

Saskatoon Skies

Volume 26 Issue 5, May 1995



Special Announcements

We want all members to try and turn up at our next meeting. Mark May 15/95 at 8:00 pm on you "Important things to do List"See You There!

**Minutes of the March Executive Meeting
7:00 PM, Mar. 20, 1995 Room A-226,
Health Sciences Building, U of S Campus**

Present: Ed Kennedy, Richard Huziak, Al Hartridge, Garry Brett, David Cornish, Jim Young, Merlyn Melby, Bill Hydomako

1. Meeting called to order 7:02 PM. R. Huziak
2. Jim Y. and Rick H. approached Nelson and Gloria Rystrom about the future of the Observatory. Outcome as follows: - General agreement will gladly be extended by Nelson (from Ed) for at least a few more years. We will review the original agreement and resign it. The level of activity at the Observatory is not a concern to the Rystroms. They don't mind us being there provided they know ahead. (This includes 'mass' OG meetings). RASC is to install a red-light on the warm-up shelter so the Rystroms know that a member is using the facility.
- RASC should complete hook-up of 220V electrical box in the machine shed. If the yard light is turned off - it shall be turned back on!
- RASC to provide a 'donation' to the Rystroms yearly for power consumption. Nelson may build a lean-to style equipment shed next to the observatory. RASC membership to be transferred from Ed to Nelson.
3. Observer's Group report. Both recent OG nights were clouded out (Mar 4, 11). An OG 'committee' should be formed to ensure someone is out to open the observatory up. (D. Cornish). May 27 to be added to OG meeting list.
4. Discussion of addition of Brian Friesen and Erich Keser as councillors.
5. New Observatory Committee. Letters have been written to the U of S Agriculture requesting potential land use, and U of S Physics requesting support of development of a new facility. Set a date for a meeting on the Monday, Mar 27, at 7:30 pm at Al Hartridge's house.
6. Future events:
 - Star night in Martensville - Tues. April 25 - Astronomy Day Display and Starnight - May 6 - we need an RASC banner made for these events
 - 7. Temporary members report, review of "astrobuddies" program. We have 22 on the temporary membership list right now.
 - 8. Rick Huziak sent Terence Dickinson a congratulatory note from the Centre and a thank-you note to Dr. Hube.
 - 9. Discussion of the fund-raising activities (D. Cornish)
 - 10. Costs incurred for Dr. Hube's visit. The Saskatoon Centre thanks Dr. Ed Kennedy for paying for Dr. Hube's meal while he was here.
 - 11. Plans for a new meeting room off campus. We are reviewing the current arrangement with the University.
 - 12. Tax receipts for Doug Miller's possible contributions of mount for the 16 inch telescope and the 80mm telescope.
 - 13. Meeting adjourned 7:55 PM.

**Minutes of the March General Meeting
8:00p.m. March 20, 1995 Room B-10,
Health Science Building, U of S**

1. Meeting called to order 8:05 PM.
2. Correction to Feb. minutes - Ed Kennedy was not present at the Exec. meeting. Motion or adoption of Minutes of the Feb. meeting as published. Jim Young. Second Scott Alexander.
3. Jim Y. and Rick H. approached Nelson and Gloria Rystrom about the future of the Observatory. Outcome as stated in the executive minutes.
4. Observer's Group report. Both recent OG nights were clouded out (Mar 4, 11). An OG 'committee' maybe/has been formed to ensure someone is out to open the observatory up. May 27 added to OG meeting list.

5. Future events: - Star night in Martensville -Tues. April 25- Astronomy Day Display and Starnight May 6- Windsor GA - July 1st weekend
6. New Business -Update on the 16 inch telescope. Call 1-800-667-9986 for "Lets talk World Travel for the India Eclipse on October 17 to 19.
7. Speakers for tonight
 - Rick Huziak - Construction a John Dobson Solar Telescope
 - Jim Young - Photographing the Centre's Star Atlas
8. Meeting adjourned 9:30 PM.

Minutes of the April Executive Meeting

7:00pm April 17, 1995 Room B-10

Health Sciences Building, U of S

Present: Ed Kennedy, Al Hartridge, Jim Young, Garry Brett, Sandy Ferguson, Merlin Melby, David Cornish, Scott Alexander, Bill Hydomako, Rick Huziak

1. Meeting call to order 7:04 pm. Rick Huziak.
2. Welcome to the meeting Fred Dean and Craig Williams from the U of S Astronomy Club and Yannis Pahatourogliou from the U of S Department of Physics. R.Huziak.
3. Motion to keep up the subscription to Sky & Tel magazine. Jim Young. Carried by show of hands.
4. Note that there will be a starnight at Martensville next Tuesday night. R. Huziak
5. Note of the Gala O.G. meeting as noted in the newsletter. R. Huziak
6. Astronomy Day is on May 6 and we will have a display at Market Mall. R.Huziak
7. Ed Kennedy needs a letter of authorization to act as an alternate to the next GA for Jim Young if required. Ed Kennedy.
8. Discussion on the new Dark Site for the Centre. The RASC, U of S Astronomy Club and the U of S Physics Department gave a short presentation of their position on the proposed new Dark Site. We need to meet again to discuss immediate, near future and long term goals and plans for the three groups. No date set.
9. Motion for adjournment 7:55pm. Garry Brett.

Minutes of the April General Meeting

8:00pm April 17,1995 Room A-226

Health Sciences Building, U of S

1. Meeting called to order 8:05 pm. R Huziak
2. We have about 24 to 30 copies of the Beginners Observers Guide that can be returned to National. R. Huziak
3. Star Night in Martensville to be held on April 25 from 8:30 pm to 11:00 pm. R Huziak
4. Astronomy Day display will be at Market Mall on May 6 from 9:30 am to 5:30 pm along with a public star night out at Diefenbaker Park. R Huziak
5. Kim Mysyk would like to conduct another meteor search this year. Contact Kim for more information and if you would like to participate. R Huziak
6. Yannis Pahatourogliou presented the U of S Physics stand on the proposed cooperation between the RASC and Physics to develop a new dark site together.
7. Presentations
 - Binocular Astronomy / Constellation for Leo. S. Ferguson.
 - Astronomy Magazine and my Telescope. Garry Brett
 - Book review "The Backyard Astronomer's Guide" by Terence Dickinson & Alan Dyer. R Huziak.
8. Motion for adjournment by Scot Alexander. 9:20 pm.

What Happened in History In May

- 1 Nereid, a moon of Neptune, discovered in 1949 by Gerard Kuiper.
- 4 U.S. Lunar Orbiter 4 left for Moon, 1967, going into orbit around Moon May 7. Satellite changed orbit on command from Earth.
- 5 Alan B. Shepard Jr., flying along a sub-orbital path in 1961 in Mercury-Redstone 3, was the first American in space.
- 14 America launched its first-generation space station, Skylab, in 1973. It was visited three times that year and not used again. Skylab fell from orbit July 11, 1979.
- 15 French astronomer Nicolas-Louis de Lacaille was born in 1713. He became known as the father of southern astronomy after observing skies over the Cape of Good Hope from 1750-55 where he named 14 new constellations. Lacaille pioneered the lunar-distance method of finding longitude. He died in 1762.
- 15 L. Gordon Cooper, 1963, Mercury-Atlas 9, over 24 hrs in orbit.
- 17 English astronomer Sir Joseph Norman Lockyer was born in 1836. He discovered helium in the Sun and founded an observatory at Sidmouth. Lockyer started Nature magazine which he edited 50 years. He died in 1920.
- 18 Thomas P. Stafford, Eugene A. Cernan, John W. Young, in 1969, took lunar module to its first orbit of Moon on Apollo-Saturn 10.
- 19 In 1971, The USSR launched Mars 2 which reached the Red Planet November 27, dropping a capsule to land on the surface.
- 20 The interplanetary probe Pioneer 12 (Pioneer-Venus 1) left the U.S. in 1978 for Venus, going into orbit around that planet December 4, 1978, checking atmosphere, photographing surface.
- 24 M. Scott Carpenter, in 1962 in Mercury-Atlas 7, overshot his intended landing site by 250 miles.
- 25 Charles Conrad Jr., Joseph P. Kerwin, Paul J. Weitz 973, made first visit to U.S. Skylab space station, repaired launch damage.
- 28 In 1971, The USSR launched Mars 3 which reached the Red Planet December 2, dropping a capsule to land on the surface. TV signals were unexpectedly brief.
- 29 USSR launched Luna 22, 1974, it reached Moon orbit June 2.
- 30 In 1966, U.S. Surveyor I flew to Moon, landed June 2, 1966, sent 10,400 photos, even after surviving a cold 14-day lunar night.
- 30 In 1971, interplanetary probe Mariner 9 left the U.S. for Mars, the first U.S. craft to orbit the Red Planet November 13, 1971, sent back 7,300 photos of the Martian surface, first close-ups of a Martian moon. Signals stopped October 27, 1972.

Observer's Group Meeting & the Rystrom Observatory

Put these dates on your calendar and plan to attend. May 27, June 24.

Members are welcome to use the observatory at any time but **please phone ahead**. Call Nelson or Gloria Rystrom at 955-2370 before 9:00 p.m. if you intend on going out. This lets them know that someone will be roaming around their yard. If they do not answer the phone go anyway. Drive through the yard slowly, and dim your lights as a courtesy to others who may be observing.

Editors Note

The following article was originally submitted by Dr. Kennedy for publication in the February issue of Saskatoon Skies. When typing up the article I accidentally left out a piece of the article. I have highlighted in bold the part that I left out and have republished the entire article....Editor

The 20th Century Hall of Fame....by Ed. Kennedy

In the October-November 1994 issue of The Beaver, columnist Christopher Moore raised the question: "Who were the great Canadians of this century?" A call for nominations was issued along with his request that each nomination was to be supported by "brief reasons why." Respondents were limited to five nominations but there was an impressive response to his invitation. The summary of nominees, worthy to be called "Great Canadians of this Century" was published in the December 1994-January 1995 issue of The Beaver. This issue marked the 75th year in publication of this Winnipeg magazine.

Among the contributions from Saskatchewan were the following:

Science and medicine produced an impressive range of names, including the very topical 1994 Nobel laureate, Bertram Brockhouse. He was nominated by fellow physicist J.E. Kennedy of Saskatoon, who also drew our attention to physicist John Stuart Foster and to astronomers Carlye Beals, Alice V. Douglas, and Andrew McKellar. A fourth astronomer, Helen Hogg, was nominated by Kennedy's Saskatoon colleague W.O. Kupsch. Other scientists who have been nominated are Nobelist Gerhard Herzberg ("still an active lecturer at age 90," says Kupsch), continental drift theorist J. Tuzo Wilson, and Geologist Charles Camsell.

A substantial proportion of the nominees submitted by Kupsch and Kennedy were distinguished Canadian astronomers. Condensed biographies of each of these scientists were extracted from The Canadian Encyclopedia in support of their nomination.

C.S. Beals (1899-1979). His contributions to the study of interstellar matter and the identification of meteorite craters in Canada were outstanding. Dominion astronomer 1946-1964.

A. Vitser Douglas (1894-1988). Biographer of Arthur Stanley Eddington. A leader in the International Federation of University Women and in her writings on the history of astronomy.

Helen Sawyer Hogg (1905-1993). Leading world expert in the field of Globular Star Clusters. Minor planet no. 2917 has been named Sawyer Hogg for her.

Andrew McKellar (1910-1960). Research officer in the RCN and astronomer at the DAO, Victoria. A scientist distinguished for his interpretations of stellar mechanisms and his prediction of the temperature of interstellar gas.

While Dr. Foster and Dr. Herzberg were nominated to the 20th Century Hall of Fame as physicists, each contributed to our knowledge of astronomy. At the DAO, Foster collaborated with Douglas in a study of the Stark effect in B stars. While at the Yerkes observatory in Chicago, Herzberg studied free radicals in interstellar space and performed analyses of molecules present in cometary spectra.

Notice of General Meeting

8:00 p.m., Monday, May 17, 1995

Room A-226, Health Sciences Building

University of Saskatchewan

You are invited to attend the May General Meeting of the Saskatoon Centre of the RASC. The main presenter will be Erich Keser, member of the Saskatoon Centre, who will give a slide presentation entitled "The Building of the Sudbury Observatory". The show will detail the disassembly of the observatory and the site development and reassembly of a new observatory for the club. Erich is a past member of the Sudbury Astronomy Club (35 members). A display by Shafraz Iqbal will also be shown. Shafraz created a beautiful display board & models of the Jupiter/Shoemaker-Levy collision. This meeting is open to members and the general public. There is no admission charge.

New Member and Changes of Address

Please note the following change of address and telephone number correction:

Erich Keser 405 Albert Ave. Saskatoon, SK S7N 1G2 tel: same
Nelson Rystromtelephone (306) 955-2370 (correction)

(Note that the number 955-2350 was accidentally listed for Nelson, but belongs to ex-member Doug Miller. If you happened to call it last month, Doug knew what you wanted and graciously directed the call to Nelson's right number! Cool coincidence!)

The Saskatoon Centre Teams Up with U of S Physics and the Astronomy Club by Rick Huziak

In our efforts to find a new observatory site for the Centre, we approached the U of S Physics department and the U of S Astronomy Club to see if there might be some interest in developing a joint facility, thus sharing costs, development and ending up with an all-around better facility. The response was very positive, and as a result, we now have formed a joint group which will work together to find and develop this new observatory. The new committee will consist of the members of current RASC New Observatory Committee (Rick Huziak, Al Hartridge, David Cornish, Garry Brett, Jim Young and Merlyn Melby) to which we add the U of S Physics representative Yannis Pahatouoglou, and U of S Astronomy Club representative (and Centre member) Craig Williams. Yannis and Craig, along with Astronomy Club president Fred Dean, attended our April executive meeting to discuss this arrangement. All groups are delighted with the teaming arrangement and envision the development of a superior new site. The teaming arrangement is also supported by Physics department Head Dr. Henry Caplan and Stan Shadick (also a Saskatoon member).

The Saskatoon Centre is currently developing a 16-inch telescope to put into a 14-foot dome, plus has an 8-foot dome and additional tracking mount for the new site. The Physics department has a 14-inch telescope, plus several smaller scopes destined for a roll-off structure at the new site, plus plan to develop a larger observatory (20" to 24" range) in the future. The Astronomy Club is planning the purchase of a 17-inch Dobsonian for the site and public education use. Yannis is also searching current U of S property holdings to see if a University-owned site can be located.

We are all very excited at the prospect of this new joint facility! If you would like more information, or would like to comment, or know of an appropriate site, please call me at 665-3392.

The Martensville Star Night - Guides, Clouds and Clear Skies by Rick Huziak

Well, there's good news and there's bad news! First the good news. On April 25th, I was scheduled to give a slide show and presentation to a Girl Guide pack in Martensville. We decided that we should also give a public star night to supplement this talk, and hoped for clear skies that evening. The presentation went well, with a 1 hour talk, slide show and discussion on naked eye astronomy, and lots of enthusiastic questions on fireballs, aliens and 'the man on the moon'. At 8:30 p.m., we peeked outside, but to find another meeting of the Variable Cloud Watchers Society in progress. Several parents and kids were standing around looking up at the slowest moving clouds I've ever seen. Slowly a few public and the occasional RASC member trickled in, all with necks craned. After an hour

or so, though, prospects looked better with some clearing going on, and we found a dark corner of the school and set up. About 10:15 p.m., the clouds cleared, and we did enjoy a beautifully clear night, until about 11:45 p.m., when the clouds rolled back in. Unfortunately, due to the cloudy beginning, crowds were thin, and we didn't manage to reach much of the populous as we expected. Thanks to Sandy Ferguson, David Cornish, Brian Friesen and Don Friesen, who helped me out with the starnight, and never gave up hope. We hope to repeat a Martensville Starnight later in the year, with better success.

Betcha Didn't Know

STS-61 C. Columbia carried Ku-1, second in a planned series of stationary satellites by RCA. Columbia also carried 12 Get Away Special canisters (GAScans) with experiments and Materials Science Laboratory-2.

The dozen GAScans held seed germination, chemical reaction, egg hatching, astronomy, atmospheric physics and materials processing experiments. Materials Science Laboratory-2 held a liquid bubble suspension by sound waves experiment, melting and resolidification of metallic samples and containerless melting and solidification of electrically conductive specimens.

Hitchiker G-1 housed experiments studying film particles, tested a new heat transfer system and determined the effects of contamination and atomic oxygen on ultraviolet optics. Comet Halley Active Monitoring Program (CHAMP) was a 35mm camera to photograph Comet Halley through the shuttle flight deck's aft overhead window. Unfortunately the camera batteries died.

STS-34. Chang-Diaz was scheduled to ride Atlantis flight STS34 for four days in space with the Galileo Jupiter probe in October 1989. With him were to be astronauts Donald E. Williams, Michael J. McCulley, Shannon W. Lucid and Ellen S. Baker, M.D.

Letter from the Editor

I am always looking for different things to put into the newsletter and I do not mind admitting that trying to come up with different ideas isn't the easiest thing to do. **I would like others to sit down and write about something they like, such as a successful night of observing or maybe a new scope they bought, or whatever. Just write like you normally talk and it will read fine.**

We are an interesting group of people and I am sure we all have a lot of good campfire stories about astronomy. So get out your writing caps and send in some interesting stuff. If you do want to submit

something to the newsletter please send it in on a 3.50 DD or HD disk. If you do not have a computer

please type it out and send it to me. I cannot accept hand written articles due to the time it takes to retype them. **All submissions must be in by the first of the month. Anything received after that will be held until the next newsletter.**

If you have something to send mail it to the address below. If you have some ideas you want to talk about give me a call at 384-1807 up until 10:30 pm....Garry

Send your stuff to: **Garry Brett**

522 Devonshire Cres.
Saskatoon, Sask.
S7L 5W1

ASTROPHOTO CORNER

MAY 1995

RASC SASKATOON CENTER

PHOTO OF THE MONTH

M65,M66 and NGC 3628 - LEO MAJOR

This group of three galaxies roughly 1/2 degree apart from each other form a triangle with NGC 3628 at the top of this photograph and M66 at the lower left and M65 at lower right. The distance of this group from us is estimated at somewhere between 29 and 38 million light years.

These galaxies are easily observed with binoculars or in small telescopes. They are located about 2 1/2 degrees south and slightly to the east of the star Theta Leonis.

The constellation Leo Major is well above the horizon in the spring and early summer sky and contains many interesting galaxies to observe.

TECHNIQUE: The original photograph was taken with my 8" Schmidt camera. The image size obtained on the negative and therefore on my usual 8x10 enlargements is quite small since the Schmidt camera has a focal length of only 300 mm. The

present photograph was cropped from the original and then zoomed up even further using my computer and photo editing software. This produced an acceptable enlargement for the news letter however to really obtain better detail of these galaxies a telescope with a longer focal length and a satisfactory field of view and a ? 60 min. exposure would have been more ideal.

ASTROPHOTO TIP: My present method of hypering Kodak's Technical Pan film took many hours of experimentation since the directions that came with my Lumicon Kit were only approximate at best especially in regard to length of time to cook the 2415 film. I found that I could obtain a background density of fog (emulsion sensitization) of 0.4 (densitometer reading) by cooking the film for 12 hours in a medium of 92% Nitrogen and 8% Hydrogen at 3 psi and at temperature of 55 degrees C.



Clear skies and good guiding ----- Al Hartridge