

Saskatoon

Skies

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

**Volume 29, Number 1
January 1998**



Centre President, Erich Keser, presents Bob and Mrs. Geall with a photograph of Comet Hale-Bopp in appreciation of Bob's dedicated and generous effort in trenching in the power runs at the new Sleaford Observatory. Thirty members and guests attended this December Gastronomy event. More on page 12.

New Challenges for Our Centre in the New Year!

by Erich Keser, President

Happy new year to all! I hope you had a good Christmas, Hanukah or whatever...and also a good rest. The new year is here, and though winter has finally come with it, there are a lot of interesting things to do, including many that can be done indoors where it is warm.

Working on some aspect of Saskatchewan Summer Star Party '98 is a nice way to think about warmer times and some of the finest and most comfortable (mosquitoes are almost as scarce as light pollution there!) observing in Canada. There are a variety of big and small SSSP jobs YOU could help with, and ideas are always welcome too. Please call me or come to our next SSSP meeting to find out more.

Our new site is hooked up and humming with warmth, power and even has coffee, (we'll not discuss the washroom facilities) and is *being used regularly*. Please contact Rick at 665-3392 or Darrell at 374-9278 if you want to go out. Car pooling is an excellent idea, and so is letting us know that you are going out for safety reasons. If you want to help or have questions or suggestions regarding site development, please contact Site Committee Chair Bill Hydomako at 384-4781. Terry Nelson at 343-5928 also eagerly awaits your fundraising ideas.

Do go out and observe Orion and the winter skies in all their glory, but if you really want an exciting indoor project and the possibility of a better mirror than you could buy, then you may want to give Wally Essar a call. at 382-5857; he's got grinding grit! And there are also a lot of small and large telescope-building and modifying chores people may want to get together on. I have a lovely 6" f/8 Cave mirror I want to build into a portable scope...and Rick has several mirrors that have been gathering dust for years.

Time to greet the New Year!

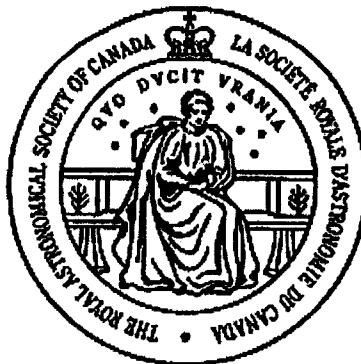
RASC Calendar Happenings

Date (1998)	Event	Contact	Telephone
Jan. 16	Junior Astronomers' Group - 7:30pm Sandy's Place	Sandy Ferguson	931-3184
Jan. 19	Saskatoon Centre General Meeting	Erich Keser	374-4262
Jan. 23	Youth Group Meeting 7:30 p.m. Sandy's Place Astrophotography will be featured	Sandy Ferguson	931-3184
Jan. 23	Nelson & Gloria Rystrom Gastronomy Dinner	Erich Keser	374-4262
Jan. 30 or 31	Observing Session at Steaford Observatory - 8:00pm	Darrell Chatfield	374-9278
Feb. 4	Mini-Starnight in Osler, SK - tentative - 7:00pm	Rick Huziak	665-3392
Feb. 6	Junior Astronomers' Group - 7:30pm Sandy's Place	Sandy Ferguson	931-3184
Feb. 13	Youth Group Meeting 7:30 p.m. Sandy's Place. Topic: Getting a Start on Int'l Astronomy Day	Sandy Ferguson	931-3184
Feb. 27 or 28	Observing Session at Steaford Observatory - 8:00pm	Darrell Chatfield	374-9278
Feb. 29	Caribbean Total Solar Eclipse - Don's Going!	Don MacKinnon	477-2892
Mar. 27 or 28	Observing Session at Steaford Observatory - 8:30pm	Darrell Chatfield	374-9278

Saskatoon Centre

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Newsletter Editor - Richard Huziak
 Collating and Stuffing - Sandy Ferguson



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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. 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.

Fr. Lucian Makes a Stop in Saskatoon

by Erich Keser

Kathleen, Ariel and I had a wonderful house guest on the December 13-15th weekend, Father Lucian Kemble. *Father Luc* had been invited to speak to the Zion Lutheran Congregation and graciously agreed to also give a presentation to our December 15th General Meeting.

Father Kemble arrived Saturday afternoon and gave an inspiring talk on "Science and Religion" to the Lutherans the next morning. It sparkled with wit, even as he discussed the development of science over hundreds of years and he grappled with fundamental issues relating to the relationship between scientific inquiry and faith.

He then treated the three of us to a pleasant brunch at Traegers. This was followed by a drive to Wanuskewan Heritage Park. On the way, he made a few choice comments about some of our crazier intersections. Father Lucian lived in Saskatoon for some months as an Air Force trainee many years ago, but rarely gets here, so he was interested to note the many changes in the city. Lucian also evinced a strong interest in the exhibits and displays as ways of effectively teaching people at such facilities as the Wanuskewin site.

We then went for a walk around the grounds and his passionate curiosity about things natural was much in evidence as he showed Ariel what the bushes and berries she might otherwise simply have skipped past had to offer.

That evening Stan Shadick and Rick Huziak met us at the University Observatory where Stan gave him a complete tour and also trained me on the dome and telescope. Unfortunately, the skies did not cooperate to allow observing.

The following day, we managed to indulge Lucian's interest in good beer by having dinner at the Black Duck. This may have had something to do with the great slide presentation he gave what was surely our best attended December meeting in many years. Even seven year old Nayla Kuhlmann, one of our very youngest and newest Junior Astronomers, was enthralled. As is long overdue, we then presented "Lamplighter" with a framed photograph by Rick Huziak of Comet Hale Bopp over our Rystrom domes. It bore the engraving "*For helping us see the light.*", as he has so many others.

However, this was followed by the damning evidence of the weakness of even the most devoted of observers, as, following the meeting, Father Luc then joined a dozen of us in eschewing the possibility of using the University dome to view the sparkling skies, and loading up with junk calories and caffeine at the donut shop instead.

Father Lucian left the next morning. When eight year old Ariel got home from school that afternoon, she upbraided us soundly for not letting her spend enough time talking with him. That's a FIRST for an adult visitor! Even Umba, our shy little cat, wandered around searching and sniffing, missing Lamplighter! ☺



The Nelson and Gloria Rystrom Gastronomy Dinner Take 2 - Honest!

**FRIDAY, JANUARY 23rd, 6:30 p.m.
DINNER AT THE STATION PLACE RESTAURANT
(221 Idylwyld Dr. N.)**

Time to celebrate and give thanks! Come, bring your spouse, bring the kids for a wonderful evening of brief presentations (including some unique images!), humour, and good food. Gastronomy coordinator Al Hartridge has once again found an excellent venue for our dinner to thank Nelson and Gloria Rystrom for years of hosting our old site. The food at the *Station Place* is excellent, prices are reasonable. However, there is no children's menu! Please call Erich ahead of time so he can get a rough head count. We hope to see you there!

The Junior Astronomers and Youth Group December Meetings by Sandy Ferguson

The December meetings of the above two groups took place on the same night, December 5th, when we all met at the observatory on campus for a tour. Parents were just great about car pooling and about 50 group members and their parents and siblings were led around the observatory by Carmen Finnigan, a physics student at the University.

We were taken into the dome area first, where Carmen described the work done and gave a demonstration of the workings of the dome itself and the telescope. Everyone was disappointed that the weather had not cooperated and we couldn't do any observing through the 6" refractor.

We were taken next to the *transit room* where Carmen described the transit instrument housed there. In this room, we also had a look at the meteorites in the display case. The group members had a good many questions for Carmen, concerning the dome and transit areas, and they came away with a much clearer idea of what goes on in the campus observatory.

Downstairs everyone checked out the displays and again questions concerning a variety of astronomical subjects were fielded by our tour guide. Following the tour we indulged in hot chocolate, so everyone was warmed up after the visit to the dome.

Thanks to Carmen for the tour and thanks to the parents for helping out with drives and crowd control. ☺

Ed Kennedy Visits the Kingston Centre

by Leo Enright, Kingston Centre

On the evening of Sunday October 19th a group of Kingston Centre members had a very interesting meeting at the home of Terry and Ruth Hicks. Professor Ed Kennedy was the special guest and the gathering of a dozen members of the Centre was an opportunity to hear from a Saskatoon Centre member who has a special fondness for Queen's University which was the site of this year's RASC General Assembly at which Professor Kennedy had been one of the speakers during the Paper Session - all of which had occurred just three and a half months before.

This time the distinguished guest from Saskatchewan was in Kingston for Homecoming Weekend at Queen's and for his class (Arts '37); its 60th reunion. For us the gathering was a chance to hear about a proposed project and a concern of his. During his informal presentation, he noted that recent Canadian contributions to the IAU Commission on the history of astronomy have been greatly diminished. There continues, however, to be a great need for the documentation of the works of a number of outstanding Canadian astronomers who are no longer with us. We particularly need to have a book on the contribution to the science by Dr. A. Vibert Douglas, the founder of the Kingston Centre, Dr. Helen Hogg, and Dr. Carlyle Smith Beals.

Professor Kennedy expressed the sincere wish that someone would undertake the effort of recording the achievements of these 3 great Canadians and those who heard his presentation heartily agreed with him. We all left with the hope that this could be initiated before too long. ☺

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, January 19, 1998 8:00 p.m.

The programs will be:

"Collimating Problems" by Darrell Chatfield

"Using Your 1998 Handbook Month by Month" by Gord Sarty

"Easy Astronomy for the Beginner" by Sandy Ferguson

and much more!

Members and friends are welcome. There is no admission.

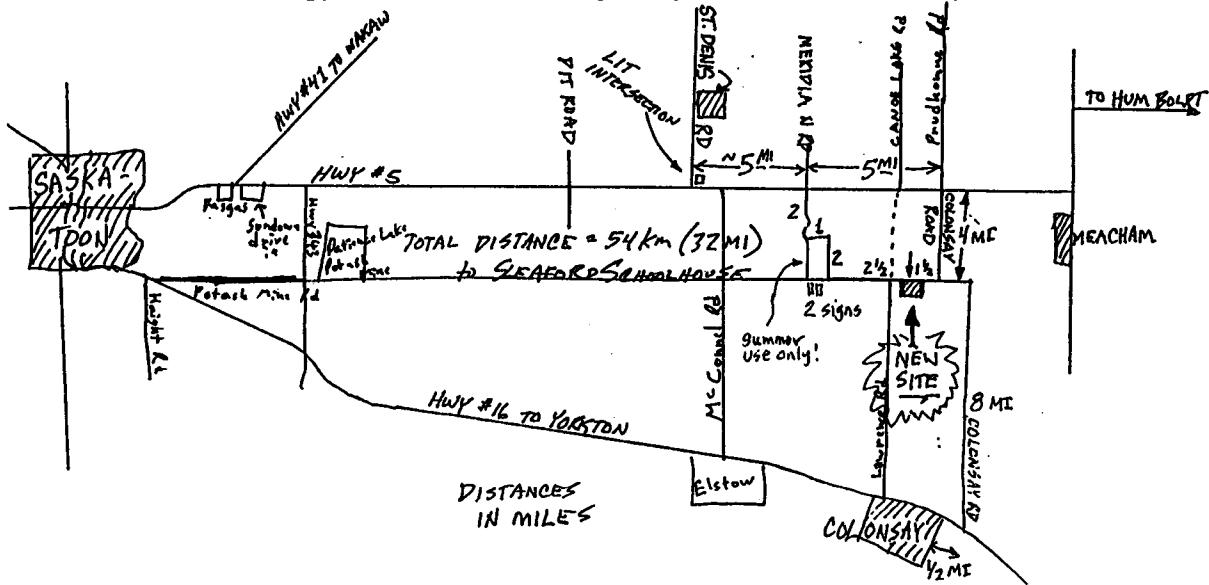
REMEMBER TO BRING YOUR 1998 HANDBOOKS TO FOLLOW ALONG!

The Sleaford Page by Rick Huziak

The Sleaford Observatory continues to be in Centre news, despite the return of Old Man Winter to Saskatchewan. It's not surprising that despite the increased distance to the new observatory, the site is seeing a usage rate slightly in excess of the usage at the old Rystrom Observatory. Since early November, the site has been visited 24 times by a dozen members! Certainly some of the visits were promoted by the excellent fall that we had with super temperatures and beautifully clear skies up until New Year's Day! Some of the visits resulted from having a combination of very dark skies complete with power for telescopes and heaters! Bill Hydomako just seems to come out for the coffee! After a few visits, the 60 kilometer drive does not really seem that bad. It's just something you get used to if you eat enough sunflower seeds on the way! The reward is true darkness and excellent observing. Check the map for how to get there. We strongly suggest you use Colonsay Road during the winter if you are not familiar with the area!

Safety - Because of the relative remoteness of the site winter safety is a serious issue. The Sleaford Committee is working on a safety policy and planning for a kit of safety items, such as sleeping bags, food, a first-aid kit and other supplies useful in an emergency at the site. The items won't be together for a while so bring your own safety supplies for now. However, our biggest worry is if someone has car trouble or an accident on the way to or from the site where no safety equipment is handy. As a result, we've put together a temporary policy. If you are going to the site, call Rick Huziak at 665-3392 and leave a message to that effect on the answering machine so we know you're there. Indicate what time you expect you will be home - be honest! Tell your spouse that they can call me 24-hours a day if they suspect that you are in trouble because you haven't arrived home. If I don't answer their emergency call, then call Al Hartridge at 373-0034 (24-hrs). We WILL decide what to do and send out a search party if necessary. If we don't get any calls, we'll assume everyone got home safely (ie. don't call to let me know you got home OK at 4 am!). Remember the winter safety tips - if you have car trouble - stay with your car! Drive slowly on the grids - they are in reasonable winter driving condition but can be treacherous. Car pool and use the buddy system if possible. Also, please use Colonsay Road preferentially. If we get an emergency call, this is the first road we will check. If you have a cell phone, take it along. There is no phone at the site and farm houses are scarce in the area.

Coffee Pot - BYOW - Bring your own water. Coffee, sugar and powdered creamer are already there.





Erich and Darrell gave presentations about moving the Warm-up Shelter from the Rystrom Observatory to the new Sleaford Site, the trenching provided by Mr. Geall and wiring of the site. All photos by Rick Huziak.



by Rick Huziak

The Saskatoon Centre met at the Delphi Restaurant on 8th Street last December 12th to honour Bob Geall for the volunteer labour he put in at the new Sleaford Observatory. Bob gave up a valuable Sunday in November to trench in the underground power at the new site, cutting about 100 meters with his ditch witch. This allowed us to bury our power conduits and thus have power at the site this year.

President Erich Keser was chief organizer and master of ceremonies for the evening, which included talks and slide shows from himself and Darrell Chatfield. Darrell was the chief organizer for the Warm-up Shelter move this fall. Darrell was also honoured for his effort and the countless hours he put in to arrange the contractors, price materials, do the running around and pickups and work out endless scenarios to trade off scarce funds with maximum progress.

The evening was well attended by members and their families, with a quick head count running around 30! It was an interesting evening of leisurely eating and visiting. My Greek rib dinner was delicious.



December's Geall Appreciation Gastronomy Dinner

The Delphi Restaurant did an excellent job of arranging a small meeting area for us and operating the lights as required during the presentations as the projectors switched on and off.

Nelson and Gloria Rystrom were scheduled to attend the dinner as well, but due to an administrative error, they were not able to attend. A dinner specifically to honour the Rystrom's contribution to the success of the Saskatoon Centre's last 20 years will be held on January 23rd instead. See the announcement on page 5. ☺

The 1997 - 98 Membership List

Making up pages 7 through 10 of this issue is the 1997-98 membership list. If you'd like, you can pull it out for easy reference. The membership numbers this year are encouraging and indicate that the Centre is still growing. To date, we have 62 paid memberships, adding 18 new names to the club, and losing 12, though 3 of these 12 will still most likely rejoin. A major boost to membership is certainly the addition of 12 youth members in Sandy's program. Welcome to everyone this year - old and new. If the information on the membership list is incorrect or inaccurate, or if you'd like to fill in any missing columns, please contact Rick Huziak.



Attendees of the Geall night included new member Terry Nelson, his wife Connie and their entourage.



Darrell and Bev Chatfield. Bev finally got to see the slides of the construction - actual proof of where her husband really was for most of October and November!



As it always seems, Scott was very confused over what a 10-dollar bill was supposed to be used for. Al Hartridge and Jim Young offered several useful, but painful suggestions, none of which Scott took up!

The Messier Club

Rick Huziak	110
Gord Sarty	110
Scott Alexander	110
Sandy Ferguson (did it in Ottawa)	110
Dale Jeffrey	109
Darrell Chatfield	106
Bob Christie	63
Erich Keser	30
Brian Friesen	15
Les & Ellen Dickson	more than some!
Terry Nelson	4 and holding!

Join the Messier Club!

Observe all 110 Messier objects and earn your

CERTIFICATE!

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, let me know & I'll add you!

***** DUES *****

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

Regular - \$40.00

Youth - \$22.50

Life - \$720.00

The University of Saskatchewan Observatory Hours

During the months of January and February, the U of S Observatory will be open to the public on Saturday evenings from 7:30 p.m. to 9:30 p.m. The observatory is located on campus one block north of the Wiggins Avenue entrance off of College Drive. On clear evenings, visitors may view the moons of Jupiter, the rings of Saturn and the Hercules globular star cluster through the telescope. Admission is free of charge. Group tours of the observatory can be booked for Friday evenings. For further information, phone the recorded Astronomy Information Line at 966-6429. ☺

The 1997 Leonid Meteor Shower

by Rick Huziak

According to the most recent IMO Circular, the 1997 Leonid peak occurred over the North American west coast and Hawaii on November 17 between 10h30 UT and 13h UT (November 17, 4:30 - 7:00 am CST). The strong moonlight caused difficulties in determining the limiting magnitudes, resulting in large scatters of the observed rates with observers reporting sharp activity peaks at different times within this period. Average rates suggest the peak occurred at about 11h UT, which is the same peak solar longitude (sol = 235.17) as in 1996. Based on the data available, it is not possible to recognize double peaks or filamentary structures, though the ZHR may have been as high as 132; exceeding the Perseids in strength (except for the sharp new spur). For the last few years this show has been increasing in strength. There is no evidence, however, that the anticipated meteor storm occurred this year. ☺

Minutes of the December Executive Meeting

Monday, December 15, 1997
at the Conference Room, National Hydrology Research Institute, Saskatoon

1. Meeting called to order at 7:00 pm.
2. Adoption of minutes- moved by Scott Alexander and seconded by Brian Friesen and carried that the minutes of Nov. 1997 be approved.
3. Membership-a family has joined, some further discussion on family memberships. Les Dickson suggests that we make a real effort to welcome new members at their first meeting.
4. Financial Report- Mike gave a summary of the annual financial statement.
 - update on Sleaford financial situation
 - update on Newsletter costs, need to find a new printer in order to cut costs.
 - Motion made by Al Hartridge and seconded by Erich Keser and carried that \$25 be allotted to the Geall Dinner and awards.
 - oculars for Eetook and loaner scopes have been obtained by Erich.
5. October National Council Report and associated business- Rick Huziak
 - Family membership and Beginner's Guide vs. Handbook option discussed
 - The Secretary's Report and executive list to National is due by Jan. 15, 1998
 - representation at the 1998 GA and a Centre display discussedThe family membership idea has been shot down by National but Rick and Gord will continue to push the proposal.
6. Sleaford Observatory Site Report
 - further construction plans discussed, Bill Hydomako has a master plan.
 - Partnership Agreement still pending - Huziak and Keser
 - distribution of keys to Physics department discussed, will try to limit the number of keys in circulation.
7. Fundraising - the ongoing saga.
 - a lot has been said but very little has been done.
 - we need lots of bucks for future plans, a corporate fundraising meeting is still pending, BINGO a fantastic way to make very BIG bucks very quickly has been suggested, but shunned by some members, remember.beggars can't be choosers.
8. Observing - a report on the Sleaford sessions will be given at the general meeting
 - key to Beaver Creek Conservation Area, use of this area has to be coordinated with the authorities and planned ahead of time.
9. Junior Astronomer and Youth Group report will be given at general meeting.
10. Saskatchewan Summer Star Party 1998
 - another committee meeting is needed
 - leaflet or brochure is needed for E-mail inquiries.
 - dates for future SSSPs must be settled soon.
11. New Business:
 - lockable cabinet -Darrell Chatfield is working on this
 - presentations needed for future meetings - Roland Deschenes(Calgary)
 - articles (and junk)in Library, schoolhouse and Erich's basement need to be dealt with.
12. Meeting adjourned at 8:00pm.

Minutes of the December General Meeting

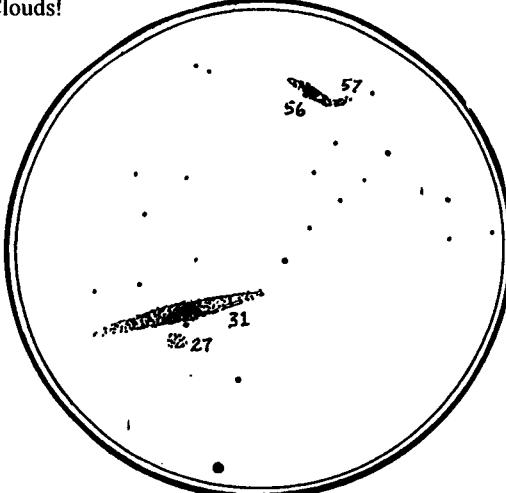
Monday, December 15, 1997
 at the Conference Room, National Hydrology Research Institute, Saskatoon

1. Meeting called to order at 8:00pm.
2. Adoption of Nov. 1997 minutes of general meeting.
3. Membership - see minutes of executive meeting
 - tonight is the last chance to join or renew and get your Handbook before the new year.
4. Sleaford Site Report: Bill Hydomako
 - Phase one is completed - the warm up shelter is operating.
 - Nov. 24 committee report given - Bill has drawn up a task list.
 - Safety procedure was discussed - Rick will be a 24-hr. contact person with Al Hartridge as back up.
5. Annual Financial Report - Adopted unanimously.
6. Saskatchewan Summer Star Party 1998-gathering momentum
 - presentations will be given by Dyer, Kemble, Paulson, Hladiuk, Zsoka
 - articles and good photos needed for presentation to the astronomy magazines.
 - review of whom to contact and work progress so far
 - Promotion: -Dale Jeffrey 'Net and Articles (photos needed)
 -Bob Christie- Brochure
 - Registration: -Ellen and Les Dickson (also e-mail inquiries)
 - Speakers - Jeffrey and Mysyk
 - Meals - still being worked on
 - Volunteers - Rick Huziak
 - Accommodation - Dale Jeffrey
7. Program:
 - Father Lucian Kemble
 - Rick Huziak- possible large scale impact in Greenland
8. Meeting adjourned at 10:30 pm.

Observation of the Month The NGC 4631 Galaxy Cluster

by Rick Huziak

If you look closely, the sky seems to be filled with objects that just seem to want to whack into each other! Take, for instance, the very interesting field of 4 galaxies which make up the NGC 4631 group in Canes Venetici. NGC 4631 is an impressive edge-on spiral galaxy; 12th magnitude, $2' \times 10'$ in size, and appears to be mottled, showing a possible lust lane on the south edge. Looking a bit closer, a faint elliptical galaxy, NGC 4627, seems just about ready to collide with its much larger parent. Most likely this pair is very similar to the Milky Way and the Magellanic Clouds!



In the same field is another colliding pair. NGC 4656 is another spiral, close to edge-on. Touching the eastern part of the disk is a 14th mag. companion, NGC 4657. What a wonderful site this field is! I found this field while searching for the last few objects on the *Finest NGC* list. (See your Handbook). I'm only 6 objects short of completing that list!

The view is through 12.5" Eetook at 45x. The observation was made at 3:20 am on Dec. 26, 1997 from the Sleaford Observatory. North is down.