

# *Saskatoon*

# *Skies*

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

**Volume 29, Number 6  
June 1998**



Don MacKinnon and ex-Ottawa Centre member Chris Martin greet RASC National President Doug George on his recent visit to the Saskatoon Centre. Story inside! Photo courtesy of Sandy Ferguson (another ex-Ottawa member - geez!)

## RASC Calendar Happenings

Date (1998)	Event	Contact	Telephone
Jun. 18 - 22	1998 General Assembly - Victoria	Rick Huziak	665-3392
Jun. 19 or 20	Observers Group at the Sieford Observatory	Darrell Chatfield	374-9278
Jul. 23 - 26	Sask. Summer Star Party at Cypress Hills	Erich Keser	374-4262
Aug. 14	"A Night Under the Prairie Stars" at Grasslands National Park - a writers workshop on astronomy	Rick Huziak	665-3392

# Notice of the General Meeting of the Saskatoon Centre of the Royal Astronomical Society of Canada

Conference Room, the National Hydrology Research Institute  
Innovation Place  
Monday, June 15, 1998 8:00 p.m.

### **The programs will be:**

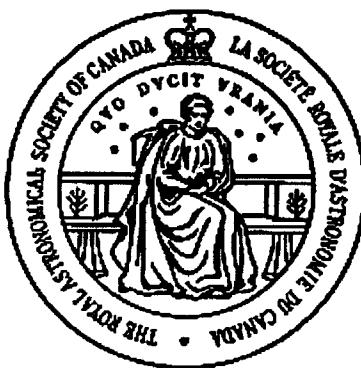
**"Building Stargazer Steve's Dobsonian - Dale and Richard Jeffrey  
"The Partial Solar Eclipse from Chitchin Itza" - Winston Quan  
"Star Parties -the Good, the Bad and the Ugly" - Erich Keser  
"The BRING-YOUR-OWN Telescope Extravaganza"**

\* Members and friends are welcome. There is no admission.

# Saskatoon Centre

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*Saskatoon Skies* is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 135 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. 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 UUEncoded or as attached .GIFs. Send e-mail submissions to the editor at [huziak@SEDSystems.ca](mailto:huziak@SEDSystems.ca). Submitted materials can be returned upon request. A separate subscription to *Saskatoon Skies* is available for \$12.50 per year. Articles may be reprinted from *Saskatoon Skies* without expressed permission (except where otherwise stated), but source credit is requested. DEADLINE for submissions is the 1st of each month. *Saskatoon Skies* accepts commercial advertising. Please call the editor for rates. Members can advertise non-commercial items free of charge.

## President's Report

by Erich Keser, President

So many things are happening with our Centre that it's hard to know just where to start. Preparations for the Saskatchewan Summer Star Party are going well with many more registrations than we had last year at this time coming in, and the promise of a great number more coming in due to calendar listings and prominent mention in *Astronomy* and the *RASC Journal*. Do come if you can, even if you can't stay for the whole weekend.

Our big *Astronomy Raffle* to raise funds to develop our new Sleaford site is also moving along well. I've been frankly amazed at just how easy it is to sell tickets to friends, neighbours, casual acquaintances and absolute strangers. If you've had difficulty, then please remember a point which Kirt Headley, one of our most successful sellers, makes: that even if the people you are selling to themselves have no interest in a telescope, there is certainly a child of their acquaintance who would love to have such an ideal telescope to start with and keep. Frankly though, the great majority of people I've approached *have* wanted the telescope, and indeed, have bought three or even six tickets in hope of winning just that prize.

One important point though: please *do* get you results and any tickets in to Raffle Coordinator David Cornish ASAP. Email him at <david.cornish@sk.sympatico.ca> or call him at 242-7125, or even at work 653-7431. The rules for raffles are very strict, and every ticket must be accounted for, and frankly, David and I are on the hook for any mistakes.

Dr. Al Hartridge also recently completed and submitted an application to run five or six bingos over the next year in order to raise funds. These funds will first of all go toward such projects as our *Junior and Young Astronomers* program, updating and preserving our library and archives, and toward our newsletter, *Saskatoon Skies*.

### *ANOTHER LITTLE FUNDRAISER*

The same Firefly Press that is generously donating five of Terence Dickinson's books to our Raffle is also willing to send our Centre these books at a 40% discount. These include such volumes as the beautiful new *SPLENDORS OF THE UNIVERSE* (\$40.00, with Jack Newton), the very useful *BACKYARD ASTRONOMERS GUIDE* (\$39.95, with Alan Dyer) and the perennial classic (with its excellent charts) *NIGHTWATCH* (\$24.95) plus such exciting titles as *THE UNIVERSE AND*

*BEYOND (\$24.95), FROM THE BIG BANG TO PLANET X* (a book of questions and answers about astronomy) and *EXPLORING THE NIGHT SKY* and *EXPLORING THE DAY SKY*. Centre members from as far away as the Northwest Territories have expressed an interest in purchasing some of these books through us. Please examine copies of most of them at the June 15th General Meeting and fill out an order for any that you wish. We should be able to provide you with a substantial discount and still make money for our Centre.

Our Partnership Agreement with the University of Saskatchewan is also finally nearing completion, and Bill Hydomako, our Site Committee Chair, will shortly have some time out from his busy schedule to plan and make preparations to continue our move and to begin on new construction (as such projects as the Raffle, Bingos and SSSP make funds available). Please let Bill or construction coordinator Darrell Chatfield know if you can help, or if you have any suggestions.

#### ***IT'S \*YOUR\* CENTRE: HOW CAN WE BETTER SERVE YOUR NEEDS?***

Our last few meetings have been very well attended. Nevertheless, I was almost shocked when Fr. Lucian Kemble and I spoke to the Winnipeg Centre's May 8th meeting. The Winnipeg centre is only slightly larger than ours (about a hundred versus about eighty members) yet there must have been at least 60 persons at this Friday night meeting.

#### ***WHAT IS YOUR OPINION?***

At its special meeting, our Executive discussed the timing and arrangement of meetings, and agreed to stay with the present system of Monday night 8 p.m. General Meetings for now. Such organizational decisions are subject to change, and there was a general consensus that this question could be reopened. Does the present timing of meetings suit your needs? Would an earlier start or even another day of the week make it easier for you and your associates to participate. Please do let us know. This is *YOUR* Centre and we want to do our best to serve your wants and needs.

**BRING YOUR TELESCOPE TO THE JUNE 15 GENERAL MEETING - WE'D LOVE TO FILL THE ROOM WITH SCOPES SO THAT ALL MEMBERS CAN POKE AND PROD!**

**Be prepared to give a 5-minute blub on your scope.**

## SSSP Update - You Won't Want to Miss It!

by Erich Keser

The July 23rd - 26th Saskatchewan Summer Star Party 1998 is an event you will not want to miss. SSSP'98 is looking bigger and better every day. Nearly a hundred people have already registered, almost a quarter of them from Winnipeg (Father Lucian Kemble and my presentations to that Centre's May General meeting may have helped!). A recent brief meeting with Regina President Steve Szuta and their T-shirt designer Darcy Kozoriz confirmed that they have this area well in hand. Registrant demand has been remarkable, and I was able to deliver pre-orders and payment for 35 T-shirts, which had been ordered BEFORE THE GRAPHIC EVEN APPEARED ON OUR WEBPAGE. Gord Sarty has now put it there; please be sure to have a look.

Park personnel promise to do their best to help us in make SSSP'98 another great success. They will again: mow the Meadows for us, let us have our own light-controlled Observing Area, loan us equipment and even have their Conservation Officers watch over our 'scopes so that all registrants can attend our Saturday night presentations, draws and other events. Evenmore, Park Administrator Brad Mason will supervise our Raffle draw, has donated door prizes, and is even looking for better blinds to suit the Meeting Hall slide shows.

The talks promise to be stunning. Even before Saturday night's multimedia Astrophoto Blowout by former *Astronomy* Editor Alan Dyer, Calgary's Don Hladiuk will present a dual-projector dual screen show as part of the Eugene Shoemaker Memorial Session which our own Kim Mysyk will introduce and chair. This will be preceded by a panel of presentations on this year's great Caribbean Solar Eclipse by Edmonton's Murray Paulson, our own Don MacKinnon and John Leppert, Alan Dyer and Don Hladiuk...and some of us have already been lucky enough to have a preview of just how good these will be.

Our Star Party will also be wonderfully instructive and welcoming for the many beginning stargazers, and somewhat interested friends and family members whom SSSP is successful at attracting. Murray is preparing an extra, special version of his renowned Binocular Star Walk for beginners on Friday night and Rick Huziak will start off the Saturday afternoon presentations with a talk on Astronomy for the Beginner. Our many Young and Junior Astronomers will also be making a major showing. They'll be building and decorating their own 4.5-inch Dobsonian on Saturday morning from a kit generously donated by Stargazer Steve and will, under the direction of Whendi Jeffrey, be kicking off the Saturday evening events with their own unique dramatic perspective on the History of Astronomy. SSSP'98 is becoming a better and broader effort every day. New members (but experienced Reservists) Leanne Carpenter and Rob Keir have taken on Security and First Aid. Gary Brett has proposed that we award prizes for such categories as Best Telescope, best modification, and so forth. Please contact him with your ideas.

Do attend, or at least drop by for a day or two if you possibly can. Some participants will be arriving and starting to set up in the Meadows as early as Wednesday July 22nd, and we will again be offering the option of a \$10 one day registration for those who can't stay longer. Even if you have to be back for Saturday, there may still be a chance to get some observing in. And please also consider helping in any way that you can. At the 15th June General Meeting Rick Huziak, our Volunteer Coordinator, will have a matrix showing the many jobs you could give a hand with at the SSSP.

## National President Doug George Visits 'Toon Town

by Rick Huziak

Apart of the National President's term of office involves traveling to as many Centres as possible to help promote national policies and RASC unity. Our Centre was fortunate to be visited by National President, Doug George, who, when not National Presidenting, hails from the Ottawa Centre.

Doug arrived on Sunday, May 10th. I met him at the airport, then wined and dined him all evening at Earl's. We had a great discussion about National policies and astronomy in general.

The next morning, Erich stole Doug from Sandy's apartment fed and watered. Sandy graciously loaned Doug her place since she was out of town anyway. (Doug and Sandy go back a long way, since Sandy was an Ottawa member about 7 years ago!) On Monday afternoon, Erich toured Doug through the U. of S. Observatory, and I toured him through SED Systems and the Radarsat Satellite Tracking Facility. Doug enjoyed these visits since he is an electronics engineer by profession.

The 'formal' festivities surrounding Doug's visit began in earnest at supper on Monday, when Doug was honored with a meal at the Taverna Restaurant. We had a reasonable turnout of about 15 members, including a rare appearance of Chris Martin, yet another past-Ottawa Centre member. Besides great food, much of the meal was consumed by Sandy, Chris and Doug reminiscing about old Ottawa times; a language that many of us didn't understand that well!

The real reason for Doug's visit was to give a presentation at the General Meeting. Doug gave an excellent slide presentation on the recent advances and revolution of CCD astronomy, where he showed many excellent CCD images, and demonstrated the clear future for CCD astrophotographers. I think our Centre won a few film-to-chip converts that night. The meeting was well attended with about 30 members making the trip. The night wrapped up with a few tipped back brewskies at Sandy Ferguson's house.

Unfortunately, these types of visits end too soon. Doug had to fly out early on Tuesday.

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## The Search For Vulcan

by J. E. Kennedy

A review by Patrick Moore of the recently published book, In Search of PLANET VULCAN, has appeared in the December issue of The Observatory. The reviewer commends the authors, Baum and Sheehan, for the thorough research on this topic and for telling the fascinating story well. No reference to the planet Vulcan will be found in the 1998 Observer's Handbook, nor does it get mentioned in modern texts on astronomy. As the authors of this book clearly state: "*Vulcan has now passed into history.*"

For the known planets in our solar system, the planet Mercury moves in an orbit closest to the Sun. In the early 1800's, Mercury was known to be experiencing a slow change in its perihelion point of about 43 arc-seconds per century. After Le Verrier had carried out his calculations on the perturbations of the planet Uranus, which led to the discovery of the planet Neptune in 1846, he concluded that Mercury might be subjected to the perturbations of an unknown planet moving in an orbit still closer to the Sun than Mercury. In the literature, this was referred to as an "intermercurial" planet.

Because of its proximity to the Sun, Mercury is difficult to observe. A planet still closer to the Sun than Mercury might be observed either (i) in a transit across the Sun's disc, or (ii) during a total solar eclipse when the bright light of the Sun is cut off for a short time by the Moon. In 1859, a French country physician and amateur astronomer, M. Lescarbault, reported that he had observed a transit of this desperately needed planet; an observation that Le Verrier accepted. The new planet was named "Vulcan".

No other astronomers had observed this single reported transit of Vulcan, nor were there any sightings made of this intermercurial planet while studying the total eclipses during the latter part of the 19th century, a period when astronomical photography was introduced as a supplement to the visual observations of eclipses.

In the 1907 edition of Simon Newcomb's Astronomy for Everybody, his closing concise summation of the searches for Vulcan is:

*"The result therefore seems to be conclusive against the view that the motion of the perihelion of Mercury can be produced by intermercurial planets."*

Without change, this statement is reproduced in the 1944 edition of Astronomy for Everybody, a text which had been revised by Robert H. Baker long after Newcomb's death in 1909.

Baker had added a single paragraph to the above:

*"The general theory of relativity, formulated by Einstein, in 1915, requires the advance of Mercury's perihelion at the rate of 43" a century faster than that calculated by Newton's theory of gravitation, and in practical agreement with the observed excess. It is one of several instances in which celestial phenomena seem to be more successfully represented by the relativity theory than by the older one."*

The desperate need for the planet Vulcan to account for the perihelion motion of Mercury no longer existed. Einstein had solved the problem. ☺

**In Search of Planet Vulcan**, by R. Baum & W. Sheehan (Plenum, New York), 1997. Pp. 310, 21.5 x 15 cm. Price \$28.95 (about £18) (hardbound; ISBN 0 306 45567 6).

The planet Neptune was discovered in 1846 by Johann Galle and Heinrich D'Arrest, from the Berlin Observatory, as a result of calculations sent to them by U. J. J. Le Verrier in Paris. Le Verrier had worked out the position of the new planet from its perturbations on the movements of Uranus, and his calculations were remarkably accurate. His reputation was made; could his triumph be repeated?

Mercury, like Uranus, was not moving precisely as it might have been expected to do, and Le Verrier came to the conclusion that it too might be subject to perturbations by an unknown planet, moving in an orbit still closer to the Sun. Obviously such a planet would be difficult to observe, and would probably have to be caught either in transit or else during a total solar eclipse. However, Le Verrier computed an orbit, and apparent confirmation came in 1859, when a French country doctor and amateur astronomer named Lescarbault reported that he had seen the planet crossing the face of the Sun. Despite Lescarbault's crude apparatus, Le Verrier accepted the observation, and the planet was even given a name: Vulcan.

However, positive confirmation was lacking; no further transits were reliably reported, and searches made during total eclipses were, to put it mildly, inconclusive. Finally — long after Le Verrier's death, in 1877 — Einstein's theory of relativity accounted for the wanderings of Mercury without recourse to any unknown planet.

Such are the main facts, but there were many repercussions, and even personality clashes; one observer, Lewis Swift, reported possible sightings of Vulcan during the 1878 eclipse, and was accused of falsifying his observations! The whole story is fascinating, and Baum and Sheehan tell it well. They have carried out very thorough research, and the exhaustive list of references will be of great value to the serious student of astronomical history, but in its way the text reads rather like a detective story, and will be enjoyed equally by the casual reader. No full book has previously been devoted to the Vulcan episode, so that this new work fills a definite gap in the literature. It may be strongly recommended — even though, as the authors say, Vulcan has now passed into history. — PATRICK MOORE.

## Observers Report for May 23, 1998

by Darrell Chatfield

Finally, an observing session with no clouds!!! After 3 tries at the observer's groups, one was bound to turn out favourably. A group of us met at the FasGas station around 9:00 p.m. Jean Dudley, a Kelsey instructor, and her associate friend Ron, proceeded to show me the C-8 that Kelsey institute had bought some years ago for their Physics program. It came with a variety of lenses and a camera adapter. However, someone had forgotten to buy the legs to go with it, which makes it impossible to use by itself. Anyway, we left for Sleaford, after being met by the Dicksons.

Upon arriving at Sleaford, we were greeted with the site's first campers, in the form of Terry Nelson and children. They had been out the night before and had so much fun, they decided to try it again. (Terry used binoculars at first throughout the night, and later set up the club C-8. He had just finished doing that, when the Northern Lights decided to give a colorful display. So off to bed for the rest of the night.)

We set up Eetook, and saw the arrival of Larry Grenkow. He set up the club loaner 4" Astroscan. I set up my Meade SC 10", with the Dicksons setting up their Meade 4" Newtonian. So, we had quite a selection of telescopes to choose from.

By now the time was 11:00 p.m. We were starting to view the big objects, like M13 and M57. Ken Noesgaard arrived with his brother Hans, and son Keith. Ken's sons Peter and Erik also came along. A bit later, Scott Alexander arrived with his 14-1/2" scope. Now, things were getting interesting. He showed the crowd M13, and NGC 6207 a companion galaxy, among other things. Jean made a special request to see M51, which I was able to find almost overhead. She, as well as everyone else, enjoyed the view. Ken got quite excited; no, change that to very excited, when he viewed something very strange. In the north across the road, was a bright column of light, about 40 feet high. It got brighter and brighter. Ken exclaimed in a loud voice: "Look, look, what's that? What is it?" I turned around from my telescope, and surveyed the situation. After seeing what was happening, I exclaimed in a loud voice, "Ken, that is the best well-lit telephone pole you will ever see!!" You see, it was a telephone pole illuminated by the approaching car lights of RCMP Constable Val and a friend.

Of course, it brought uproarious laughter from everyone. Constable Val was just checking things out in her area, making sure this was no grad party. She was quite eager to join our group and view through the bigger scopes, until she got called away on the car radio.

By now, the time was midnight. Ron Schnor and Kirt Headley , along with Bill Hydomako managed to join our enthusiastic crowd. Bill and I tried to collimate the 6" Newtonian telescope that was left in the U. of S. Observatory library, but without success. More on that story later. Shortly after midnight, the sky was lit up with a huge auroral display, which washed out our viewing session. It managed to light up the ground around us, which gives you an idea of how bright things really got.

After packing up, a handful of us retired to Tim Horton's on 8th Street. That lasted until 3:00 a.m. Even though we were very tired, I know everyone had a fantastic time at Sleaford. Thank you to the 18 people who came out. You made it all worthwhile. See you later!

## PREDICTING THE TRANSPARENCY AND SEEING CONDITIONS

by Alan Whitman, Weatherman (retired), Okanagan Centre

*Here are a few general rules for picking a promising observing night:*

The best transparency (clean, unpolluted air) normally occurs when the sky first clears behind a ~~strong~~ cold front. This is because the source region of the airmass behind the cold front is normally ~~higher~~ latitudes areas to the NW (which are essentially uninhabited areas in Canada). However, such a night is apt to be restricted to low power viewing because, while the transparency is excellent, the seeing (~~image~~ steadiness) is poor due to all the turbulence aloft caused by the strong winds and windshear associated with active weather systems.

If a LARGE high pressure area builds in behind the cold front, the seeing will probably improve ~~night~~ after night as the winds become lighter both at the surface and aloft. The downside of this, of course, is that as the seeing improves, the transparency will probably deteriorate as your local pollution sources ~~cause~~ increasing concentrations of pollutants in the now stagnant air in the high pressure area.

I find that the best overall observing conditions are frequently the second night after the cold front passes through. The air is still clean enough to offer very good to excellent transparency and the ~~seeing~~ may by then have improved to good as the wind shear aloft decreases.

The very best seeing occurs just as the UPPER RIDGELINE passes overhead. For a few hours the winds may be light all the way from the surface to the stratosphere and your telescope's resolution ~~may~~ indeed be "diffraction-limited" for once! This is the rare night that you can use high power to split ~~very~~ close double stars and see incredible planetary detail, things like details in Jupiter's Great Red Spot, ~~etc~~ only Cassini's Division but maybe even Encke's Division in Saturn's rings.

As an upper ridge passed on October 12, 1983 I saw Sirius' white dwarf companion with my Meade 8-inch Newtonian at 348x using a polarizing filter in bright morning twilight. [They were 9" apart in 1983 but are only 3.5" now.] Another upper ridge allowed my Meade 16-inch Newtonian to split Gamma Andromedae BC at 0.43" using 522x and the polarizing filter on October 29, 1995. [The well-known components of Gamma Andromeda are golden A and blue B, but I am talking about splitting B into its two components, B and C.]

If you have had a long hot dry spell and the forecast is for a change beginning tomorrow (~~either~~ increasing high cloudiness or a forecast cold frontal passage) OBSERVE TONIGHT because the ~~upper~~ ridge line is forecast to pass through shortly and image steadiness (seeing) may be the stuff of legends. [I said "may be" because we are dealing with meteorology and there are always qualifiers which I won't get into because we're talking textbook-length.]

As soon as the upper ridge passes, you will probably get thin high cirrus or cirrostratus cloud ~~pushing~~ in and your seeing quality will plummet. Even if the winds aloft remain relatively light for a day or two, the ice crystals in cirrus and cirrostratus clouds destroy image quality. Conversely, you can view planets or the moon quite happily through clouds formed of water droplets, like thin altocumulus clouds, ~~thin~~ stratocumulus clouds, or fog, if the winds aloft are light. These thin water-droplet clouds just ~~act as~~ a neutral density filter.

Other things being equal, the best seeing in a high pressure area usually occurs towards dawn. ~~This is~~ because (a) the radiational cooling of the ground has largely ceased so you are not dealing with ~~rising~~ warm air as you were in the evening; (b) the lower layers of the atmosphere become stratified ~~as~~ an

inversion forms and the winds frequently are nearly calm for several thousand feet above the surface. [But if a morning low-level jet forms just above the inversion, your hoped for fine seeing will not then materialize--there are no sure things. BUT there are very PROMISING patterns which repeat over and over again.]

Your immediate observing environment also improves towards dawn for two reasons: (a) your telescope should be in thermal equilibrium with its surroundings after an all-nighter, and (b) most of your heat-producing fellow observers have gone home to bed (grin). [The Prince George Observatory's 0.6-metre Cassegrain is in a dome with a classical slit. The heat from all the bodies in the dome rises up through the same slit that you are trying to view through. I have never had a high resolution view when more than one other observer was in the dome at the same time. Worse yet, every time that someone enters the dome from the warm room, the surge of warm air through the open door instantaneously destroys the seeing until the door is closed and the warm air exits the dome.] Thus endeth Amateur Astronomy Observing Weather 101.

But whilst I have the floor, let me say something about a pet peeve. The word "seeing" is misused by far too many amateurs, including experienced ones who should know better. The word "seeing" refers ONLY to image steadiness and the potential for achieving high resolution. "Seeing" has nothing to do with sky clarity and cleanliness--that is "transparency".

The TRANSPARENCY will probably be poor after the air in a high pressure area has stagnated over you for a few days, but the SEEING will probably improve night after night, with the best seeing as the upper ridge passes even though your limiting magnitude may be magnitude 4 by then in murk.

WSEN, Western Space Education Network (the Canadian Space Resource Centre for the Canadian Space Agency in the Prairie Region) needs volunteers for various activities from clerical to model rocket launching. If there is anyone interested contact me at 374-1395

Sherry Neufeld, Resource Administrative Assistant, WSEN

## Asteroid Hasek

**From: Walter P Zukauskas <wzk@is.dal.ca> (Halifax Centre), reprinted from the RASClst**

A short item from Canadian Press as seen in this morning's newspaper:

*"Dominik Hasek, the best goalie on the planet, is now literally out of this world. The NHL reports that astronomers in Ondrejov in his native Czech Republic have named an asteroid Dominik in honor of the Buffalo Sabres goalie. Dominik, located in the interplanetary orbit between Mars and Jupiter, was first discovered three years ago. Its name was only recently registered."*

It's nice to see that society honours its finest through science. It's also nice to note that the solar system is quantized - there is only one orbit between Mars and Jupiter.

## The Sleaford Page by Rick Huziak

The Sleaford Observatory continues to get excellent use, despite some relatively poor observing weather in May. Some new additions to the site are the donation of an old U of S 6" telescope. Visitors to the U of S Observatory in the past may have seen this telescope sitting in the transit room. It is now a permanent fixture of the Sleaford site. The U of S machine shop did some work on the scope to bring it back to ship shape and Bill Hydomako cleaned the mirror. Bill and I easily resolved stars to the core in M13 using this fine telescope.

Erich, Yannis, Stan and I have also reopened work on the Partnership Agreement in recent weeks. Our goal is to get this agreement signed soon so we can get on with everything. An encouraging sign is also that Stan and Yannis are actively designing the U of S Roll-off Observatory, so funding seems to be more or less in place to begin construction of that structure soon! The roll-off is planned to have 4 piers holding 4 telescopes from a 5-inch Zeiss refractor to a C-14.

Due to some diligent garage saling, the Dickson's also made another worthy addition to the site - a microwave oven, which they bought for a few bucks. So remember - when going out to the site, bring water for your coffee and Pop Tarts for your snacks!

If you haven't been out to Sleaford recently, you might want to note the Meridian Road sign fell down, and the Department. of Highways has not replaced it yet. This makes the Meridian turnoff difficult to find, unless you've done it a gazillion times. (I still got lost the first time!)

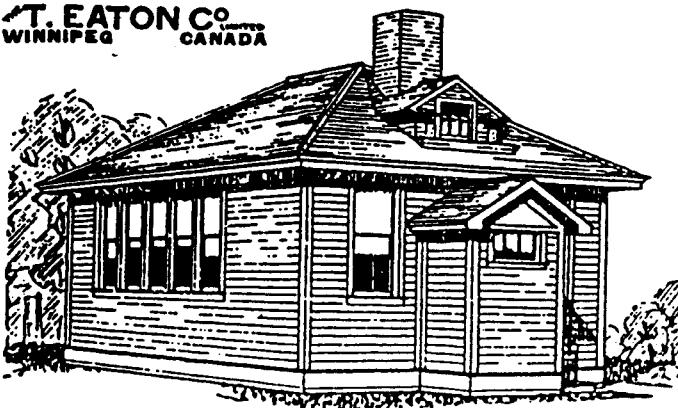
Stan Shadick also did us a great service by measuring the precise location of the Observatory. Stan states:

*"My inspection of a 1:250,000 topographic map I borrowed reveals that the coordinates of the Sleaford observatory are:*

**Longitude:** 105 deg 55' 13" +/- 13" W  
**Latitude:** 52 deg 05' 04" +/- 8" N

....And I'll bet that many of you didn't know that the Sleaford Schoolhouse most likely was purchased from the Eaton's Catalog! Indeed, many of the early schoolhouses in the area were bought from Eaton's, who also sold packages for barns, houses and even buildings. Check out the picture below.....that's our schoolhouse - one of only a few Eaton's schoolhouses remaining anywhere!

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### RURAL SCHOOL

Plan No. 690, 3 Siz

This very neat and inexpensive school is almost identical to that recommended by the Department of Education in the West. The plan calls for stock size windows and doors which are altogether suitable in every way for a simple building, and comes very much lower in cost than specially ordered stock.

The outside walls consist of shiplap, paper and No. 1 fir drop siding. The interior of the side wall consists of shiplap, paper and No. 1 fir V joint ceiling. The ceiling is also covered with No. 1 fir V joint ceiling. The roof is made up of shiplap, paper and XXX cedar shingles. The floor has shiplap, paper and No. 1 E.G. flooring.

*Research indicates that building plans & materials were available from T. Eaton Co.*

## The Messier & Finest NGC Club

### MESSIER CLUB

**Certified at 110 Objects:**

Rick Huziak, Gord Sarty, Scott Alexander

Sandy Ferguson (applied)	110
Dale Jeffrey (applied)	110
Darrell Chatfield (applied)	110
Bob Christie	94
Wade Selvig	57
Erich Keser	51
Stan Noble	28
Terry Nelson	26
Brian Friesen	15
Les & Ellen Dickson	now less than Terry!

### FINEST NGC CLUB

Richard Huziak (applying)	110
Gordon Sarty	50
Scott Alexander	30
Darrell Chatfield	18

*Join the Messier and Finest NGC Club!*

**Observe all 110 Messier and FNNGC objects and earn your**

**CERTIFICATE!**

Now that many of us have complete our Messier Certificates, we've added the Finest NGC list to our program. The list can be found in the Observer's Handbook. Each month I'll be posting updates. E-mail in you new numbers! If your name is not on this list and your observing the Messiers or FNNGCs, let me know & I'll add you! I will soon be adding the **Herschel 400** stats to the observing list for the advanced observers.

### *Just Got to Join the RASC?*

Membership runs from Oct. 1 to Sep. 30. Please send payment to the Centre mailbox.

**Regular - \$40.00   Youth - \$22.50   Life - \$720.00**

### *The University of Saskatchewan Observatory Hours*

During June & July , the U of S Observatory will be open to the public on Saturday evenings from 10:00 p.m. - 11:30 p.m. The observatory is located on campus one block north of the Wiggins Avenue entrance off of College Drive. Visitors may view a variety of objects through the 6" telescope. Admission is free. Group tours of the observatory can be booked for Friday evenings. For further information, phone the recorded Astronomy Information Line at 966-6429.

## Minutes of the May General Meeting

Monday, May 11, 1998

held at NHRI, Innovation Place., Saskatoon

(There was not Executive Meeting in May due to National President Doug George's visit).

1. Presentations:

- *"How CCD's Have Revolutionized Amateur Astronomy"* by Doug George, National President
- A special presentation of the *National Service Award* was also made to Sandy Ferguson by Doug George acknowledging her great work with the young and in the teaching of astronomy.
- *"The Winnipeg Centre: an Emigrant's View"* - presented by Ken Noesgaard, Past 1st VP of the Winnipeg Centre.
- *"The Winnipeg Centre: an External View"* - presented by Erich Keser.
- *"Yet Another Supernova Discovered"* - presented by Rick Huziak.

2. Financial Report: Mike Williams not available, a brief report given by Erich, the SSSP is in good shape with about \$700.00 cash on hand.

3. Astronomy Raffle: tickets selling very well and there is a good chance they will all be sold.

4. Astronomy Day: by Sandy Ferguson- a rather slow day this year, the star night at Beaver Creek was wiped out by a spectacular auroral display.

5. Observing at Sleaford: Darrell is planning a blow out observing session at Sleaford for May 22nd or 23rd.

6. Colonsay BBQ for junior and youth groups was rained out and will be rescheduled for 30th.

7. SSSP update: at this point in time there are 65 people registered. Star gazer Steve has donated a telescope kit which will be built on site by the juniors and youths. There is also a suggestion to have an award for the best telescope at the star party.

8. Garage Sale and Bottle Drive: the garage sale was quite successful and as well a good number of tickets for the raffle were sold. Thanks to the volunteers who came out to help. The bottle drive is also proving to be a good source of revenue. A good deal on a microwave unit was made at the garage sale and will be taken to Sleaford.

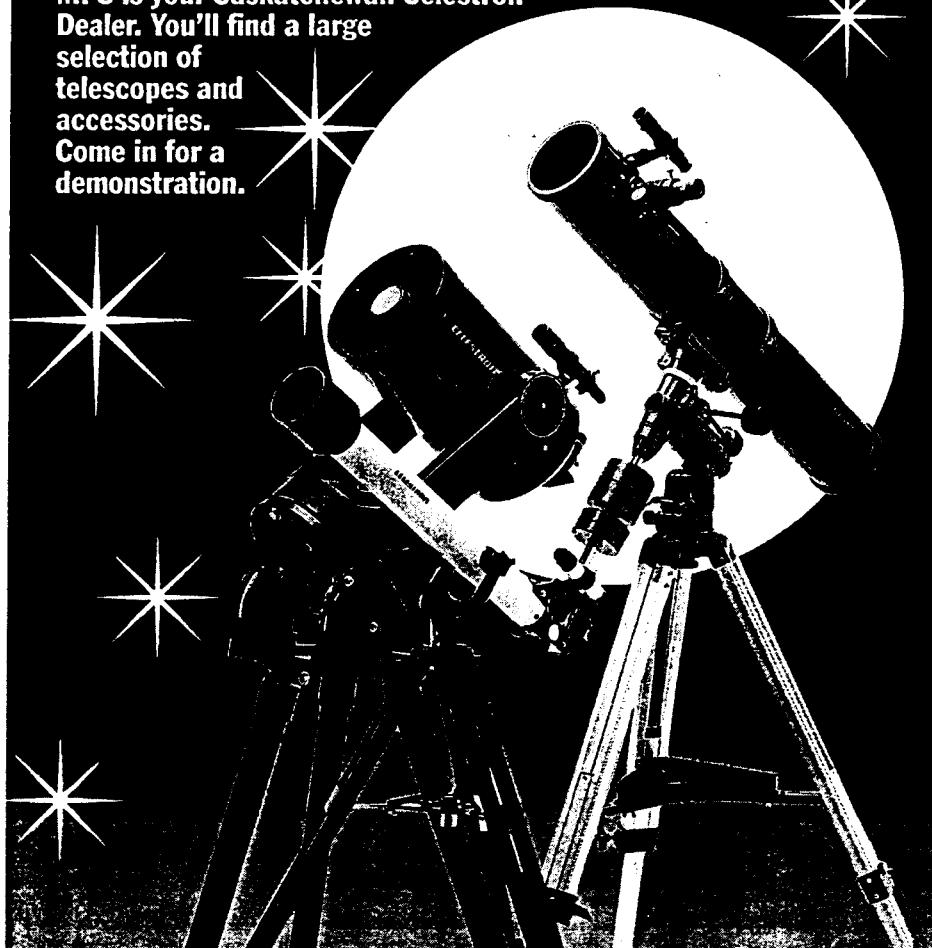
9. Other Business: Yannis will make a few more keys available for the library in the observatory on campus.

10. Meeting adjourned at 10:30 p.m.



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