David Dunham, showed up in Fort McMurray, as Sharon Tansey said "*to make us all nervous!*" They would see the eclipse happen only a minute after it passed over Sleaford.

We watched through our eyepieces as the seconds boinged along on the radio and the tape recorder tape hissed away. Our hearts kept beat to WWV. A coyote howled. Birds fell silent in anticipation. A twig snapped.....

Then, a few seconds after 5:48 am, just when predicted, and completely unexpected, all of a sudden ... *nothing happened!* Crap! What the hey? But like good observers, we glued our eyes to the scopes for another 3 minutes in case the eclipse was to occur later than planned.

Maybe the eclipse passed north of us - quite likely. Or maybe the Great Exalted Occultation God on High just plain hates my guts. A dozen - count them - one dozen failed occultation attempts and counting! Major downer! This blows! I might just as well point my telescope into a snow bank for the next one!

I guess I was a bit consoled to find out that *absolutely no one* saw this occultation. (*Why should those losers see the wink and not me?? Serves them right!*) Consoled, but disappointed all the same. In the cosmic game of occultations, some win and see the blink, and others lose and see diddly-squat - some have to lose in order to define the maximum diameter of the asteroid! Even more disappointing is that no one even saw a fading - indicating a partial eclipse of the star by the asteroid. *No one at all!* On the bright side, we recorded an excellent tape with 5 minutes of "*... boing, boing, boing, the time at the tone is ....*" including a masterful verbalization by *Yours Truly* saying, "*Crap, this sucks!*" (*Send \$9.95 plus shipping and handling*).

David Dunham emailed a day later and thanked everyone for their effort and dedication, and said he was truly baffled by where the track really went. Win some. Lose more! I guess we'll have to shoot the astrometrist that measured the last set of asteroid tracking photographs taken only a few days before the event. Despite finishing up by 6:15 am and drinking 6 cups of coffee, I still arrived at work late.

## **The Tale of Two Cities (In Space)**

**by Rick Huziak (source - the RASCList)**

Two of our greatest manmade light shows are going in opposite directions. It seems that the Iridium satellites, only a short time ago thought to be destined to a fiery fate of mass reentry, have been saved for the time being. Recently, Iridium Satellite LLC released the following statement that *"Iridium Satellite LLC will purchase all of the existing assets of Iridium LLC, including the satellite constellation, the terrestrial network ... and ... will continue to provide commercial satellite communications to the U.S. government and plans to re-launch affordable satellite communications services to those industry segments that have a particular need for satellite communications (government, military, humanitarian, heavy industry, maritime, aviation, adventure) within 60 days."* Thus, it seems that we will continue to see those excellent (but annoying) Iridium flashes for some time to come!

Meanwhile, the aged Mir space station will be ditched in February in a controlled descent that will send it hurtling into a remote area of the Pacific Ocean, Russia's Cabinet has said. The Cabinet approved a plan to crash the 14-year-old Mir into the Pacific east of Australia.

## **A Complete List of Canadian Asteroids**

**excerpts from the MIAC discussion list, posted by Jeremy Tatum, U of Victoria MIAC**

**Associate Chris Aikman** draws my attention to yet another recent Canadian asteroid. Here's ... my complete (?) list. [How many of these famous Canadians can you identify? - Ed.]

729 Watson

855 Newcombia

2104 Toronto

2154 Underhill



2904 Millman

2905 Plaskett

2917 Sawyer Hogg

2980 Cameron

3023 Heard

3034 Climenhaga

3166 Klondike

3269 Vibert-Douglas

3304 Pearce

3307 Athabasca

3314 Beals

3315 Chant

3316 Herzberg

3497 Innanen

3658 Feldman

3670 Northcott

3673 Levy

3748 Tatum

3749 Balam

3806 Tremaine

3931 Batten

3944 Halliday  
4021 Dancey  
4058 Cecilgreen  
4091 Lowe  
4113 Rascana  
4230 van den Bergh  
4276 Clifford  
4340 Dence  
4451 Grieve  
4719 Burnaby  
4789 Sprattia  
4843 Megantic  
5132 Maynard  
5272 Dickinson  
5424 Covington  
5457 Queen's  
5547 Acadiau  
5553 Chodas  
5621 Erb  
5661 Hildebrand  
5688 Kleewyck

5953 Shelton

5967 Edithlevy

6115 Martinduncan

6204 MacKenzie

6260 Kelsey

6532 Scarfe

7317 Cabot

7638 Gladman

7840 Hendrika

7886 Redman

8564 Anomalocaris

8785 Boltwood

9070 Ensab

9631 Hubertreeves

9995 Alouette

11955 Russrobb

13057 Jorgensen

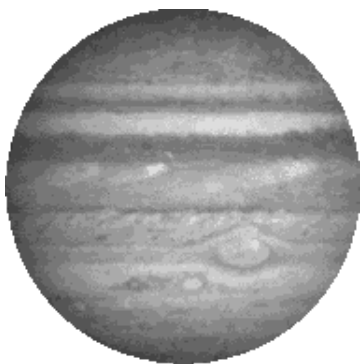
13111 Papacosmas

## **Planet (& Solar Eclipse) Report for December 2000**

**Murray Paulson, Edmonton Centre** <mpaulson@ecn.ab.ca > *(revised for Saskatoon times)*

**Mercury** declines from last month's elongation to arrive at superior conjunction with the sun on the very date that the moon does, Christmas. At 4:22 am while St. Nick is sliding down the roof of your house to his impending demise, Mercury will be exactly at superior conjunction, 1.2 degrees below the sun. Six hours later, at 10:50 am local time, we here in Saskatoon will experience the maximum phase of **the fourth and last solar eclipse of this year**. First contact of the partial eclipse occurs at 9:32 am, only 19 minute after sunrise, and fourth contact, when the last trace of the moon leaves the sun, occurs at 12.15 p.m. The magnitude of the eclipse or extent of the overlap, in Saskatoon is .555. To get maximum coverage you would have to head to north Quebec - Greenland and get about .66 magnitude. Four eclipses in one year, and we get a chance to witness two of them! The geometry of eclipse phenomena arranges that two of these eclipses graze the north end of the Earth and two graze the south end. In the week before Christmas, check and figure out where you can get the best view of the sun at these times of day. Mercury leaves this spectacular conjunction and heads toward the evening sky in the month of January.

The evening of December 11th, **Neptune** will lie 2.5 degrees south of Venus, and **Venus** will show a 17.5" gibbous disk. A little over a week later, on the evening of Dec 23 there will be a conjunction of Venus and Uranus. 5.9 magnitude **Uranus** will lie 1.25 degrees above -4.3 mag Venus. A rather compelling contrast is the respective distances that these solar system bodies are from us. Venus is .937 AU whilst Neptune is 30.8 AU and Uranus is at 20.627 AU. By the January meeting, Venus will have climbed the ecliptic to ride 47 degrees from the sun and will be approaching Dichotomy, or half phase. As it has climbed the ecliptic, it has also climbed into the night sky and rides just 7 degrees below the celestial equator. From this vantage point, it sets 5 1/2 hours after the sun.



**Mars** shines at magnitude 1.5 with a 5.6" disk in early January. It transits at 7:45 am at a height of 22 degrees from the horizon, which makes it a good early morning target for those leaving late from Sleaford. At this size, you might be able to see some of the major features. Take a good look, because this is about the highest you will get to see it over the whole next year!

Last month I mentioned a few interesting transits, including a "Bulls-eye" transit of **Io**

shortly after Jupiter's opposition. Fortune would have that it was in fact clear that morning and I did get to see the event, my second of this type. The seeing wasn't great, but in the better moments you could see the moon lying on top of it's shadow, exposing just a thin black crescent of shadow. The penumbra of the shadow helped emphasize the moon against the backdrop of the South Equatorial Belt. This situation made the moon quite visible as it transited Jupiter. It was quite neat! I have compiled a list of some of the significant transits over the next while. Remember that the times are all UT, you must subtract 6 hours. For example Dec 11 at 5:09 is actually on December 10 at 11:09 p.m. The Dec 21 event is interesting in that you may be able to see the shape of Jupiter's shadow as it passes across the 1.7" disk of **Ganymede**. I have calculated that the eclipse should take about 8 minutes from start to end, so you should have a bit of time to watch it. New Years Eve has a nice set of transits, and long enough before midnight to not interfere with celebrations. January 8 (Jan 7 local) has a **dual shadow transit**, so this one should be good fun! Aside from Jovian satellite events, the constantly changing cloud decks on **Jupiter** are a continuing source of pleasure to watch. I have been noticing that the **South Equatorial Belt** is divided by a thin whitish region and there is the occasional white oval visible in it. The **Great Red Spot** is becoming a more distinct feature and I see it as having a yellowish hue. The **North Equatorial Belt** has quite a reddish tinge and looping festoons can be seen rising from it into the equatorial zone. Barges or blocky darkish patches often adorn the northern

### *Jupiter Satellite Phenomena*

**Dec. 10**

**9:22 III.Tr.I.**

**10:33 III.Sh.I.**

**11:12 III.Tr.E.**

**12:39 III.Sh.E.**

**Dec. 11**

**6:09 II.Tr.I.**

**6:49 II.Sh.I.**

**8:43 II.Tr.E.**

**9:26 II.Sh.E.**

**Dec. 16**

**2:30 I.Tr.I.**

**2:58 I.Sh.I.**

**4:40 I.Tr.E.**

**5:09 I.Sh.E.**

**Dec. 21**

**2:15 III.Oc.D.**

**4:10 III.Oc.R.**

**4:31 III.Ec.D.**

**6:39 III.Ec.R.**

**Dec. 23**

**4:15 I.Tr.I.**

**4:53 I.Sh.I.**

**6:25 I.Tr.E.**

**7:04 I.Sh.E.**

**Dec. 28**

**5:36 III.Oc.D.**

**7:34 III.Oc.R.**

**Dec. 29**

**1:21 II.Sh.I.**

**2:25 II.Tr.E.**

**3:57 II.Sh.E.**

**8:54 I.Oc.D.**

**Dec. 30**

**6:01 I.Tr.I.**

**6:48 I.Sh.I.**

**8:12 I.Tr.E.**

**8:59 I.Sh.E.**

**Jan. 1**

**0:00 III.Sh.I.**

**0:28 I.Tr.I.**

**0:42 III.Sh.E.**

**1:17 I.Sh.I.**

**2:38 I.Tr.E.**

**3:28 I.Sh.E.**

**Jan. 5**

**2:10 II.Tr.I.**

**3:57 II.Sh.I.**

**4:45 II.Tr.E.**

**6:33 II.Sh.E.**

**Jan. 8**

**0:50 III.Tr.E.**

**2:15 I.Tr.I.**

**2:35 III.Sh.I.**

**3:12 I.Sh.I.**

**4:26 I.Tr.E.**

**4:44 III.Sh.E.**

**5:24 I.Sh.E.**

**Jan. 12**

**4:32 II.Tr.I.**

**6:33 II.Sh.I.**

**7:07 II.Tr.E.**

**9:10 II.Sh.E.**

edge of the **North Equatorial Belt**. North of this zone is the **North Temperate Belt**, which has been fairly strong over the last while and recently I have noticed another belt north of it as well as a separation in the polar zone. The south zone has a broken temperate belt with some fairly dark segments as well as some mottling in the **South Polar Region**. Keep me posted with you observations. I am glad to hear that some people caught the Ganymede event I mentioned in the last issue and Bruce McCurdy caught the Bulls-eye event.

**Saturn** continues to be a lovely image in the eyepiece and also completes a mega-constellation that I have noticed in the night sky. Back about the time of the Edmonton Workshop I saw this configuration of stars, a planet and a cluster that makes a giant ellipse. If you draw a line from Saturn to the Pleiades to the foot of Perseus then off his other foot and down to Cappella and around Auriga to the horn of Taurus, over to Aldebaran and back up to Saturn. Saturn has moved since then, and so the corners of the ellipse require a bit more imagination, but hey, what are constellations anyway? Saturn meanwhile shows splendid details in the ring system, and the more I look, the more sensitive I have become to the subtle details there. I have noted the shadow change over after opposition and it was subtle in the few days after, but is now well pronounced. I also



must congratulate Larry Wood for finding the faint **Enceladus** and **Mimas** with the aid of an occulting bar. I will have to try that trick, never having caught Mimas. Heck, I should have an eyepiece with a piece of dirt on it big enough to hide Saturn behind.

Well, till next month, Merry Christmas, and may your season be decorated with planets.



## **Newsletter Material Desperately Needed**

**by Rick Huziak, Struggling Editor**

After reading all the rot that I've generated this month, you might get the hint that I need articles. I hope some of you are doing some astronomy out there. I'd love to hear about your experiences! Please send articles!

## **Good News for the RASCList**

**reprinted from a posting to the RASCList (Dec. 2, 2000) by Dave Lane, Nova  
Astronomics <dave@nova-astro.com>**

*[In recent months, there has been much discussion regarding the usefulness of the RASCList, the RASC's Internet discussion list, since the topics being discussed often do not have a lot of substance and stray annoyingly in all directions. This has had the effect of having many good RASC observers and members leave the list, looking for more fruitful discussion pastures. Good news has arrived in the form of the following memo posted to the list recently. I hope that this memo encourages those who have recently unsubscribed to consider resubscribing and contributing their wonder experiences again! Ed.]*

**"As many of your know, I (more or less) founded this list back in November of 1995. Mark Kaye**

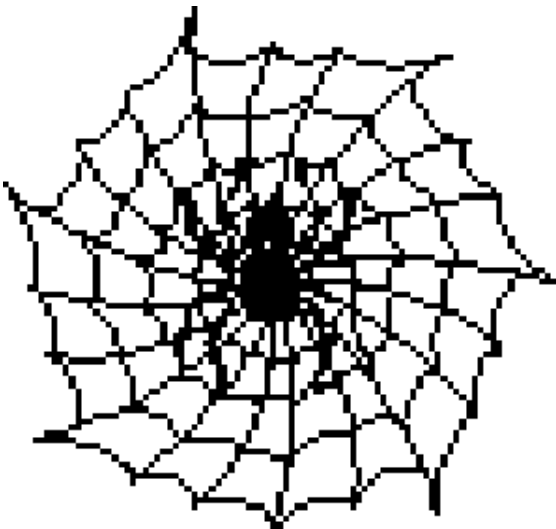
took over list-keeper duties about a year ago (I still am behind the scenes keeping the equipment and software humming). Over the years, I think its fair to say that both Mark and I were keeper's of the list rather than being moderators. We both have been very "hands off" about the discussion that has taken place here - however both of us have "bitten our tongues" on many occasions.

In recent weeks (and months) there have been several "events" that have caused many members to leave the list, for a variety of reasons (including some long-term and contributing members). I didn't know the extent that this was occurring since I don't get the administrative messages from the list software anymore, but Mark tells me that the dropout rate is steady of late.

I don't think I need do detail what some of these events were -- we all know what they are... Mark and I have discussed this and we have decided to start more actively moderating the list. He is going to do this when he sees the discussion digress far from the purpose of this list or when the "horse" has been already beaten to death! He will most likely do this in private. I doubt anyone will even notice this is going on -- Mark has been moderating astronomy lists for many years and I'm confident he can handle competently.

No one is going to get chastised for the odd off topic message, as long as it doesn't get out-of-hand. Just remember our charter: "please try to keep your messages related to the RASC (including how to improve our society), amateur astronomy in Canada, observing, etc." And try to think and re-read what you have typed before hitting "send" and potentially pissing off or offending 300 fellow members! :-)

Regards, Dave"



# Astronomy on the **Web**

**by Les Dickson**

One of the many reasons that astronomers - both amateur and professional - get into this field is to marvel at the sights: colourful nebulae, dancing aurora, bright globular clusters, and many other sights. The Internet provides access to a wealth of sites that cater to those of us who can not get enough of the night sky. These "image galleries" have something for everyone.

One of the most popular sites on the web for astronomical images is that of the Hubble Heritage Project. The Heritage team at the Space Telescope Science Institute (STScI) sees the Hubble Space Telescope "...as a tool for extending human vision, one that is capable of building a bridge between the endeavors of scientists and the public. By emphasizing compelling HST images distilled from scientific data, we hope to pique curiosity about our astrophysical understanding of the universe we all inhabit." The team culls through the images that the HST has taken and posts a new image on the first Thursday of each month. They also host an on-line voting event each month to let the public vote on the image to be posted the next month. While the team primarily use the Internet to distribute these images, many are available as prints, slides and posters through outside agencies, such as the Astronomical Society of the Pacific or Sky Publishing ("Sky and Telescope"). On a personal note, I noticed that I have an old acquaintance working for the team, a person I knew when we were both students in Toronto in the late 1970's. The Internet certainly makes the world seem a smaller place.

The Goddard Space Flight Centre hosts a site that provides public access to some of the more popular NASA images. The pictures are part of the National Space Science Data Centre located at GSFC. The pictures were taken primarily during NASA missions, and are organized by object and/or phenomenon. The major groupings are: Planetary and Solar System; Astronomical Objects: nebulae, galaxies and globular clusters, stars, and exotic objects; and others, such as images of the Sun and spacecraft. There is a special index of images taken by NASA probes, such as Galileo, the Hubble Space Telescope, and Voyager. While you are there, visit the home page of the NSSDC and select the links to "General Public" and "Space Science Education Page." These pages are "lift-off" points to many other NASA and related sites geared to public outreach and education resources. They are worth browsing if you are interested in space sciences in general, not just astronomy. NASA also has a central repository of images held in the Johnson Space Centre Digital Image Collection. While most are of the Earth from orbit, they are also worth looking at.

There are several sites in the Internet that cater more to the professional and serious amateurs. The Digitized Sky Survey has as its mission to digitize photoplates taken by the

Schmidt Camera telescope. These images are used by the Hubble Telescope team to plan observation runs and select guide stars. The pictures are available for download from the main site, or from mirror sites, including a Canadian site at the Canadian Astronomy Data Centre, Dominion Observatory, Victoria. Another "professional" site is run by the 2MASS (2-Micron All Sky Survey) out of Caltech. The survey is taking images of the sky at several near-IR (infra-red) wavelengths, notably 2.17 microns, in order to see through most of the obscuring dust in the galaxy, and to see the dimmer, cooler stars of the universe that emit primarily at IR wavelengths. The images in their gallery use false colours to code the IR wavelengths: J-band (1.25 micron) in blue, H-band (1.65 micron) in green, and K-band (2.17 micron) in red. The IR pictures show up many interesting details that are not visible at visible wavelengths.

Given the wealth of sky survey images and data available on the Internet, it is now possible to do astronomy without ever getting near a telescope. I am not talking about robotic telescopes as I mentioned in the last column, but mining the data taken by others and made available over the Internet. This has been called "Virtual Astronomy." One very nice site dedicated to this is "Virtual Sky". The data and images on this site include the Digital Palomar Optical Sky Survey, IR, radio and X-ray images from groups such as 2MASS, a multi-resolution star map produced by John Walker, and many historical and cultural representations of the sky, including Johann Beyer's "Uranometria", first published in 1603. The site offers an image of a user-selected part of the sky, and provides buttons that allow you to tilt, pan, and zoom in up to 12 levels of resolution. The interface is based on "Terraserver" a web site with over a terabyte of Earth imagery and mapping data, much of it taken from orbit.

Astro-Web search results for "Image Gallery": <http://simbad.u-strasbg.fr/cgi-bin/search-master?image+gallery>

NSSDC Photo Gallery: [http://nssdc.gsfc.nasa.gov/photo\\_gallery/photogallery.html](http://nssdc.gsfc.nasa.gov/photo_gallery/photogallery.html)

NSSDC Home Page: <http://nssdc.gsfc.nasa.gov/>

Astronomy Society of the Pacific Home Page: <http://www.aspsky.org>

Sky Publishing Home Page: <http://www.skypub.com>

Johnson Space Centre Digital Image Collection: <http://images.jsc.nasa.gov/>

Digitized Sky Survey: <http://stdatu.stsci.edu/dss/>

Canadian Astronomy Data Centre: <http://cadcwww.dao.nrc.ca/dss/>

2MASS: <http://www.ipac.caltech.edu/2mass/gallery/>

Virtual Sky: <http://virtualsky.org/>

Terraserver: <http://www.terraserver.com/>

**Notice of the General Meeting of the Saskatoon Centre**

**Monday, December 18, 2000 at 7:30 p.m.**

**Room 8313 City Hospital**

**Presenting**

**Main Guy Talking - *"TB Determond, but Very Good"***

**Rick Huziak - *"Simple Tripod Photography (including Geosyncs!)"***

**U of S Observatory Hours**

**The U of S Observatory is open to the general public every Saturday from December through February from 7:30 p.m. to 9:30 p.m.. Admission is 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.**



# Excellent Presents for Christmas

**Books For Sale:** The Saskatoon Centre has a number of Firefly Books left over from SSSP sales, and these are now available to general members to purchase at discount rates, despite my lousy Spanish. They make great Christmas presents! There are only one or two copies remaining of the following titles. Contact Debbie Anderson at 242-8854.

*Astronomy Quiz Book* - \$10.00

*Big Bang to Planet X* - \$10.00

*Exploring the Night Sky* - \$8.00

*Exploring the Sky by Day* - \$8.00

*Other Worlds* - \$8.00

*The Universe and Beyond* - \$20.00

*Cosmic Phenomenon* - \$25.00

*Extraterrestrials* - \$8.00

Messier, FNGC, H-400 & Binoc Club is taking a rest this month.

## Saskatoon Centre Opts in to the National Membership System

by Les Dickson, President

At our last Executive and General Meetings, the members present voted to approve a motion put forward by the Executive to have the Centre "opt-in" to the RASC National Membership System. The main consequences of the change for our members is that the

membership year for each member will now run from the month they join to the same month the following year. There will no longer be an official Saskatoon Centre membership year running from October 1 to September 30. This avoids the problem of pro-rating memberships if new members want to join mid-year, or having them join as Temporary members until October comes around. National Office handles mail-outs of the Observer's Guides, Journal and SkyNews based on whether a member is active (paid-up) at the time the mail-outs occur. So, if you let your membership lapse for a few months, you may miss not only our Centre Newsletters, but some National publications and perhaps your new Observer's guide. Also, your membership year start will shift to the month that you rejoin. National Office will now maintain the official list of members, both active and in-active, and will send out renewal notices to members 2 months before they are due to renew.

There will be a transition period where there may be some confusion. We ask that you be patient with us, especially with Bob Christie our Membership Coordinator and Jim and Barb Young our Treasurers, as we try to make the transition as smooth as possible. For now, we ask that renewing members renew through Barb and Jim at our December meeting, or mail your renewals to them before Christmas. Any member not renewed by the end of December will become in-active and will not receive the Newsletter or the National publications in the New Year. If you have already renewed, or have been a member and for some reason have not been receiving your publications, please contact us immediately so we can sort it out.

## MINUTES OF EXECUTIVE MEETING

for November 20, 2000

ROOM 8313, CITY HOSPITAL

recorded by Al Hartridge, Secretary

1. Minutes of the executive for October approved. Moved by Bob Christie and seconded by Jim Young and carried.
2. Open Positions for the new executive:
  - Debbie Anderson has agreed to take over the position of Sales Coordinator
  - Ken Noesgaard has not yet decided regarding the position of Observing Coordinator
  - Mike Stevens will take the position of Activities Coordinator with some back up from Sandy Ferguson

1. Revolving Membership: considerable discussion occurred regarding this issue. It was moved by Les Dickson and seconded by Bob Christie that we recommend this to the membership at the general meeting where this will be voted on. This motion was carried. Bob Christie will now do the mailing labels.
2. Newsletter to other Centres: other Centres will be offered the option of electronic or printed copy. If a Centre requires a printed copy then we expect a printed copy of their newsletter in return. There is a considerable yearly expense in mailing newsletters to the other Centres.
3. Treasures Report: the present balance is \$10,927.99
4. Computer Problem at Sleaford: it has been deemed by some that the occupation of the new area in the warm up shelter by the University's computer is a problem. Stan Shadick will be consulted about this.
5. SSSP2001: Barb Young will send a cheque to Cypress Hotel for \$200.00 as a deposit on the Wapiti Room.
6. Meeting adjourned at 7:30 p.m.

## **Minutes of the General Meeting**

**Room 8313, City Hospital**

**November 20, 2000, 7:30 p.m.**

**recorded by Al Hartridge, Secretary**

1. Presentations:
  - Sandy Ferguson, Edmonton's George Moores Astronomy Workshop in pictures.
  - Bill Hydromako , How to Plop at Sleaford - A Users Guide.
1. Approval of Minutes for October Meeting - Moved by Dale Jeffery and seconded by Bob Christie and carried.
2. Executive 2000. There still a few open positions.
  - Debbie Anderson has agreed to stand for Sales Coordinator
  - Ken Noesgaard has yet to decide to be Observing Coordinator
  - Mike Stevens has agreed to be the Activities Coordinator
1. Revolving Membership: Les Dickson moved and Bob Christie seconded that the club move to a revolving membership and this was carried.
2. Newsletter to other Centres: the other Centres will be given the option to go electronic or to receive a printed copy. If they wish to take a printed copy then we expect a printed copy of their newsletter in return. Taking the newsletter on line will



- reduce the cost to our club considerably.
3. SSSP2000: we need to send a deposit for the Wapiti Room and for the reserved block of rooms at the Cypress resort. The required deposit is \$400.00. Les moved and Sandy seconded that we take care of this soon. This motion was carried.
  4. Use of warm up shelter at Sleaford: there has been some concern raised by the membership over the placement of the U of S Physics department computer in our new addition. This takes up considerable room. Stan assures us that it will be removed in about two weeks time.
  5. Treasures Report: the club balance at this time is \$10,927.99.
  6. Membership at this time is 45 paid-up members.
  7. Youth Group: Andrew says at present there are nine members and it is going well.
  8. Book Sales: an order to Sky Publishing is going in soon. Let Debbie know if you want anything special. A few more RASC calendars will be ordered. Messier Cards are also being considered.
  9. Sleaford Open House: very well attended. About 250 people showed up to peruse the facilities and look through the telescopes.
  10. Meeting adjourned at 9:30 p.m.

### *Interested in*

*Saskatoon RASC*

### **Membership?**

**Regular - was \$48.00 per year**

**Youth - was \$26.00 per year**

## **It's never too late to join!**

### *Benefits of Membership in the Saskatoon Centre*

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the UofS Observatory (after training)
- Saskatoon Skies Newsletter
- Observer's Handbook 2001

- The Journal of the RASC (bi-monthly)
- SkyNews Magazine (bi-monthly)
- use of the Centre library
- discounts to Sky & Telescope Magazine
- discounts of Sky Publishing merchandise
- discounts to Firefly Books

## ? Questions about Membership and Membership Updates ?

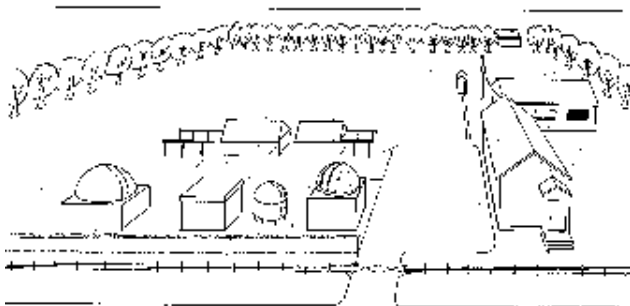


While Bob Christie is gone south, please report any changes to membership information or status to Rick Huziak until April 2001, either by e-mail [huziak@SEDSsystems.ca](mailto:huziak@SEDSsystems.ca) or by phone (306) 665-3392.

**Some 1999-2000 members have not yet rejoined for the new year. Please note that is your last newsletter until you rejoin. Thanks.**

## **REMEMBER THE CHRISTMAS DAY ECLIPSE!**

*CHECK YOUR 2000 OBSERVER'S HANDBOOK FOR DETAILS*



## **The Sleaford Observatory**

*Longitude: 105 deg 55' 13" +/- 13" W Latitude: 52 deg 05' 04" +/- 08" N, tel.: (306) 255-2045*

**by Rick Huziak**

**Toilet** - Well, without great pomp and circumstance, the toilet is operating.. A poster and calendar for it's proper use have been put up and the floor linoleum has been siliconed

around the edge to aid on messy clean-ups. Those that have partaken have expressed a newfound love of the site. **Now you have no excuse to observe!** By the way, remember to lock the door, and stir when it is your turn. And do not play with the thermostats. If you need to boost up the heater in the toilet room, use the "5 kW" switch in the main warm-up shelter. Shut off the switch if you turn it on (though it goes off with the main breaker).

**G. N. Patterson Observatory** - Bill has been busy and has now wired the AC into the breaker box and into all outlets. It still remains to figure out how the low-voltage supply work and what has to be done to get the red lights working again. However, the dome can almost be used in the state that it is in.

**Warm-up Shelter** - The paneling has been replaced on the old north wall (where the telephone is). After we install the hot air hand warmer (over Christmas), we will be able to replace all remaining panels on the east wall, completing the wiring. Over the winter, counters will be put on the lockers, bookshelf and tables will be put up, and the floor might be painted. The University's experiment with remote control of the CCD camera has concluded, and the computer and table have been removed.

**U of S Roll-off Observatory** - The C-14, Meade 8, LX-200 and their computers are all being removed for servicing until the end of January. Several problems were run into at the end of the labs - the Meade 8 decided not to track, the LX-200 decide it didn't want to be remote or locally controlled, and the C-14 is getting a rebuilt tracking controller. In the meantime, we can use the existing piers to mount other C-8s or Meade 8s or just roll the roof off for observing the Quadrantids. The telescopes will be replaced before labs start up again in mid-February. (The roof also only rolls half-way off due to a roller problem).

**Missing Supplies** - We seem to be missing some building supplies and their whereabouts is unknown. Missing is one bail of R20 insulation, several 2x4's and a 50-foot roll of direct-bury 2-inch conduit. If anyone has borrowed this material and not told us, we'd really like to know. The materials went missing and caused us some grief lately, since it was not there when we needed it during the last work day. Please call me if you know where this stuff is!