( The monthly newsletter of the Edmonton Centre, Royal Astronomical Society of Canada )

## CENTRE ORGANIZES FORMAL OBSERVING PROGRAM

At long last, the Edmonton Centre has put a formal observing program into operation. Following a meeting at the home of Franklin Loehde early in April, several objectives were set out for members interested in carrying out specific schedules of observing.

## Telescope Building

For those who are interested in building telescopes, either from the mirror up or just assembling, Ralph Haeckel will co-ordinate and assist in this activity. Interested people will work alone or in small groups of their own choosing. They will meet as they feel necessary. The most interesting part of this field is that the Centre has secured a ruling from the Customs people that as long as telescopes and parts are owned by the Centre, these can be imported from the United States or elsewhere, DUTY FREE.

### Lunar Occultations

Since our own Franklin Loehde is National Coordinator for Occultations; it is only natural that he should be in charge of all such observations made by Edmonton astronomers. As well he will receive reports of Aurora or Meteor observations.

#### Variable Stars

As pointed out by President Cumming at the April meeting, Variable Star timing is one of the most useful fields for amateur astronomers to take part in. Robert Allin will be in charge of coordinating variable star observers. As well, Mr. Allin will receive reports from people interested in lunar or planetary work.

#### Phone Numbers

Ralph Haeckel	455-1069
Franklin Loehde	429-1887
Robert Allin	488-7680

#### CENTENNIAL PROJECT

The Centennial project of the Centre will be to complete our 12 and a half inch F/6 Reflector for installation at the Devon Observatory. Ralph Haeckel will be in charge of finishing the mirror. There are other Centennial projects in progress. Dave Rodger has completed his. Franklin Loehde has commenced his. It is still not too late to help make this year the best in our history.

#### ECLIPSE REPORT

EDITOR'S NOTE: PICTURES OF THE APRIL 24th LUNAR ECLIPSE AND THE MAY 9th PARTIAL WILL BE PRINTED IN THE JUNE ISSUE OF STARDUST. ALL OTHER

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PICTURES OF CELESTIAL OBJECTS WILL BE INCLUDED IN THIS SPECIAL END OF THE YEAR GALA SPECIAL ISSUE. GET YOURS IN NOW !

An unusually clear sky on the morning of Monday April 25th gave many observers from the Edmonton Centre the chance to observe the Total Eclipse of the Moon. Although many people undoubtedly did see this event, we will only deal here with those who took part in organized groups under the Centre's new program mentioned on Page One.

Franklin Loehde headed a group of six people, including Walter Franiel who obtained a remarkable movie film record of the eclipse. Many still pictures were also taken.

Angus Smith had five observers in and around his observatory. Pictures taken with the  $12\frac{1}{2}$  inch were successful.

Ralph Haeckel somehow squeezed four observers into his dome. The result was spectacular! Some of the best pictures of all came from his group.

Dave Bruner was joined by two other astronomers to enjoy the viewing.

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Gary Finley headed a group of three at the Planetarium. The 10-inch F/6 there yielded some pictures of good quality.

To sum up, 21 observers from the Centre made this eclipse an Observational success.

### Eclipse of the Sun

DO NOT OBSERVE THIS ECLIPSE DIRECTLY! PROJECT THE SUN'S IMAGE ONTO A SHEET OF CARDBOARD OR PAPER.

On the morning of May 9th, the Sun will be partially eclipsed by the Moon. The spectacle begins around 6:10 AM. By 7:07 AM, the Sun will be 55% covered by the Moon. The Eclipse will end around 8:10 AM. The Planetarium has scheduled a special public observing session for the morning of the Eclipse. RASC members who wish to take advantage of this are more than welcome. Assistance in the form of telescopes will be greatly appreciated.

#### PLANETARIUM NOTES

On Tuesday evening, May 9th the premiere of "The Way of All Stars" will take place. This presentation deals with the Milky Way and the Evolution of Stars.

The City of Edmonton has ordered a Goto Venus projector to replace the current Spitz A-2 in the Planetarium Theatre. Installation is expected in early Autumn.

Gary Finley will be joining the staff of the Planetarium for the Summer. Mr. Finley, a long-time member of the Edmonton Centre, will give lectures and assist with the day-to-day operation of the building.

Dave Rodger, Planetarium Director, will be leaving Edmonton on July 26th for his new position as Curator of the Vancouver Planetarium. No successor in Edmonton is expected to be appointed until June.

A new display, entitled TEN YEARS INTO SPACE has been set up in the Planetarium Foyer. It is one of the most ambitious and striking displays ever seen at the Planetarium. It is aphotographic record of the major highlights of the last ten years in space.

#### MAY MEETING

The May meeting of the Edmonton Centre promises to be one of the most interesting in some time. The guest speakers will be Mr. Jim Wright and Mr. Bob Nelson of the Calgary Centennial Planetarium. They will be describing progress at the Calgary project with special attention on their recent training course at the Carl Zeiss/Jena factory in East Germany. The three Jena technicians who are currently in Calgary assisting with the erection of the mammoth new projector are expected to make the journey to Edmonton with Mr. Wright and Mr. Nelson.

#### LIFE ON JUPITER

A recent report from the National Aeronautics and Space Administration tells of the work done by two scientists at the Ames Research Centre near San Francisco with a simulated Jupiter atmosphere.

Their work suggests that energy transfer and resulting chemical processes in the turbulent atmosphere of the huge planet may produce organic chemicals such as the forerunner compounds of amino acids and of the living cell nuceus. These processes are similar to those believed to have produced life on Earth.

The researchers used electrical discharges (lightning) as an energy source. They found that by simulating the activity on top os Jupiter's atmosphere, which is believed to contain large amounts of Ammonia and Methane, they could produce numerous building blocks of living cells. Only water was needed to turn these building blocks into even more complex organic molecules. Simulation of a lower layer of the Jupiter atmosphere believed to contain large amounts of ammonia and methane PLUS liquid water also produced complex building blocks of living cells.

The extreme low temperatures on the top of Jupiter's atmosphere ( minus 356° F ) were duplicated and did not interefere with production of complex organic molecules.

Much evidence suggest that Earth also had an atmosphere of Ammonia, Methane, and Water four and a half billion years ago. Complex organic molecules are believed to have linked themselves continuously in combinations in the Earth's primordial oceans. Eventually a long chain molecule, able to reproduce itself, appeared, marking the origin of life. The Ames scientists believe a similar sequence of events is quite possible on Jupiter.

#### CANALS ON MARS

Astronomers around the world are spending a good deal of time right now studying Mars. Here in Edmonton, the two largest telescopes—Angus Smith's and the Planetarium's—are pointed at Mars at every opportunity. Despite the difficulty of observing this planet, a good deal of detail can be seen for scattered seconds.

On the night of April 23rd and 24th, after nearly two hours of uninterrupted viewing through the Planetarium 10-inch with a 6.6 mm lens, your editor detected a T-shaped marking south east of the polar cap. In as scientific a reaction as possible, your editor will attempt no conclusion or even speculation of the brief apparation. But it was a fascinating glimpse into the mystery of Mars.

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STARDUST IS PUBLISHED MONTHLY, EXCEPT DURING THE SUMMER BY THE EDMONTON CENTRE, ROYAL ASTRONOMICAL SOCIETY OF CANADA.

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# A FINAL REMINDER

THE REGULAR MONTHLY MEETING OF THE EDMONTON CENTRE, R.A.S.C.
WILL BE HELD MONDAY, MAY 8 AT 8:15 PM IN ROOM 262 CAMPUS TOWER. THE
SPEAKERS WILL BE JAMES WRIGHT AND ROBERT NELSON OF THE CALGARY
CENTENNIAL PLANETARIUM. EVERYONE IS WELCOME.