

Stardust

A Monthly Newsletter of the
Royal Astronomical Society of Canada
Edmonton, Centre

JUNE 1967

UNIVERSITY TO BUILD OBSERVATORY

The University of Alberta plans to build a small but modern Astronomical Observatory in the Edmonton area this summer. The basic instrument will be a twelve-inch Tinsley Cassegrainian reflector.

Dr. George Cumming, Professor of Geophysics and President of the Edmonton Centre of the Royal Astronomical Society of Canada, told STARDUST he expects the observatory will be but the beginning of Astronomical efforts by the Edmonton campus. He mentioned a full course leading to a Master's degree in Astronomy and Astrophysics may be offered within a year or two. To augment this, there are already plans to build a larger observatory in the not too distant future.

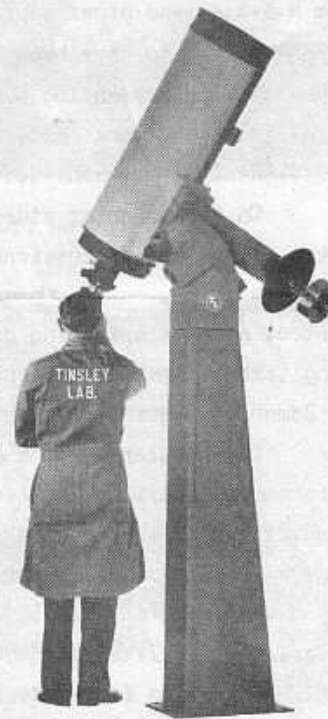
While no final decision on the location for the Tinsley reflector has been reached, it appears likely it will find a home close by the site of the R.A.S.C. Observing Station on the University Ecology farm.

Edmonton amateur and professional astronomers alike will welcome the establishment of the new observatory as more than adequately filling the gap left by the closing of the old observatory on 87th Avenue in the late 1950's.

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JUNE MEETING

THE JUNE MEETING OF THE EDMONTON CENTRE WILL BE HELD AT THE DEVON OBSERVATORY ON FRIDAY EVENING JUNE 9th. MEET AT THE PLANETARIUM AT 7 PM REGARDLESS OF WEATHER. BRING TELESCOPES, FOOD, REFRESHMENTS, ETC.



THE YEAR JUST PAST

While the official end of the year's activities doesn't come until Autumn, June, nevertheless, always seems to be, in fact, the end. Holidays and new jobs scatter our members to the far corners of the country and, indeed, the world. And for most of us, the summer is a rather slow observing time due to the short nights and long twilight.

Looking back over the past ten months of activities, we can certainly view it with mixed emotions. Unquestionably the most disappointing highlight of 1966-67 was our inability to stage the annual STAR-NIGHT. As our Educational Directors, Franklin Loehde and Gary Shearman, have pointed out, the hoped-for new displays from N.A.S.A. and other sources simply were not available for our use when STAR-NIGHT was to have been staged. And rather than drop the level of previous STAR-NIGHTS by presenting a mediocre display this year, a decision was made to cancel it altogether. And, regrettably, as we go to press, the chances for a 1967 STAR-NIGHT are none too good, either!

On the brighter side of the year just past, there were many interesting talks, films, and discussions at our regular monthly meetings. And out of these developed a rejuvenated Observing Section. All of a sudden, meteors are being counted, planets are being drawn, occultations are being timed, photographs are being taken, comets are being hunted, and new telescopes are being built. At last the Edmonton Centre seems to have a "raison d'etre".

The popularity of the monthly meetings forced the Council of the Centre to recommend shifting the scene of the meetings from the small lecture room at the Queen Elizabeth Planetarium to Room 262 Campus Tower. Meetings took place on Mondays instead of Thursdays.

Finally, as this is to be the last issue of STARDUST under the present editor, I would like to thank you all for your assistance and co-operation. Since I will be leaving for Vancouver near the end of July, I may not have the chance to see each of you again. My association with the Edmonton Centre is something I will always cherish, and each of you has a standing invitation to the Rodgers' if you're visiting the West Coast.

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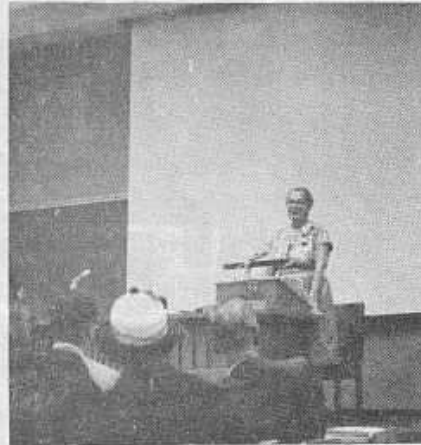
PLEASE NOTE : THERE MAY NOT BE AN ISSUE OF STARDUST THIS SUMMER. YOU ARE REMINDED OF THE PERSEID METEOR SHOWER IN MID-AUGUST. WEATHER PERMITTING, YOU CAN TAKE PART IN THE COUNT FROM FRIDAY, AUGUST 11 TO SUNDAY, AUGUST 13. MEET AT THE PLANETARIUM AT 10 PM. TRANSPORTATION WILL BE PROVIDED THOSE WITHOUT CARS.

R. A. S. C. GENERAL ASSEMBLY 1967



F. LOEHDE

Well over 150 outside delegates, representing fourteen centres, met in Montreal over the Victoria Day weekend for the Centennial version of the R.A.S.C. General Assembly. The genial host for the occasion was the Centre d'Astronomie De Montreal which arranged, for the delegates, the facilities of the University of Montreal atop picturesque Mount Royal.



Dr. Helen S. Hogg

The feature speaker for the Assembly was Dr. Hele S. Hogg of Toronto, who

devoted much of her talk to the achievements of the late Dr. R.M. Petrie who was, for many years, Director of the Dominion Astrophysical Observatory in Victoria, B.C.

After Dr. Hogg's address, the Chant Medal was awarded to Ray Thompson of the Toronto Centre.

The delegates heard ten interesting presentations at the Paper Session. These will be published in the R.A.S.C. Journal beginning this Autumn.



Paper Session

The National Council met during the weekend and discussed, among other things the R.A.S.C. Centennial project:

a set of ten articles describing many aspects of Astronomy as it existed in Canada one hundred years ago and how it compares to today's Science. These will be published in the Autumn.

Perhaps the best feature of any assembly is the opportunity to renew old acquaintances. Among those attending this year were Ian and Adrienne McLennan of Rochester, New York, Joseph Matte of Quebec City, George Ball of Victoria, Vern Ramsey and Marie Fidler of Toronto, Henry Lee of Windsor, and Franklyn Shinn of Winnipeg.

Next year's General Assembly will be in Calgary.

OBSERVING with Ralph Haeckel

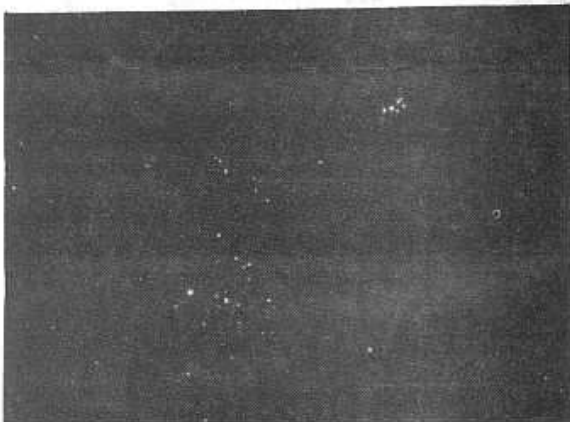


Observers at the Angus Smith Observatory

The Observers have met several times in recent weeks, in addition to carrying out their own individual observing programs. At one such meeting the topic was Mirror Grinding and Telescope Making. Due to an article published in the EDMONTON JOURNAL response was very good. Members of the public are advised, however, that assistance of this sort is given only to members of the Edmonton Centre of the Royal Astronomical Society.

In order to get our program of grinding and building underway, a unique project of obtaining mirrors for the Centre has been established. For a \$ 20.00 fee, a six-inch mirror kit will be obtained, and the purchaser will be supplied with all the necessary materials and an instructional book.

All those who are interested in obtaining a mirror in this manner should bring their money with them to the June 9th meeting. In this way a large order can be placed, and all the mirrors will arrive at once. With Summer ahead, the time for making a telescope is now.



Taurus and the Pleiades (F. Loehde)

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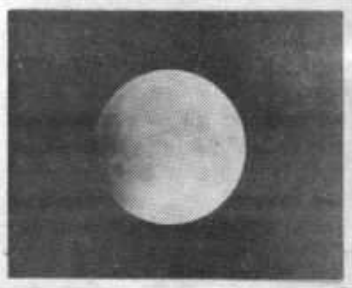
ECLIPSES

Two eclipses were seen from Edmonton in recent weeks. On April 24th a total lunar eclipse was visible. Photographs of the eclipse are shown in sequence on Page Five. Clouds obscured most of the Partial Solar Eclipse of May 9th.

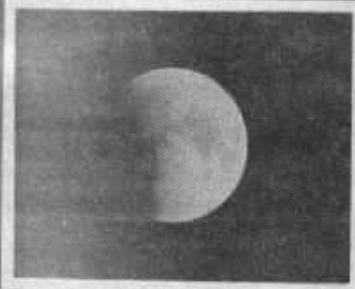


PARTIAL ECLIPSE OF SUN

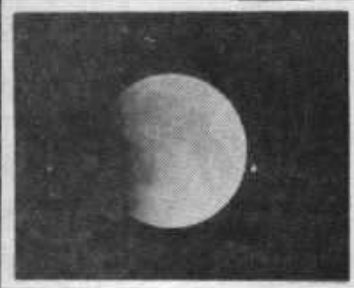
ECLIPSE OF THE MOON



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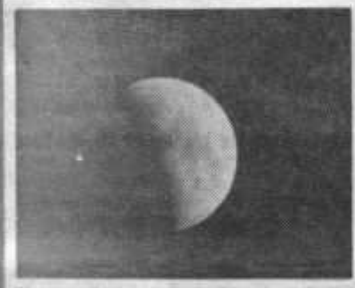
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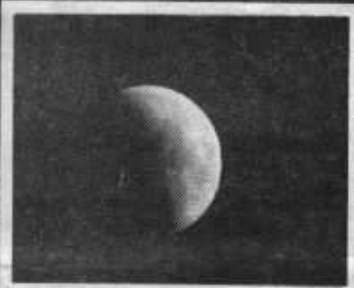
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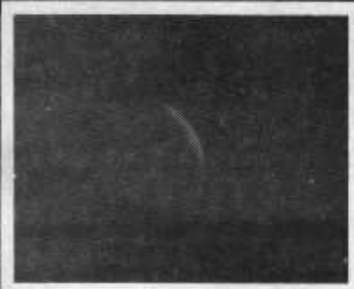
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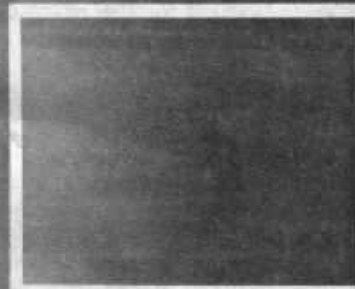


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Ted Taylor
SUNNY VA



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S I D E R I U S N U N C I U S

Normally, amateur astronomers find the summer pretty dull. Our northerly latitude complicates matters by extending twilight throughout the night from mid-May to early August. But don't despair! There's plenty of activity and some surprises as well in the late Spring and Summer sky of 1967.

PLANETS

A year ago, the sky was a total loss as far as planet-watchers were concerned. This year the situation is completely the opposite. It would be possible during June to see every planet of the solar system if you had a least a ten-inch telescope and about five hours to spend at it.

Let's take June 9th, for example; the night of our monthly meeting. The Sun sets just after 9pm. By 10pm, you should be able to see Mercury, Venus, and Jupiter fairly close together in the northwest. Venus and Jupiter will be very close, with Mercury slightly lower down. Moving towards the south along the Zodiac, you would next come to Uranus in Leo, Mars in Virgo, and Neptune in Libra. Then, by waiting until 2:30 AM, you would see Saturn rising in the east. Pluto is conveniently placed in Leo, but virtually impossible to see in all but the Smith and Planetarium telescopes (and even then, it's doubtful!). Just for good measure, we'll throw in the Moon over in the west with Jupiter, Venus, and Mercury; and Vesta, the brightest planetoid, in Libra not far from Alpha Librae (Zubenelgenubi to the uninitiated).

NOCTILUCENT CLOUD

This is the real peak of summer observing achievement. Noctilucent Cloud used to be considered very rare. Until 1963, only a handful of North Americans had ever seen it. Then after a network of observers was established, reports increased. 1964 was the best year so far, but 1967 could possibly top it.

Noctilucent cloud (night-shining) consists of tiny specks of meteoric dust which become coated with water vapour sixty to seventy miles above Earth. These newly-formed ice crystals reflect sunlight enabling us to see them, providing conditions are right. These conditions include having the Sun between six and sixteen degrees below the horizon, a clear sky, and a position in latitudes north of 50 °. Here in Edmonton we are ideally suited for observing these beautiful clouds. During the period from early June to late July, the Sun doesn't get ~~below~~ below sixteen degrees all night. So after Sunset there is a chance the Cloud will show up.

However, there doesn't seem to be any way of predicting when it will. From past experience it has been learned that by far the greatest number of sightings occur after the Summer Solstice (June 21st). In 1966, only five displays were reported by members of the Edmonton Centre. In other words, Noctilucent Cloud is still very rare. So if you start to see the characteristic blue-white streamers about an hour after Sunset in the northwest in late June or early



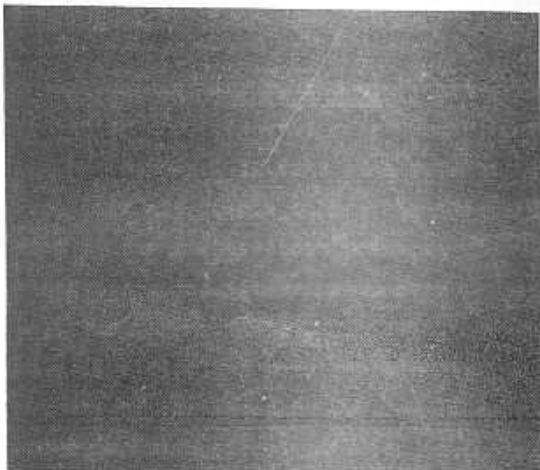
Noctilucent Cloud

July, you may count yourself as one of the lucky ones, able to see a very beautiful and mysterious phenomenon still quite puzzling in all its aspects.

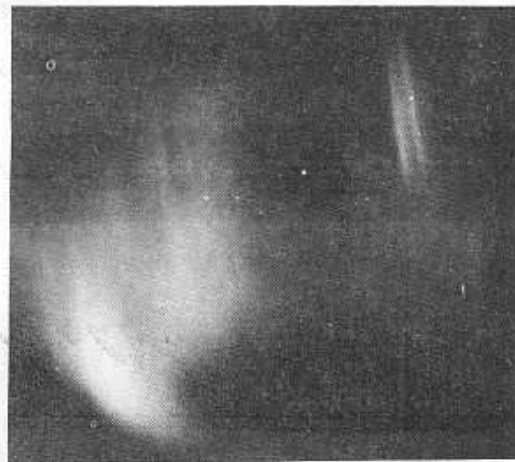
Your editor was part of a research team which investigated the clouds in Saskatoon in 1964. His summary of the program was published in SKY AND TELESCOPE magazine's April 1965 issue. From time to time the R.A.S.C. Journal has printed articles by Dr. B.W. Currie of the University of Saskatchewan's College of Atmospheric Studies on the subject. You may also refer to SCIENTIFIC AMERICAN - June, 1963 for further words on Noctilucent Cloud.

Those members who are interested in making a record of 1967 sightings should contact the editor for proper report forms. Just phone the Planetarium.

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ECHO TWO IN CASSIOPEIA



AURORA IN PERSEUS

David Roles

PAGE EIGHT

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