NATIONAL NEWSLETTER

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NICOLAUS COPERNICUS

500th Anniversary

The Royal Society of Canada is planning to celebrate the 500th-year anniversary of Nicolaus Copernicus with a one day event which will take place on November 28, 1973 in Ottawa.

The program will start with a symposium on the theme "Where do we go?". After an introductory talk "Copernicus, Scientist and Man", four prominent members of the Society (a statesman, scientist, philosopher and a writer) will analyze basic questions concerning the future of mankind in the context of present changes and doubts. In the afternoon, at the conclusion of the symposium, a major exhibit on Coperni-

In the afternoon, at the conclusion of the symposium, a major exhibit on Copernicus will be opened. The exhibit, prepared by the National Library, will be accessible to the public for several weeks.

In the evening, there will be a solemn concert in the Opera House of the National Arts Centre in which a musical work "Nicolaus Copernicus", commissioned by the NAC, will be presented. This work is now being composed by a leading Polish composer, Tadeusz Baird.

A special committee set up by the Royal Society of Canada is directing the preparation for the celebration in which the National Library and the National Arts Centre cooperate.

Texts of the talks given at the symposium will appear in a special publication issued by the Society.

General Assembly at Ottawa, May 25-27, 1973

It is a pleasure to report that the 1973 General Assembly saw each of our eighteen Centres represented – a "first" for the Society. The meetings were held at Carleton University, hosted by the Ottawa Centre. Our capital city, particularly at this time of the year, can boast of its beautiful setting, and time was allotted for participants to see some of the city and, of course, the Parliament Buildings. Along with others, the writer was interested in listening to the "Question and Answer" period of our Government at work.

Registration was held in the Tory Building of the University on Friday, May 25 and two hundred and forty persons signed in, each receiving a package containing information plus a welcome from the President of the Centre, Mrs. Mary Henderson. Members of the National Council met in the Commons Building during the afternoon and in the evening a reception and social gathering was held at the Tory Building, which afforded an excellent display area for exhibits from Centres and individuals. Another first in 1973 was the awarding of prizes, donated by ASTRO MURALS, in these two categories (see this *JOURNAL*, p. 205). During the evening we enjoyed the well-produced colour film on the Apollo 17 blastoff, made by members of the Ottawa Centre during their junket to Florida last December. To complete a delightful evening, a number of members took advantage of an invitation to visit the Centre's North Mountain Observatory to see for themselves what had been accomplished by enthusiasm, hard work and excellent cooperation.

The Session for Papers, the first half chaired by Dr. Halliday and the second by Mr.

Ken Hewitt-White, was also held in the Tory Building on Saturday, May 26, at 9:00 a.m. The list of papers follows:

"Colour Astrophotography on a Small Budget" by G. R. Winder, Niagara Falls Centre (read by Hugh Maclean).

"Al-Biruni: 793–1048" by A. Vibert Douglas, Kingston Centre.

"Astronomy's Neglected Child: The Long-Focus Refractor" by Richard Berry, Toronto Centre.

"The 20.5-inch Buchroeder Catadioptric Telescope of the Montreal Centre, R.A.S.C." by John Allcock, Montreal Centre.

"Astronomy at the Summer Camp at Port au Saumon, P.Q." by Roger Gagnon, Centre d'Astronomie de Montreal.

"Activities at North Mountain Observatory" by F. P. Lossing, Ottawa Centre.

"Highlights of Astronomy Club Day" by Andreas Gada, Toronto Centre.

"An Orrery in Use in Canada Since 1835" by Rolland Noël de Tilly, Centre d'Astronomie de Montreal.

"Mars, the Old View and the New Concept, a Contrast" by Peter M. Millman, Ottawa Centre.

"An Easy Graph for the Figure of a Telescope Mirror" by Peter Andreae, London Centre.

"Observations of Sunspot Motions and Related Phenomena, 1972" by Rob Pike, Toronto Centre.

"Construction of a Ritchey-Chretien Telescope" by Hery Coïa, Centre d'Astronomie de Montreal.

"The Ottawa River Solar Observatory" by V. Gaizauskas, Ottawa Centre.

For those not wishing to participate in the foregoing, a bus tour of Ottawa was offered. The Festival of Tulips, a marvellous display of nature's beauty, will long be remembered by those who took advantage of this trip. The usual group photograph was taken immediately after the Session for Papers and copies were available before the end of the meetings.

The Annual Meeting of the Society took place after lunch on Saturday and the account appears in this issue of the *JOURNAL*. While a meeting of the new Council took place, other members were delighted with the tour of the Museum of Science and Technology where we were pleased to see a special display honouring Copernicus, the famous tilted kitchen, communications through the years as well as working displays in the Physics pavilion, old railway coaches, steam locomotives and early aircraft.

It was a bit of a rush to get back for the Society dinner, tendered by the Government of the Province of Ontario. The speaker on this occasion was Dr. Frank D. Drake, Cornell University, and the 250 persons present were spellbound by his talk on "Extra-Terrestrial Intelligence". Guests at the Head Table were welcomed and introduced by our President, Dr. J. L. Locke. These were: Dr. and Mrs. Ian Halliday, Mr. and Mrs. M. M. Thomson, Dr. and Mrs. Ian Henderson, Dr. A. Vibert Douglas, Mrs. J. L. Locke, Mr. and Mrs. S. B. Handelman, Dr. J. D. Fernie, Mr. C. E. Hodgson and Dr. and Mrs. Drake. Mr. Handelman, the member of the Legislature of Ontario for Carleton, brought greetings on behalf of the Government of Ontario. A warm welcome was also extended to Mrs. Werner Grantner and her son Eric. Mrs. Grantner is the sister of Lady Ryle, whose husband is the Astronomer Royal and a newly-elected Honorary Member of the Society. Dr. Fred P. Lossing, nominated by the members of the Ottawa Centre, was presented with the Service Award at the time of the banquet (see citation on p. 208 of this JOURNAL). Informal gatherings were enjoyed after dinner back at the residence.

Good weather prevailed for the Sunday tours to various installations – the Bell Northern Research Centre, Communications Research Centre (Satellites) and the N.R.C. Solar Observatory – and here Murphy's Law took over – no sun! Dr. Vic Gaizauskas, the Director, made everyone welcome and explained the workings of the solar instrument. This Observatory has a lovely setting on the banks of the Ottawa River and the best box lunch ever was enjoyed on the grounds where guests had time to stroll around for informal chatting. Two busloads took advantage of these tours and we were fortunate on our bus to have Barry Mathews to point out places of interest en route.

The proposed tour of the N.R.C. Laboratories scheduled for Monday morning was cancelled and the weatherman commiserated with us by opening the heavens. However, this couldn't dampen the delight of the participants of the 1973 General Assembly and we thank all the members of the Ottawa Centre for their warm and enthusiastic hosting of the 1973 meetings. May we meet again in 1974!

MARIE (FIDLER) LITCHINSKY

Activities of the Centres

The reports from the Centres, presented at the General Assembly, were of great interest and variety. Following are some excerpts.

Halifax Centre

The Halifax Centre has enjoyed a very successful year. We held regular meetings through the winter and spring, and following a summer recess we headed into an edifying fall, winter, and spring season.

In June 1972, two committees were set up. The first to study ways and means of building a telescope for the Centre's use. The second committee had a more pressing time schedule to meet. It was set up to design a battle plan for the July 10th solar eclipse.

The telescope committee secured several varied options for the construction of a mount, the optics and a trailer, as it was intended to be portable yet be of aperture 12½" or larger. Funds were raised for the telescope to the tune of \$200.00. The optics were ordered and delivered April last. However, in the mean time, for financial and experience reasons, the telescope project was handed over to Dalhousie University for completion.

After two meetings of the Eclipse committee, it was decided that the best idea would be that the members spread themselves out over the entire eclipse path through the Atlantic Provinces. By adopting this policy, we were sure that someone would be successful in having clear skies.

The only member to be clouded out, and then only for the complete totality, was our President, Dr. Cunningham. Some members reported minor cloud difficulties in Antigonish. Cirrus clouds obstructed the greater extent of the solar corona at Arisaig. Members in P.E.I. and other parts of Nova Scotia reported crystal clear skies.

Our monthly meetings have seen a slow but steady increase in attendance. The actual figures are 15 people in January '72 and 45 people in April '73. This trend appears to be continuing. The increase in our popularity is also reflected, to some extent, in the membership. In September 1972, we had 23 paid members. By the May meeting there were 38 paid members. Currently we are averaging 2 new members per meeting.

Perhaps the greatest highlight of the past year's activities was our visit by Dr. W. Iwanoska on January 3rd. This was her first stop in Canada. Her first audience comprised some 200 people from the Halifax Centre, the Nova Scotia Science Association and members of the Halifax Polish Community.

Looking to the future of the Halifax Centre, we plan an amateur telescope making program for the summer months. With Dr. Murry Cunningham at the helm our prospects can only look bright!

PETER EDWARDS

La Société d'Astronomie de Montréal

Le Centre d'Astronomie de Montréal is an organization for the French-speaking population.

In 1972, the Officers and Council had 11 meetings. Our Society publishes every year, the *ANNUAIRE ASTRONOMIQUE DE L'AMATEUR* which is the counterpart of the *OBSERVER'S HANDBOOK*, but published in French. Special attention is given to the planetary co-ordinates.

A monthly journal is published under the title of le *QUEBEC ASTRONOMIQUE* and sent by mail to the various centres of the Royal Astronomical Society of Canada. We also have fifty individual subscribers to this *JOURNAL*.

Our Society holds a weekly meeting at the Botanical Garden, every Tuesday evening.

We had 48 meetings in all; 11 lectures given by special guests usually university teachers or graduates, and 36 by members. The General Assembly was held on Nov. 3rd 1971 and a series of 27 sessions were given to the new members; the average number of persons was 90.

We also had every Tuesday evening a laboratory meeting for the members who

wished to polish their own mirrors under the guidance of efficient experts.

On the 13th of May 1972, a banquet was given to celebrate the 25th anniversary of the foundation of the Montreal Centre. On this occasion, a trophy "The Silver Star", was awarded for the first time, and won by Mr. Jean Valliers, editor of the *ANNUAIRE ASTRONOMIQUE DE L'AMATEUR*.

In 1972, 14 meetings were organized in various schools summer camps, and various groups outside Montreal, plus our popular evening when 5,000 persons congregated at

the Botanical Garden.

The development of astronomy in the Province of Quebec is on the upgrade, various schools, and universities are interested, various clubs and groups are being formed. The aim of the Societe d'Astronomie de Montreal, is to cooperate and also to bring together the various groups for a better understanding.

Kingston Centre

From September, 1972 to March, 1973, the Kingston Centre had eight meetings with varied activities. The films presented to our members were: "The Universe," "Our Mr. Sun," "Fields of Space" and "Radio Sky."

The Centre was grateful to Dr. A. H. Bridle Ph.D., G. H. Chapman B.Sc. and D. S. Retallack B.Sc., all of the Queen's University Physics Department, who delivered lectures with topics ranging from Interstellar Space Travel to Extra-Galactic X-Ray Sources.

An Observers' Group was established and held regular sessions at the Queen's University Observatory which houses a 16-inch Cassegrain telescope.

It is the Centre's aim that more residents of Kingston will become involved and efforts are being made to see that this aim is achieved.

GEOFFREY J. R. WYGHT

Windsor Centre

For the past two years, the Executive of the Windsor Centre has been student oriented. In general, the move has high merit in that it has attracted members of an age group which will help sustain the activities of the Centre for some time to come, and programmes are geared to their level and needs.

So far this year, two Council meetings have been held and monthly meeting programmes have been developed by the student executives on a variety of noteworthy subjects such as "Marsography", "Life Bioscience", and "Universal Gravitation", augmented with the latest films or slides from the Audio-Visual department of the Windsor Board of Education and other sources.

In addition, this year, a Director of Observational Activities has been created, correlating all related activities of Astro-Photography, mapping, drawing, optical observing, and meteor shower counting.

A special lecture was held under the joint auspices of the Windsor Centre, R.A.S.C. and the Department of Physics, University of Windsor by visiting Prof. Dr. W. Iwanowska, commemorating the 500th Anniversary of the Birth of Nicholas Copernicus.

A field trip to the Ann Arbor Michigan Radio Telescope site is being planned for the month of June with Dr. O. C. Mohler.

The Windsor Centre has been favoured in being consulted for the arrangements in installing a Student Tyde Observatory at St. Clair College, Windsor. A site has been tentatively selected on campus.

The Windsor Centre expects an eventful conclusion to the programmes for the balance of the year, at which time a regular resumé from the secretary will be duly submitted.

HENRY LEE

Edmonton Centre

Sept. 15/72 Observational Extravaganza at the University of Alberta Devon Observing Site.

Oct. 16/72 Annual meeting with Election of new Executive and Council. Reports of solar eclipse expeditions on July 10, 1972 by:

Franklin and Audrey Loehde at Gaspé Peninsula

David Ellis at Coppermine, N.W.T.

Paul Deans, Gary Finlay, Prof. E. S. Keeping and David Roles at Tuktoyaktuk, N.W.T.

Nov. 10/72 Annual banquet at the Corona Hotel

Guest speaker: Mrs. Marie Litchinsky: "Random Thoughts of the R.A.S.C."

McBain Trophy for Astrophotography awarded to Paul Deans

Establishment of the "Angus Smith Memorial Award".

Dec. 11/72 Brian Dowling and Keith Enhagen: A silvering demonstration,

Film: "Fields of Space."

Jan. 8/73 Ken Hewitt-White "Meteors and Meteor showers."

Jan. 28/73 Dr. Wilhelmina Iwanowska "Nicolas Copernicus and modern science."

Feb. 12/73 Mrs. C. Chevraux: "The Iron Creek meteorite."

Messrs. Parker, Chrapko and Peterson: "Observing – the amateur's view of the universe."

March 12/73 Davis Ellis: "Vagaries of climate."

April 9/73 Dr. L. L. Cogger: "The Arecibo Radio Telescope".

May 14/73 Paul Deans and Anthony White: "Planning for two expeditions to Africa for the June 30th total solar eclipse."

NASA film: "Apollo 15, Mountains of the Moon."

In March an observers' group was re-established, which is meeting on a weekly basis at the Queen Elizabeth Planetarium, and has organized several observing sessions at the Planetarium and outside the city. Two of our members will be reporting their experiences at the June 30 African Eclipse.

F. LOEHDE

Winnipeg Centre

Because we were involved in the Nicolaus Copernicus Celebrations of the 500th anniversary of his birth, we were very fortunate in having Dr. W. Iwanowska, Director of the Observatory in Turen, Poland, as our guest speaker in January. Many of our members actively co-operated with the Canadian Polish Committee in charge of the various events connected with the Copernicus Celebrations.

For our February meeting we had Dr. Martin Samoiloff speak to us on his favourite

subject - "Biology".

In March, Mr. Jack Newton, our immediate Past President, gave an illustrated talk on Astrophotography. This, of course, is a very popular discipline and drew a large attendance.

April meeting was "Junior Night", but we also had the pleasure of seeing the film, "The Stonehenge Mystery" based on the book "Stonehenge Decoded" by Prof. Gerald Hawkins. The second part of the meeting was turned over to the Junior members under the direction of Mr. John Nunderlich. Three Juniors gave excellent talks on their favourite subjects, i.e. "Planets" by Alan Dyer, "Cosmology" by Larry Frostiac and "Meteors" by Bill Krosney.

At our May meeting the special speaker was Dr. George Lubinski on "Cosmology and the Brahman Time Scale", well ilustrated. At this meeting the "Centennial Observatory" drawing took place. All three prizes (Colour T.V. Console and Colour T.V. Portables) being won by non-members.

A brief talk on the *HANDBOOK* is given at the commencement of our meetings, which is proving most instructive.

Our officers have also been busy giving courses of instruction not only at schools, but to such groups as C.G.I.T., Boy Scouts and Guides.

Our various Observational Groups, under excellent individual leadership, hold regular group meetings for observing and instruction.

During the summer and fall months, many of our members set up their telescopes

in parks and other suitable observational points for the general public. These are well received and result, as a rule, in an increase in our membership.

Our big project, of course, is our Centennial Observatory which we hope to have completed in 1974, Winnipeg's Centennial Year.

DEL STEVENS

Hamilton Centre

Interesting monthly lectures are a highlight of the Hamilton Centre's programme. However, there are many other activities for the interest and participation of the members. The discussion group meets monthly and its members give short talks, often on controversial topics, followed by a general discussion.

The Centre's newsletter, ORBIT, has become a monthly publication. In content, it

often appears more like a journal of amateur astronomy than a newsletter.

A new programme of observing has begun, employing a "partner-system." Each experienced observer has been paired off with one who is inexperienced. In this way, the education of the inexperienced is enhanced, and the couple spur each other on to observe the skies.

Progress is being made on the Centre's observatory project, and it is hoped that a ground-breaking ceremony can be held this summer.

The Annual Picnic will be staged for us by the Niagara Falls Centre again. The grudge baseball games will be the highlight of the affair.

K. CHILTON

St. John's Centre

Our best project this year, if it succeeds, will be the publication of a pamphlet on stars and observing, to be issued soon by the Provincial Parks Division. Forty thousand copies are to be placed in more than sixty provincial parks, and we plan to follow this up with visits to the nearer parks this summer, equipped of course, with binoculars and telescopes.

A memorial plaque has been placed on the Ruth Northcott telescope, which we were fortunate to obtain through the interest and efforts of Marie Litchinsky and Ken Chilton.

At other meetings we showed slides and films, did a Star of Bethlehem show, heard a talk on occultations and pro and con versions of UFOs, participated in an Open House sponsored by the College of Fisheries, and heard an interesting talk on Skylab by John Hale of the NASA Satellite Tracking Station near St. John's. This is one of the few satellite stations in the world to be tracking this mission.

Our monthly newsletter is expanding, almost with each issue, and we are now sending copies to all other centres.

D. Russell

Toronto Centre

The year 1972 has been an eventful one for the members of Toronto Centre. The Centre is proceeding with incorporation as the first step in the acquisition of an observatory. A site has been chosen in the Albion Hills Conservation Area, and negotiations are in progress with the Metropolitan Toronto Regional Conservation Authority.

About 60 members of the Centre travelled to Bonaventure, P.Q. to observe the 10 July 1972, solar eclipse. Although the eclipse was rained out, the trip was an enjoyable

experience for all.

Andreas Gada chaired the Astronomy Club Day programme which was held on Oct. 28, 1972. This year's event was quite successful, with about 80 delegates attending. Proceedings were held at the McLaughlin Planetarium, the Ontario Science Centre and the Keele campus of York University. The guest speaker was Dr. Helen Hogg.

The Observational Activities Committee was reorganised under Ray Thompson late in the year. The variable star section co-ordinated by Chris Smith has been very active.

The Centre prepared an exhibit as part of the 60th anniversary celebrations of the Royal Ontario Museum. Fred Troyer chaired the committee which assembled the displays. Special thanks are due to Dr. Helen Hogg for her loan of the Hogg two-star

sextant, and to Mr. Moody Kalbfleisch for the loan of his 12½-inch telescope, which made up the nucleus of the display.

SCOPE continued to keep members well informed of Centre events. Under Editor Jim

Cobban, the year's operation showed the first budget surplus in a number of years.

The Study Group and the Public Star Night Committee chaired by Ian McGregor and Ralph Chou respectively, continued in their programmes to introduce astronomy to the citizens of the Metropolitan Toronto region; while the Optical Workshop under George Foster, and later Bill Weller, has been particularly active.

R. CHOU

Saskatoon Centre

Both General Meetings and Executive Meetings have been held regularly except in August when the Annual Field Outing took the place of one of the former.

The paid-up membership of the Centre for 1973 at the latest assessment totalled 53 persons. There has been a marked upsurge of local public interest in the subject of astronomy. The signed attendance at the Observatory during 1972 exceeded 7100. One very successful venture was the opening of the Observatory during the July 1972 solar

eclipse when some 700 people came to view the projected image of the sun which was about 2/3 obscured at Saskatoon.

The Annual Field Outing was very successful. It was held on the night of the 11th–12th of August. The site was well to the west of Saskatoon and was made available through the kindness of Mr. and Mrs. Auckland who acted as hosts to the party.

Between 25 and 30 members attended and in addition to general viewing, a meteor count of the Perseid shower was carried out. There were sightings of 100 meteors including 4 sporadics.

In the fall, several Activity Groups were started:

- 1. Fundamentals of Astronomy.
- 2. Astrophotography.
- 3. Telescope making.

4. Messier and Variable Star observing.

These Activity Groups together with the meetings and organized tours for school groups and others have ensured that the Observatory is open and operating most nights, weather permitting.

A lecture series headed "The Sky Above" was given at the Saskatoon Public Library's

We were very pleased and fortunate to hear in this series about "The Lunar Surface" from Dr. Ian Halliday when he visited us.

As a Centre, we are very proud of Dr. B. W. Currie, our Honorary President, who was named a Companion of the Order of Canada in recognition of his outstanding services on the University of Saskatchewan campus as a scientist, teacher, administrator and humanist.

Our past Secretary, Professor J. E. Kennedy, has been pursuing his special interest in the field of Astronomical History. In the course of these studies he visited the New Brunswick Museum at Saint John and also some interesting historical sites in Canada.

F. A. HOLDEN

Victoria Centre

Membership has been maintained steadily. During the season seven regular meetings were held.

In November the regular meeting was combined with that of the Vancouver Centre, at which the National President, Dr. J. L. Locke was the lecturer; this event was followed by a demonstration at the Vancouver Planetarium.

During his visit to Victoria, Dr. A. D. Thackeray, of South Africa, addressed one of the "Summer Evenings with the Stars" lecture series, another feature of which was a visit to the Dominion Astrophysical Observatory.

For some years past there has been a need to organize a telescope making group, but no suitable accommodation could be found. Such accommodation has now been provided by the University of Victoria with no cost to the Centre.

In July and August, when the D.A.O. is open to visitors on Saturday evenings,

members of the Centre are in attendance to promote interest, and publicize the activities of the R.A.S.C.

The Department of Energy, Mines and Resources provided supplies of attractive folders which have been of very substantial interest.

E. E. BRIDGEN

Montreal Centre

The Montreal Centre held eight formal monthly lecture meetings at McGill University through 1972/73.

The Centre's Observatory located behind Molson's stadium was opened to the public every Saturday night regardless of the weather. At these meetings, the program consisted of a short lecture followed by discussion and/or observations at the telescope depending on the weather. In addition, several school classes and other interested groups visited the observatory on other nights.

The highlight of the year was the purchase of an 8" Celestron with accessories to

replace the 6" refractor that had been stolen.

We also purchased an astrographic camera equipped with a 305 mm. f.l. f/2.5 Kodak Aero-Ektar lens and a $3\frac{1}{4} \times 4\frac{1}{4}$ plate holder back.

A grinding tool for the Centre's 20.5" mirror was finally received and grinding should commence shortly.

All these activities plus Board meetings, newsletter production, work parties, etc. have kept our group quite busy throughout this period and it seems that this trend will continue throughout the summer and on into the next year.

CONSTANTINE PAPACOSMAS

News from the Bahamas

The dedication of the Freeport Observatory in the Bahamas was scheduled, for the spring of 1973.

This was quite an achievement, for the Bahamas Astronomical Society was founded only one year previously. At the founding in 1971, several scientists were present, from Canada and the United States, including the Director of the D.D.O., Dr. D. A. MacRae.

Since its inception the Society has carried out an ambitious school programme, providing astronomical instruction for hundreds of students through field trips, lectures, and films.

The general public has not been neglected, and regular observing sessions are scheduled at the Observatory as well as lectures of a popular nature.

We are sure that any visitors from this country to the Bahamas would be most welcome to tour the Freeport Society.

A Starry Special

"Star crazy weekend" – A camp-out in London with food, fun, walks, talks, and stars (Weather permitting) from Friday evening Aug. 24 to Sunday Aug. 26. For further information write to Peter Andreae RR#3 London N6A 4B7 Ontario.

Sam Litchinsky

As this issue went to press the Editors were deeply saddened by news of the passing on August 1, 1973, of one of the Society's most devoted members. Sam Litchinsky was a long-time member of the Calgary Centre, which he represented on National Council for many years, and a recipient of the Society's Service Award. To his wife, Marie, and his family, we extend the Society's sincerest sympathy.

A complete obituary will appear in a subsequent issue.