

# SASKATOON SKIES

Volume 22, Number 3

March, 1992

- In this issue**
- Minutes of a special executive meeting  
The Centre executive discuss the finances of the Society
  - Minutes of the February Executive Meeting
  - Minutes of the February General Meeting
  - Editor's Notes
  - High winds on Mars  
A discussion of the causes of wind on the red planet
  - APRIL'S GENERAL MEETING MOVED

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## Saskatoon Skies Information

Next month's deadline is Friday, March 27, 1992. Please have any submissions in to me by then in order to be included in the next issue. Saskatoon Skies is a monthly publication of the Saskatoon Centre of the Royal Astronomical Society of Canada. Submissions may be sent to one of the following:

Mike Wesolowski  
1813 Easthill  
Saskatoon, Sask.  
S7J 3C2  
373-0137 (home)  
931-3425 (work)

OR

Saskatoon Centre RASC  
Box 317, Sub P.O. #6  
Saskatoon, Sask.  
S7N 0W0



Submissions mailed to the Centre's address may not be retrieved in time for inclusion unless you tell me it's there.

Minutes of the Special Executive Meeting  
January 30, 1992

Attendees: J.E. Kennedy, D. Friesen, J. Young, A. Hartridge, W. Hydromako

Item	Detail	Action
71.	Meeting called to order 7:35 P.M.	W. Hydromako
72.	The <i>Beginner's Observer's Handbook</i> is getting off the ground. The expected cost will be around \$4 per copy on orders of 10 copies or more. The <i>Handbook</i> will be about 116 pages in size.	J.E. Kennedy
73.	The Centre has received the agenda for the National Council Meeting that is to be held on Feb. 15, 1992. There are 30 items of business on the agenda.	J.E. Kennedy
74.	It was noted that the <i>Observer's Handbook 1992</i> will be sold at the full price until August 15, then from August 15 to October 15 it will be sold for half price. After October 15, the <i>Handbook</i> will be free.	J.E. Kennedy
75.	The <i>Journal</i> and the <i>Bulletin</i> were discussed: a) It was noted that the <i>Bulletin</i> must be received by members 60 days before the General Assembly. b) It was noted that the cost of correcting errors in articles for the <i>Journal</i> was \$2443.00 for the first five issues of 1991. The authors of these articles may be asked to pick up these costs in the future. c) Another cost of the <i>Journal</i> is the publishing of abstracts. The abstracts added \$2000.00 to the cost. CASCA may be asked to pick up these costs.	J.E. Kennedy
76.	J.E. Kennedy has received a letter from Louie Bernstein, President of the Montreal Centre: a) It was noted that the current deficit attributed to the <i>Journal</i> is between \$25K and \$30K. The projected deficit from this in 10 years could be \$176,581.00. The interest on this money could be used to cover the cost of other items. b) It was noted that with the last fee increase, the Montreal Centre lost about 30% of its membership. What would happen in 1993 if fees were raised to \$40.00? The current fee level could have been lower of the Society did not have the deficit arising from the <i>Journal</i> . c) The <i>Journal</i> was called "dry" and "difficult to read", not user-friendly. d) It was further noted that the <i>Observer's Handbook</i> is the flagship of the RASC, and that the profits from the <i>Handbook</i> support the <i>Journal</i> .	J.E. Kennedy
77.	A letter from Doug Hube on the <i>Journal</i> was read to the executive.	J.E. Kennedy
78.	There were comments from the floor on the <i>Journal</i> : a) The <i>Journal</i> and the <i>Handbook</i> go together. The professional input on the <i>Journal</i> and the <i>Handbook</i> helps to keep the <i>Handbook</i> at its high level of regard. b) If the RASC doesn't have something like the <i>Journal</i> for professionals to publish in, then the Society as a whole may deteriorate.	Executive

79. There were comments from the floor on the deficit:
- a) A one time surcharge as suggested by our treasurer would be acceptable.
  - b) Other ways have to be found to reduce the operating costs of the Society.
  - c) Charge back correction fees to authors on articles for the *Journal*.
  - d) The cost per page of the *Journal* should be investigated and compared with other publishing methods.
  - e) The Society needs to look at the overall operating costs. Can volunteer services be found for functions such as accounting and legal?
80. Meeting adjourned 10 P.M.

Executive  
W. Hydomako

Minutes of the Executive Meeting  
University of Saskatchewan Observatory  
February 17, 1992

Attendees: D. Friesen, M. Williams, C. Blenkin, A. Hartridge, W. Hydomako, J. Wood, J.E. Kennedy, R. Huziak

Item	Detail	Action
81.	Meeting called to order 7 P.M.	D. Friesen
82.	J.E. Kennedy read a letter to the executive that he composed on the subject of national finances. A discussion followed.	J.E. Kennedy
83.	Richard Grieve is presenting a lecture at the Western Development Museum on "Large Scale Meteorite Impact and its Consequences - Impact Craters, Death of the Dinosaurs, etc." on April 5. The Centre should investigate the possibility of inviting him to speak on April 6. The decision will have to be published in the next Newsletter.	J.E. Kennedy
84.	The Centre membership stands at 34 so far this year.	M. Williams
85.	The Telescope Committee would like to buy eyepieces for the Centre's dark site.	R. Huziak
86.	A portion of the telescope fund will be re-invested as was done last year. This will leave about \$700 for immediate expenses, such as eyepieces.	M. Williams
87.	It was moved that the telescope committee spend up to \$500 for eyepieces.	R. Huziak D. Friesen
	Carried by a show of hands. The Centre will accept donations towards the cost of the eyepieces.	
88.	J. Wood has completed a preliminary inventory of the library which contains: <ul style="list-style-type: none"> <li>- a set of Society <i>Journals</i></li> <li>- many newsletters from other Centres</li> <li>- archive material including letters from other Centres</li> <li>- many back issues of both <i>Sky and Telescope</i> and <i>Astronomy</i> magazine</li> <li>- numerous hard cover books</li> </ul>	

- a filing cabinet full of unknown "stuff"
- an optical bench
- a Gestetner machine for copying
- old envelopes
- large atlases.

The Gestetner is to be advertised in *Saskatoon Skies*.

There was some discussion about the old newsletters and what to do with them. It was decided that new newsletters from other Centres should be brought to the General Meeting to encourage other members to read them. Old issues are to be discarded.

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| 89. | The position of Vice President is open as Jeff Phillips is unable to continue in this position. Volunteers for this position will be accepted. | J. Wood    |
| 90. | Meeting adjourned 7:55 P.M.  | D. Friesen |

Minutes of the General Meeting  
Room B-111, Health Sciences Building  
University of Saskatchewan  
February 17, 1992

Item	Detail	Action
91.	Meeting called to order 8:07 P.M.	D. Friesen
92.	The discussions of the executive meeting were reviewed.	D. Friesen
93.	Approval for spending of up to \$500 for the purchase of eyepieces at the dark site was given by a show of hands.	D. Friesen
94.	The Gestetner machine is available for sale. Anyone interested should contact Don Friesen.	D. Friesen
95.	Newsletters from other Centres will be brought to the meetings to allow others to take them home and read them.	D. Friesen
96.	The Centre has received a video tape from the Calgary Centre. It will be shown at the next meeting.	R. Huziak
97.	J.E. Kennedy presented a talk entitled "The Moon Hoax".	J.E. Kennedy
98.	Meeting adjourned at 9:35 P.M.	D. Friesen

### NOTICE OF GENERAL MEETING

The next General Meeting will be held on Monday, March 16, 1992, at 8:00 P.M. in Room B-111 of the Health Sciences Building. Sandy Ferguson, formerly of the Ottawa Centre, will be presenting a talk discussing the history of the Ottawa Centre.

### NOTICE OF OBSERVER'S GROUP MEETING

At the time of writing (early March) the date for the next meeting has not been set. I suspect that the most likely date will be Saturday, March 28. This date will be set at the next General Meeting. If you are interested in attending, contact me (the editor) prior to this date and I will let you know for sure what's going on.

## EDITOR'S NOTES

1) It's production time for *Saskatoon Skies* again and I feel obliged to note that I do not have a plethora of material to insert. Those of you who continue to submit material – you have my thanks. It would be nice to see others making submissions as well though. *Saskatoon Skies* belongs to all of you. I have a suggestion for the newer members ( a repeat of what I suggested in the November , 1991 issue) – why not write to me with some questions you have? The answers I (or my designated author) would generate new articles and fill the empty space!

2) The March, 1992 issue of *Sky and Telescope* magazine contains a number of interesting articles. For observers, there is a comparison (by experienced amateurs) of telescopes using optics of known quality. For those that read science fiction, especially old science fiction, there are a number of images, some in 3D, of Venus, as revealed by the Magellan orbiter. No steamy jungles and no swamps there!

3) With Jupiter just past opposition this month, it's about as big as it's going to get in the eyepiece for the next year or so. Both *Sky and Telescope* and *Astronomy* magazine devote some space to observing Jupiter in their March, 1992, issues.

4) A perhaps little known fact is that the Saskatoon Centre is permitted to write receipts for donations which can be used for income tax purposes (at least I haven't been audited yet!). If you wish to make a donation, to either the Centre in general, or to the telescope fund in particular, contact the treasurer, Mike Williams, at 668-4365.

## GENERAL ASSEMBLY REMINDER

The next General Assembly of the Royal Astronomical Society of Canada will be in Calgary, Alberta, from July 1-5, 1992. For information, refer to the January issue of *Saskatoon Skies*, or contact RASC- Calgary Centre, c/o Ms. Dennis Goodman, 28 Southland Crescent S.W., Calgary, Alberta, Canada, T2W 0K3. Phone (403) 252-7095. Information is also available from the editor.

If you are at all interested in going, don't delay and don't make plans in isolation. It is likely that other members of the Centre will be planning to go too, so ask around!

## ASTRONOMY DAY 1992

Astronomy Day 1992 has been set for Saturday, May 9. Sandy Ferguson has kindly volunteered to coordinate this activity and the current plans are to set up a mall display (which mall is not known at this time) with a theme based upon light pollution. If you have any ideas you want to see expressed, or wish to offer your assistance, give Sandy a call at 382-0898.

## UNIVERSITY OF SASKATCHEWAN OBSERVATORY HOURS

During the month of March, the University of Saskatchewan Observatory, located one block north of the Wiggins and College Drive intersection, will be open Saturday evenings from 8:30 P.M. to 10:30 P.M. The big attraction for this and coming months will be Jupiter, which is just past opposition.

## HIGH WINDS ON MARS

Submitted by Don Friesen

High winds in the Martian atmosphere are mainly caused by its very low density (only one percent of that of the Earth) and the sunlight warming the planet. These combine to produce the pressure differences that drive the winds. Although the absolute pressure of Mars limits the winds' driving force, speeds are 100 times greater than those on the Earth.

Several major features produce large pressure differences on Mars. It's topography is extreme, with mountains that would dwarf Mount Everest and chasms that would swallow the Grand Canyon. Great, dense dust storms absorb sunlight creating temperature differences among different parts of the atmosphere. The boundaries between the reflective ices of the polar caps and the darker surrounding soil generate surface temperature contrast. Global and Earth-like frontal circulations also contribute to the winds that may generate dust storms. In places like Olympus Mons or the Valles Marinerus, the night time buildup of a cold layer near the surface causes strong "mountain" or "Valley winds" as dense cold atmosphere sinks down the slopes at night and early evening. At the Viking lander site, a slope of only one percent causes winds of five to ten miles per hour and on larger slopes the winds could be far stronger.

At the edge of the southern polar cap, shortly after winter, the Sun shines on the contrasting red soil and white polar cap producing large temperature differences. This generates strong winds and large local dust storms every Martian year. This effect is stronger in the south because Mars has a highly elliptical orbit and it brings it significantly closer to the Sun during the late southern spring. Although the Viking landers have provided years of data, we still have major questions about the great Martian dust storms.

### NOTICE OF APRIL'S GENERAL MEETING

This notice is intended to inform you that *there will not be a meeting on the third Monday in April (April 20) as would normally be expected. The meeting date has been moved to Monday, April 6 in order to take advantage of the presence of a guest speaker. This is not an early April Fool's joke.*

The Centre and the Department of Geology at the University of Saskatchewan have worked together to arrange for Richard Grieve to present a lecture entitled "Large Scale Meteorite Impact and its Consequences – Impact Craters, Death of the Dinosaurs, etc." The lecture will take place on April 6, tentatively at 8 P.M. in the Biology Lecture Theatre in the Biology-Geology Building on campus. His presence is part of the Logan Lecture Series of the Geological Survey of Canada.

Lest you think that Mr. Grieve is "just" a geologist, you should be aware that he has served on numerous lunar and planetary science committees, has an asteroid named after him, and has published articles in numerous popular science magazines. His lecture promises to be interesting.

Should you be unable to attend this meeting, Mr. Grieve will be presenting the same lecture on April 5 at the Western Development Museum. You may see more than one advertisement for this so be aware of this fact.

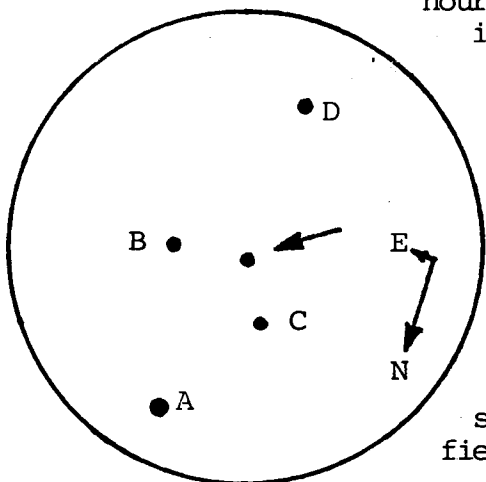
As noted above, the date for the lecture is pretty much fixed, but the time is not. If the time does change from the 8 P.M. noted above, you will be contacted by telephone.

# SEEING THINGS!

## NOVA LYNX 1974 ??

While scanning through a past volume of my observing journal, I found an interesting observation that is worth following up. On December 30, 1974 at 7:25PM CST (1974, Dec 31, 1:25UT) I noted below observation.

While star-hopping to the correct starfield to find the asteroid Eros, which was making a particularly favorable approach, I chanced on a bright starfield that had too many stars. I only had a poor quality chart in Sky and Telescope magazine, and did not own a star chart better than Atlas of the Heavens, so I could not at the time verify that I was seeing a guest star. I recorded the observation with a brief sketch of the field and stated the following: "position 0747 +5440 (1950), mag = 7?, reddish, 1-1/2 hours (of) searching to find this area and try to identify it. (did not result in positive identification)".



The next night (1975, Jan. 1, 1:00UT), I recorded the follow-up observation: "Reported Nova, still there and still as bright, mag = approx. 7.5".

I immediately went on to observe Eros again and seemed to have forgotten about this possible nova.

At the time, I also probably didn't know how to report a possible discovery, or felt that I should not if I could not positively identify the field.

The drawing shown above is adapted from my sketch on that first night. The possible nova is arrowed. I have recently used Uranometria 2000 and the SAO Star Atlas to identify the star field and have referred back to the original chart in Sky and Telescope, Dec. 1974, to confirm the observation.

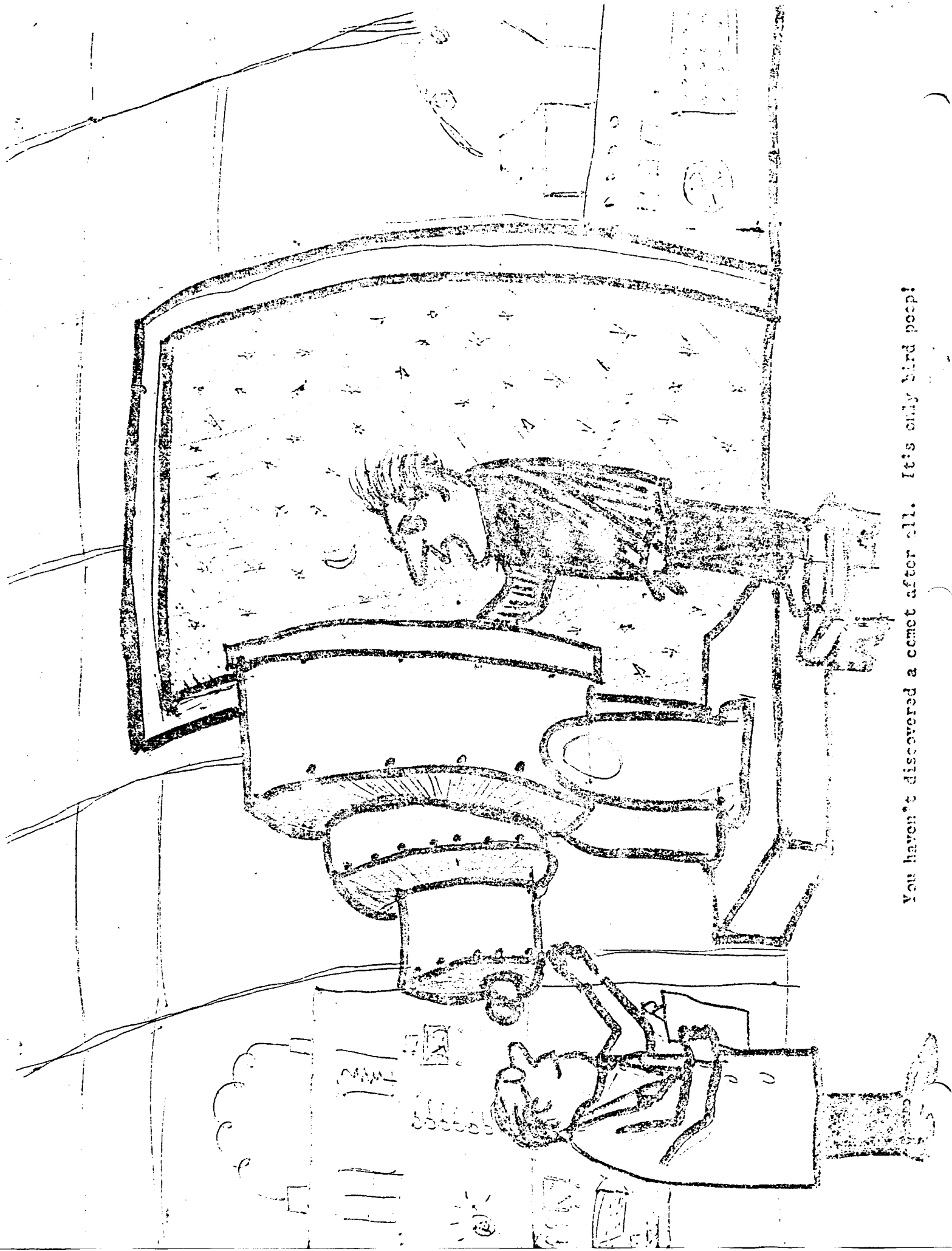
The stars are identified as follow:

A	SAO 26543	mag 6.2	0748.6 +5520 (1950)
B	SAO 26561	7.2	0750.3 +5450
C	SAO 26536	7.4	0747.4 +5451
D	SAO 26535	6.0	0747.2 +5415
	Nova?	7.5?	0749 +5440

There is a good possibility that this was indeed a nova. Other objects that it may have been could be a U Gem dwarf nova, or a Mira variable on an exceptionally bright maximum, or an asteroid. The "reddish" color mentioned seems to rule out a U Gem star, as they are typically white or blue at maximum. An asteroid is unlikely, as I did not notice any obvious movement on the second night's observation. This field is also about 30 degrees north of the ecliptic.

One way to confirm this observation would be to find someone who photographed the starfield within a few weeks of the above dates. I would be very interested to hear from anyone who did. An object this bright would easily have been picked up on a 10-second exposure with Tri-X (the popular film at the time).

Richard Huziak



You haven't discovered a comet after all. It's only bird poop!