



Supplement to the **JOURNAL**

of the **ROYAL ASTRONOMICAL**  
**SOCIETY** of **CANADA**

**ANNUAL REPORT 1972**

APRIL 1973

## REPORT OF THE NATIONAL PRESIDENT

Astronomy continues to occupy a preeminent position among the natural sciences. In 1972 its discoveries once again captured the attention and imagination not only of astronomers but of scientists in other fields and the general public as well. Today, more people than ever are wanting to have some understanding of the universe in which they live and this desire is most clearly demonstrated in our schools and universities. At a time when interest in other branches of the physical sciences is lagging, students are pressing our educational institutions to provide more courses in astronomy. In the future, as in the past, the Royal Astronomical Society will have an important part to play in the educational process. Individual Centres, in particular, will have important roles within their own communities.

Canadian astronomers made important contributions to their science in 1972. Perhaps the most exciting discovery was that made by Professor P. C. Gregory of the University of Toronto using the 46-metre radio telescope of the Algonquin Radio Observatory. Dr. Gregory observed a remarkable outburst in the radio emission from an X-ray source in the constellation of Cygnus X-3.

Canadian astronomers continued to stress their need for a large optical telescope and at year's end success appeared nearer. In December the Canadian government authorized the National Research Council, on behalf of the astronomical community, to negotiate with France the terms of a possible agreement to construct jointly a 3.6 metre telescope on Mauna Kea, Hawaii. It is hoped that the negotiated agreement will be submitted for approval consideration early in 1973.

Society members had an eventful year. A highly successful General Assembly was held May 19 to 22 in Vancouver, organized jointly by the Vancouver and Victoria Centres. It was encouraging to see so many eastern members in attendance; the great distances between Centres represents a major obstacle for our Society and broad representation at our General Assemblies is therefore a healthy sign. Following the General Assembly there was great activity in preparations to observe the total eclipse of the sun of 10 July – the so-called Alcan eclipse. Eastern members distributed themselves mainly throughout Quebec and the Maritimes. Members of the Calgary and Winnipeg Centres showed great resourcefulness in organizing flights to Tuktoyaktuk and Baker Lake. Both of these expeditions experienced good observing conditions.

During the year we lost the services of our capable Executive Secretary, Mrs. Marie Fidler. The loss was not entirely an unhappy one since she resigned to become Mrs. Sam Litchinsky, wife of a prominent Calgary member. In thanking her for her many years of faithful service as Executive Secretary I wish to acknowledge her continuing contributions to the Society. From Calgary Mrs. Litchinsky is carrying on as assistant to the Editor of the Journal. The position of Executive Secretary is now being capably filled by Miss Rosemary Freeman.

As we look forward to a new year of increased activity, I wish to express my personal thanks to all those who have worked so hard for the good of the Society. My thanks particularly to the Executive Secretary and to all members of the National Council for their valuable assistance.

J. L. Locke, Ph.D., *National President*

## REPORT OF THE NATIONAL SECRETARY

Canadian astronomers scored another first in 1972 when Dr. Philip Gregory made an almost accidental discovery of a remarkable radio outburst of Cygnus X-3 on September 23rd. Many other observatories were immediately alerted and the phenomenon has been kept under constant surveillance. However, the nature of the event or events still remains puzzling.

During the year the Halifax Centre opened the Burke-Gaffney Observatory, while Toronto Centre has completed an agreement with the Metropolitan Toronto and Region Conservation Authority to establish an observatory at the Albion Hills Recreation Area. The Montreal Centre, too, hopes to begin construction of a 20 inch Buchroeder telescope.

The reports of the eighteen centres of the Society spanning Canada from coast to coast, which follow, indicate a most virulent Society and record many accomplishments to be proud of.

During the year well attended meetings of the Council were held on January 29th, May 20th and September 16th. The Annual Meeting was held in Vancouver in conjunction with the General Assembly of the Society.

The Society's membership reached 2584, including 145 Life Members. The record of members as of September 30th is listed below and compares favourably with a total of 2554 at the same date in 1971:—

Calgary	44	Ottawa	144
Edmonton	52	Quebec	90
Halifax	26	St. John's	11
Hamilton	95	Saskatoon	69
Kingston	11	Toronto	800
London	38	Vancouver	123
Montreal	145	Victoria	73
La Société D'Astronomie	77	Windsor	38
Niagara Falls	28	Winnipeg	104
<b>Unattached</b>			
Canada	168	Foreign	18
United States	416	Honorary	14

Almost one hundred members of the Society attended the well planned General Assembly jointly organized by the Vancouver and Victoria Centres and held in Vancouver with a one day visit to Victoria and the Dominion Astrophysical Observatory. Complete details of the Assembly were published in the June issue of the JOURNAL.

Dr. Ian Halliday, as Chairman of the Editing Committee, and Editor, maintained the excellent reputation of the JOURNAL. Special thanks are due to Reverend Norman Green and his Editorial Board for the interesting Newsletter published as a part of each JOURNAL. The OBSERVER'S HANDBOOK, under the direction of Dr. John R. Percy, was published for the 64th year.

Mrs. Marie Fidler, who had served the Society as Executive Secretary with dedication and distinction for many years resigned in January. She was married in April to Sam Litchinsky of the Calgary Centre and now resides in Calgary. At the General Assembly in Vancouver she was honoured when the Council unanimously presented her with a Life Membership in the Society. Miss Rosemary Freeman was appointed to fill the vacancy and took up her duties as Executive Secretary in early April.

The Total Solar Eclipse of July 10th was observed in many parts of Canada. A special group of members from the Calgary, Edmonton, Vancouver and Saskatoon Centres flew to Tuktoyaktuk in the North West Territories and were rewarded with a perfect sky. Large parties from Toronto, Hamilton and Montreal chose points in the Gaspé region of Quebec but were disappointed and some experienced rain. Members from Ottawa and other Centres as well as many visitors from the United States chose Prince Edward Island and in general experienced good viewing conditions. Winnipeg members journeyed to Baker Lake. When ground conditions appeared unfavourable, the groups hurriedly boarded their chartered plane and had a

brehtaking view from above the clouds. A party from the St. John's Centre had an excellent view at Antigonish in Nova Scotia.

C. E. Hodgson, *Secretary*

### LIBRARIAN'S REPORT

Since this report, the last from me as librarian, marks the end of a three year term of office, I hope you will forgive me if it seems more rambling than is customary.

Over a period spanning more than eighty years, the library has grown erratically, largely as a result of generous donations from members, until it now includes well over a thousand different titles, countless journals, approximately six hundred 35 mm slides and a half dozen 16 mm films. It is a collection in which, I believe, all members should take considerable pride. I am pleased to say growing numbers from all parts of the country are using our mailing service in addition to those who visit the library personally.

Being librarian has been both an enriching and a frustrating experience. I will try to explain, even the routine work has its rewards but the frustration comes from the realization that there remains so much undone which ought to be dealt with and so much to be read which cannot even be scanned.

Opening the mail is the main time-consumer. Roughly a carton full every week, it contains advertisements from publishers, journals and books and borrowing requests from members. The latter are generally handled by our executive secretary, Ms. Freeman, without whose efficient help I would have been swamped. The incoming journals are all stamped as belonging to the Society and are either turned over to the David Dunlap Library or are filed away - no easy feat when there is virtually no remaining shelf space. Then for each new book needing to be shelved, six labels or cards are prepared. Careless borrowers with overdue books need to be pursued. Scanning the publishers lists and advertisements is an education in itself. Besides trying to make decisions as to which books might make suitable additions, it is sometimes fascinating to flip through these catalogues. For instance, did you know that there is a 600-page book on the manufacture of ice cream and perhaps you didn't realize that Charlie Brown is available in Spanish.

In addition to these aspects of my duties, I have enjoyed being a member of Council, to have met many fine people, and to have seen first hand how the Society operates.

I hope I will be able to be of benefit to the Society in the years ahead in an unofficial way.

During my term of office I have found many projects which interest me but which have gone undone because the time I was prepared to spend was consumed by routine. Our back issues of the *Journal* desperately need sorting out, our periodicals collection should be organized, instruments belonging to the Society should be tracked down and our old minutes, correspondence, etc., should be carefully scrutinized and stored.

These are a few of many ideas to which I hope I can devote some time in the future.

R. P. Broughton, *Librarian*

## CALGARY CENTRE

The Calgary Centre held nine regular meetings and ten council meetings in the year 1972. The regular meetings and Council meetings were held at the Calgary Centennial Planetarium, with two exceptions; the October meeting was held at the University of Calgary's Observatory near Priddis, Alberta, while the December banquet meeting was held at the Carriage House Motor Inn.

The Speakers and subjects were:

- January Student Forum; Norbert Schlinker, Comets and the Three Body Problem, Charles Haber, Neutron Stars, Terry Gaetz, Geometry of the Universe.
- February Dr. H. Wieser; Spectroscopy, The Astronomer's Tool.
- March Dr. O. George Fritz, Jr., "Witchcraft and Magic."
- April Dr. J. B. Rice; "Solar Prominences."
- May Dr. J. Schaefer; "General Relativity."
- September Calgary Members Report on the Solar Eclipse Trip to Tuktoyaktuk
- October Dr. T. A. Clark and Dr. E. F. Milone, University of Calgary, Rothney Astrophysical Observatory Field Trips.
- December Annual Banquet; Marie Litchinsky and the Royal Astronomical Society of Canada.

The Calgary Centre had two outstanding events occur in 1972. The first event was the spiriting away from the National office of Marie Fidler and bringing her to Calgary as Mrs. Sam Litchinsky. The second event was the ultra-successful Solar Eclipse trip to Tuktoyaktuk, N.W.T., which was organized by John Findlay.

R. A. Nelson, *Secretary*

## EDMONTON CENTRE

The regular meetings of the Edmonton Centre were held in the Physics Building of the University of Alberta. The first meeting was held on October 18, at which time the new executive and council were elected. The Centre's Annual Banquet was held on November 8 at the Faculty Club of the University of Alberta. At this banquet, Mr. Robert Paul was presented with the President's Award for Observational Activities. Speakers and their topics at the eight regular meetings were as follows:

- October David Ellis: "The Near-by Stars - A Nondescript Lot?"; Film: "National Film Board of Mars"
- November Annual Banquet; G. Rostoker, Ph.D.; "The Northern Lights, Violence in the Sky"
- December John Rice, Ph.D.: "Solar Prominences"
- January Anthony Whyte: "The Development of American Rockets from A-F"
- February David Routledge, Ph.D.: "Decametric Radio Astronomy"
- March Gary Stasiuk: "Planetaria, Past and Future"
- April Sigmund Weiser: "Let Now the Astrologer"
- May Eclipse Meeting: Mrs. J. Rusch presented an article written by Dr. D.P. Hube entitled "Solar Eclipses"; David Ellis spoke in regard to solar eclipses and showed a film of one observed in Quebec plus slides of a total eclipse taken in North Carolina; Mrs. Ann Stasiuk spoke on "How to Photograph Eclipses"; Paul Deans reviewed the plans for the eclipse trip; Gary Finlay outlined his photographic plans for this trip and Franklin Loehde told of his plans to view the eclipse in Gaspé, P.Q.

Mr. and Mrs. Franklin Loehde represented the Centre at the General Assembly of the Society, held in Vancouver.

Members and friends of the Edmonton Centre were saddened to learn of the passing of Mr. Angus Smith in June. He had been an active member in the executive and council for many years and his interest and support will be greatly missed.

The Devon Observatory was the site for the picnic in June plus an observing session, with a second observing night held on September 15. The following members travelled to various points in Canada to observe the July 10 total eclipse of the sun: Paul Deans, David Ellis, Gary Finlay, Prof. E. S. Keeping, David Roles and Audrey and Franklin Loehde.

(Mrs. ) Yni Ebbers, *Secretary*

## HALIFAX CENTRE

Regular meetings of the Halifax Centre were held in the lecture theatre of the Nova Scotia Museum of Science, in Halifax. Speakers and subjects were:—

- January 21 Dr. John Farley: "Stonehenge"
- February 18 Miss Mary King: "Ancient Astronomical Observatories"
- March 17 Mr. Howard Freeland: "The Solar Wind"
- June 16 Film entitled "Astrophysics"
- July Eclipse trips were organized and the results were communicated by Dr. Murray Cunningham on CBC television, including a movie of the eclipse.
- October 20 Mr. Walter Zukauskas: "Other Planetary Systems", and Dr. Peter Wanger-sky: "The Origin of Life"
- November 17 Mr. Chris Purcell: "Telescopes and Mirror Grinding"
- December 8 Dr. Murray Cunningham: "A Tale of Two Stars; 4 B.C. and 1054 A.D."

An observing night was scheduled two weeks after each meeting, with a good turnout on clear nights. This past year has seen a significant growth in "Nova Notes," the monthly publication of the Halifax Centre. We look forward to renewed interest and an exciting year in the Halifax area.

David L. DuPuy, *Secretary*

## HAMILTON CENTRE

The Hamilton Centre was again very active this year with many old and new programmes. The regular meetings were held at McMaster University and were as follows:—

- January Annual meeting with elections
- February "The Motions of the Earth" – a descriptive audio-visual lesson on the motions of the earth by G. Thede and L. V. Powis
- March "This Cosmic Age" by N. Green
- April Dr. R. Garrison on the new Observatory in Chile with some remarkable photographs in colour using an ordinary SLR.
- May "New discoveries on Mars" by T. Dickenson
- October B. Fox and L. V. Powis on the Vancouver General Assembly
- November "Barnard's Star" by Prof. W. McCallion
- December "Dead and Dying Stars" by Dr. T. Bolton

Hamilton also hosted the second session of the Niagara Frontier Council of Amateur Astronomical Associations, a group of clubs in the U.S. and Canada who get together to exchange information.

Again this year the Annual picnic was held in June with our friend the Niagara Falls Centre being our guests. This was a good meeting, but due to rain we could not play the baseball

game and win back our pride. They beat us last year. The prize was won by the Hamilton Centre by default.

The Centre went on a very interesting trip to the McLaughlin Planetarium for the programme "On the Changes of the Seasons" narrated by Mr. Green. Later, Mr. H. Creighton gave a special programme on the mysteries of precession.

At the Annual Meeting of January, 1973, Mr. G. A. Thede was the first recipient of the "William A. Fautley Award" for 1972, for his work on shadow band detection during solar eclipses.

At a general meeting of those persons who were interested, it was decided to change the meeting dates of the Centre to the first Thursday of the month instead of the first Wednesday of the month. This is actually returning to the time that was used prior to 1969, and was instituted because it was felt that too many people were interested in the hockey games instead of astronomy.

The ATM's were meeting regularly each other week in Caledonia which was rather too far for some people. However, the meetings were very active with many projects under way. Also the Discussion Group met once a month to talk about many different topics in astronomy and related fields.

Peter H. Ashenhurst, *Secretary*

## KINGSTON CENTRE

Kingston Centre meetings were held as follows:

- October 10 A film entitled "The Universe."  
Visited Queen's Planetarium and used 15 inch Cassegrain Telescope.
  - October 25 A report on the progress of the Observer's Group. Glen Chapman, a graduate student at Queen's and past president of the Centre, presented a slide lecture on Interstellar Space Travel (Part 1).
  - November 8 A film "Our Mr. Sun."  
A Mrs. Shortcliffe advised she will donate to the Q.U.A.C. \$500. to the cost of building an observatory for a 10 inch reflecting telescope, which she will also donate. Stipulation is that a proper place be chosen and plans presented to ensure the good intentions of the Q.U.A.C. and a committee was formed to carry out this plan.
  - November 22 Donald Retallack, a graduate student at Queen's in the Astronomy Department, presented a talk on recent developments in Radio Astronomy.  
The Observer's Group used the 15 inch Cassegrain Telescope and took astro-photographs.
- 1973
- January 15 Professor Bridle of Queen's Astronomy Department lectured on "Some recent observations of Extra-Galactic X-Ray Sources."
  - January 30 A film "Radio Sky" from National Headquarters in Toronto was shown. A report on the meeting of the Council of January 27th was given by the Secretary, Geoffrey Wyght.  
The Q.U.A.C. committee reported that they could not accept Mrs. Shortcliffe's donation.
  - March 6 Glen Chapmann presented a slide lecture on Interstellar Travel (Part II).  
The following were elected to the Executive Committee - Paul Brown, President; Valerie Kirkwood, Vice-President; Geoffrey Wyght, Secretary-Treasurer; and Dave Ridding, member of council.
  - March 20 A film "Fields of Space."  
The 15 inch Cassegrain Telescope at the Planetarium was used by the Observer's Group.

Geoffrey J. R. Wyght, *Secretary*



## LONDON CENTRE

Our golden year has left our centre looking forward to another half century as an astronomy club for all. Over-all, it has been a golden year in every respect. Our meetings have had a variable increase in attendance over last year, and thanks are due for all those who made this year the success it has been.

Our programme for 1972 was as follows:—

- January 20 Annual Meeting (50 years 10 days after the late Dr. H. R. Kingston created the London Centre); Film, "Journey into Light," story of the Kitt Peak National Observatory, U.S.A.
- January 27 Dr. Vic Gaizauskas, Astrophysics Branch of National Research Council: "A New Canadian Solar Observatory on the Ottawa River."
- March 2 The H. R. Kingston Memorial Lecture: Dr. John R. Percy, Department of Astronomy, Erindale College: "Stellar Magnetism."
- March 30 Dr. John C. Evans, visiting professor to Department of Astronomy, University of Western Ontario: "Some Aspects of Stellar Atmospheres."
- April 22 Member's Night – Martin G. Connors, President London Centre, "Telescopes I have known and loved." Also tour of on-campus observing facilities, U.W.O.
- May 4 Mr. W. C. Heine, editor of London Free Press: "Recent Developments in the U.S. Space Program."
- May 18 Mr. Kara Szathmary, Department of Astronomy, U.W.O.: "How to find and identify White Dwarfs."
- June 1 Dr. Howard Plotkin, Department of History of Medicine & Science, U.W.O.: "An Irreverent Biography of Sir Isaac Newton."
- June 24 Member's Night: Mr. Jim Livingstone: "A Large Amateur Observatory for the London Area."  
Mr. Ken Hewitt-White, Ottawa Centre: "Quiet Site" and talk on Ottawa Centre's meteor observations.  
Mr. Martin G. Connors: U.W.O. Physics Department's plans for Atmosphere Research during July Solar Eclipse.
- July 10 Open house of the U.W.O. Department of Astronomy's Hume Cronyn Memorial Observatory.  
Partial solar eclipse.
- July 22 Public Star Night – huge success with approximately 200 people viewing at Greenway Park, London.
- September "Eclipse '72 discussions, Part 1" – Mr. Jim Livingstone: talk on main points about eclipse phenomena.  
Dr. Lane-Smith, U.W.O. Physics Department: talk on atmospheric electricity research during the July 10 solar eclipse.
- October "Eclipse '72 discussions, Part 2" – Mr. Martin Connors: his talk on trip to Churchill, Manitoba during solar eclipse.  
Mr. Ron Sawyer and Dan Heisler: The July 10th Solar Eclipse as seen from Aylmer, Ontario."  
Mr. Mike Wallis: slides of eclipse taken from London.
- November Mr. Ralph Dakin; visiting astronomer from Rochester, N.Y. – "The Tools of the Astronomer."
- November 23 Member's Night – Mr. Mike Wallis; "Apollo 16-17."  
Mr. Martin Connors: "Tricky Ways to Place Nebulae."
- December 14 Dr. Helen Hogg, David Dunlap Observatory, University of Toronto: "Globular Clusters, Beautiful Satellites of our Galaxy."

Since September, every Wednesday night we alternated between our ATM group headed by



**Mr. Peter Andreae and the Observers Group, headed by Martin Connors. These beneficial and successful group meetings have had such discussions as Lunar Occultations, photography by rockets, parabolizing mirrors, space flights and satellites, the "Chariots of the Gods," and a large centre's telescope.**

Plans have been drafted for many telescopes by ATM members. A variety of 12", 10", 8", and smaller telescopes have been built this past year and a member has an aluminization chamber under construction.

With the devoted planning and fine organization of Mr. James Livingstone, the Public Star Night in July was a complete success, but plans for others in the year had to be scrapped because of poor weather conditions.

Observation of variable stars and meteor showers, etc., were few and far between as this past year academic minded members received poor cooperation from the local weatherman. Maybe he needs a larger bribe!!!

Our newsletter published well over 100 pages of interesting and information reading, and thanks are due to our retiring editor, Mr. Dave Turner. He was kept busy with many hours of hard work that paid off with a very enjoyable newsletter.

Our Centre, while remembering a vivid past, is looking forward to a happy future and ..... to leave you with a thought - remember Edward Young once wrote, "An undevout Astronomer is mad."

Eric J. Clinton, *Secretary*

## **MONTREAL CENTRE**

The Montreal Centre held eight monthly public meetings in 1972. The programme was as follows:

### **1971**

October 14 The Annual General Meeting.  
After the business, a short film on Lunar Occultations was shown, followed by refreshments.

December 9 Dr. T. F. Morris, McGill University: "The Enigma of Stonehenge."

### **1972**

January 13 Dr. Peter M. Millman, N.R.C.: "The Thinkers" (Copernicus and Kepler).

February 10 "Eclipse Preview Special"

The Centre's plans for the 1972 solar eclipse were presented.

March 9 Dr. Carl Sagan of Cornell University delivered the G. Horsley Townsend Memorial Lecture. The topic was "The Planet Mars."

April 10 "Little Green Men," a Dow Planetarium presentation given by Mr. Bryan Rawlings.

May 11 Two films were shown:

1. "To the Edge of the Universe"

2. "The Moon - Old and New"

Refreshments followed.

In addition to the monthly meetings, the Centre opened its observatory to the public every Saturday night. At these gatherings short talks were given by members of the Centre, and if the weather permitted, observing periods followed.

The observatory was reserved for members only on Wednesday nights.

The observatory was open on many occasions throughout the year for various activities such as: Board of Directors & Committee Meetings, courses, visits by interested groups, newsletter production, etc.

The Centre also held a Book Auction, the proceeds of which were used to purchase new books for the library.

The Astronomy Course was offered to the public again this year, and was quite successful.

Several of our members lectured to various interested groups in town, while others gave instruction to boy scouts & girl guides for their "astronomer" badges.

"Stellafane," the Mecca of Amateur Telescope Makers, was well attended by our members.

The Centre's solar eclipse expedition to Carleton, Quebec was quite successful. In spite of the haze that covered the sun during totality, several good photographs were taken. It was cloudy just before totality, and it rained half an hour later.

There was a break-in at the Centre's observatory. The 6"-diam. objective lens was stolen, along with the 2½" Unitron finder.

The Montreal Centre has undertaken to establish an out-of-town observatory, equipped with a 20" catadioptric telescope of the Buchroeder design. The optical blanks for the telescope have been purchased, and several observing sites have been inspected. The existing 12½" f/5 Newtonian reflector is to accompany the 20" at the out-of-town observatory.

Constantine Papacosmas, *Secretary*

## CENTRE D'ASTRONOMIE DE MONTREAL

Le Centre d'Astronomie de Montréal est une section de la Société d'Astronomie de Montréal, organisme à caractère francophone.

A la fin de l'année fiscale de cette Société, on comptait 472 membres; 4 membres à vie, 267 seniors et 201 juniors. Parmi ces membres, 67 sont affiliés au Centre d'Astronomie de Montréal, de la Société Royale d'Astronomie du Canada; dont 2 membres à vie, 43 seniors et 22 étudiants; et 42 sont membres de la Société Astronomique de France.

Au cours de l'année, le Conseil s'est réuni onze fois. La Société publie chaque année l'Annuaire Astronomique de l'Amateur, qui présente plusieurs analogies avec "The Observer's Handbook" mais entièrement en français; une attention particulière, est apportée aux coordonnées planétaires.

Un Journal mensuel est publié sous le titre "Le Québec Astronomique" et expédié aux membres ainsi qu'aux différents Centres de la Société Royale d'Astronomie du Canada. Environ 50 abonnements individuels sont abonnés à ce journal.

La Société tient une réunion hebdomadaire tous les mardis soirs au Jardin Botanique de Montréal, et il y eut 48 réunions au cours de l'année 1972, 11 conférences ont été données par des invités de marque, règle générale par des professeurs d'Université, 36 causeries données par des membres. L'Assemblée générale tenue le 3 novembre 1971 et une série de 27 cours d'initiation à l'astronomie en prélude aux causeries; l'assistance moyenne à ces réunions était de 90 membres.

Conjointement avec les soirées hebdomadaires, un atelier d'optique, à l'usage des membres, permet à ceux-ci de se procurer tout le matériel nécessaire pour l'ébauchage et le polissage des miroirs, sous la conduite d'experts en la matière. Environ 90 miroirs ont été finis au cours de l'année. D'habiles mécaniciens fabriquent des montures et conseillent les jeunes au besoin.

Le 13 mai 1972, un banquet a souligné le 25<sup>e</sup> anniversaire de la fondation du Centre d'Astronomie de Montréal. A cette occasion a été décerné pour la première fois le trophée "Étoile d'argent" octroyé annuellement à l'avenir à un Canadien d'expression française qui s'est signalé dans le domaine de l'Astronomie soit par des travaux ou des écrits. Le premier récipiendaire fut M. Jean Vallières, éditeur de l'Annuaire Astronomique de l'Amateur.

Au cours de l'année 14 rencontres furent organisées dans des institutions scolaires, des colonies de vacances et dans des agglomérations de l'extérieur, sans compter notre soirée populaire tenue au jardin Botanique et qui attirera pas moins de 5,000 personnes.

L'Astronomie, au Québec, se développe de plus en plus, les maisons d'éducation s'y intéressent davantage, plusieurs groupements autonomes se forment, et la Société d'Astronomie de Montréal, a pour objectif au cours de la prochaine année d'établir des liens de coopération et de liaison entre ces divers organismes.

Rolland Noel de Tilly, *Secretary*

## NIAGARA FALLS CENTRE

In 1972, the Niagara Falls Centre continued its programmes in telescope making and educational talks before various civic and youth groups.

We held 8 regular meetings and 5 planned Star Nights during the year. In addition, a number of informal Star Nights for members only took place.

In September, we participated in a hobby show at Virgil, Ontario. The members developed a beautiful exhibit and we felt our presentation was quite effective.

Our programmes and speakers for the year were as follows:

- January 13 Annual Election of Officers. Joe Hauzer – Quasars.
- February 10 Tony Akkerman: "A New Design for a Telescope."
- March 9 Hugh Maclean: Slides of Various Astronomical Objects.
- April 13 Robert Doran: Review of Patrick Moore's book, "The Atlas of the Universe."
- April 15 Joint field trip with the Hamilton Centre to the McLaughlin Planetarium in Toronto.
- May 11 Movie Night: "The Solar System" and "Exploring the Universe."
- October 12 Public Night – Movie: "Time" and review of summer activities.
- November 9 Movie: "The Strange Case of the Cosmic Rays."
- December 14 Ken Chilton: "Astronomy in Europe."

Robert C. Doran, *Secretary*

## OTTAWA CENTRE

The year 1972 may go down in the history of the Ottawa Centre as the year of the Presidents. No less than three held office during the year; Lloyd Higgs until spring, with Hans Klinkenberg being preceded by Tom Legg late in December. Both Lloyd and Hans are currently working outside the Ottawa area; Lloyd for a year at the D.R.A.O. in Penticton, and Hans at Laval University in Quebec.

With the exception of the Annual Dinner Meeting, the Dominion Observatory, Department of E.M.R., continued to host meetings of the Ottawa Centre. The quality of lecture meetings over the past year was excellent. It is with pride we note that five of the eight lecturers are members of the Ottawa Centre. A schedule of meetings follows:

- January 19 Annual Dinner Meeting – Dr. Peter M. Millman, National Research Council: "The Thinkers – a Glimpse at the Life and Times of Copernicus and of Kepler."
- February 17 Dr. Alan E. Wright, York University: "Tidally Interacting Galaxies" or "Tails of a Beansprout."
- March 22 Dr. Lloyd A. Higgs, National Research Council: "Atoms and Molecules in Gaseous Nebulae."
- April 7 Members of the Observers Group talked about their various observing programmes, discussed plans for the '72 eclipse, and screened a number of films.
- September 20 Dr. Lawrence W. Morley, Director of the Canada Centre for Remote Sensing: "Studying the Earth from Space."
- October 18 Dr. Alan H. Bridle, Queen's University: "Intergalactic X-ray Sources."
- November 29 Romeo Wlochowicz, National Research Council: "Micrometeoroid Research."
- December 5 Dr. Derek W. Sida, Dean St. Patricks College, commenting on the film "Cracking the Stone Age Code."

The Observers Group continue to meet the first Friday of the month with an added feature,

a course for beginners, occupying the third Friday. An exchange with other Centres provided guest speakers from London, and Vancouver, and Ottawa Centre members were welcomed by Montreal, London, Edmonton and Vancouver. The enthusiasm of the group carried them on four major trips during the year; from coast to coast in Canada, and as far south as California and Florida, visiting major observatories along the way. Regretfully, the '72 eclipse was successfully observed by only a few isolated members; the major expedition to Les Méchins being victimized by the weather. Group members Ken Hewitt-White and Rick Lavery presented papers to the General Assembly in Vancouver, and we note with pride that Ken Hewitt-White was also invited to describe his observing programme as one of the tent talks at Stellafane. The observing programme at the Meteor Observing Site continues to flourish and the first year of operation of the North Mountain Observatory resulted in many excellent photographs. A programme of observation of the optical variation in brightness of several sources, in conjunction with the observed variation in radio wave lengths, was successfully carried out. A programme has also been instigated to correlate North Mountain observations with those obtained by Ottawa Centre member Rick Lavery at the Observatory in Chile. In recognition of their achievements during the year, the following awards were presented: Ken Hewitt-White - Observer of the Year; Stan Mott and Ken Perrins the Merit Award of the Ottawa Centre; Cathy Hall, the Variable Star Award.

Lloyd Higgs had not yet stepped down as President when rumour had it that the Ottawa Centre was the logical group to host the 1973 General Assembly. The idea took shape and an official invitation by the Ottawa Centre had been accepted by National Council before Hans Klinkenberg relinquished the Presidential reins to Tom Legg. Plans for the 1973 Assembly were well in hand before the end of 1972. We look forward enthusiastically to the opportunity to repay the hospitality of other Centres.

Membership of this Centre consisted of 80 Regular, 20 Life and 44 Student Members.

Mary W. Grey, *Secretary*

## QUEBEC CENTRE

1972 fut une année fructueuse, elle nous a permit de presenter de nombruses conférences toutes plus intéressantes les unes que les autres et qui de plus marquaient par leur actualité et leur appoint. Elles étaient ouvertes au public et la réponse ce fit sans cesse grandissante et cela malgré un temps d'arrêt lors de la période estivale.

- |          |     |  |
|----------|-----|--|
| Janvier  | 8   | Conférence par: Mlle Andrée Mathieu sur: Quand la lune nous fait un clin d'oeil ou l'éclipse totale de la lune du 30 janvier 1972. |
| Février  | 6   | Conférence par: M. Paul Darisse - "Où sommes-nous: Notion d'astronomie de position."   |
| Mars     | 12  | Conférence par: M. Claude Frémont - "Un voyage à la lune." Il y eut aussi projection du film: "Appolo 12, retour à la lune."       |
| Avril    | 4   | Conférence par: M. Yvon Chassé. - "La lumière"<br>Plus projection du film: "La recherche spatiale aux Etats-Unis."                 |
| Mai      | 7   | Conférence par: M. Benoît Drolet - "L'éclipse totale de soleil du 10 juillet 1972."<br>Plus projection du film: "Appolo 15."       |
| Jun      | 7   | Assemblée générale annuelle du Centre de Québec où fut élu le conseil pour l'année.  |
| October  | 1er | Une visite était organisée à l'observatoire de l'Université Laval à St-Elzéor.   |
| Novembre | 15  | Conférence par: Dr. A. De Kokline - "La pollution et son contrôle par détection aéroportée."                                       |
| Décembre | 6   | Projection de films de la Nasa.<br>"Mariner mars 1966."<br>"Seed of Discovery."  |

## ST. JOHN'S CENTRE

Due to the failure of the Secretary to fulfill his duties the minutes for many meetings were never recorded or entered.

During the year we had seven regular monthly meetings and three special meetings as follows:

### 1971

- |          |                              |
|----------|------------------------------|
| November | Films.                       |
| December | Lecture "Star of Bethlehem." |

### 1972

- |          |                                    |
|----------|------------------------------------|
| January  | Dr. Lockwood: "Optics."            |
| February | Open House at Fisheries College    |
| March    | Visit to Imperial Optical Company. |
| May      | R. Dodge: "Astrophotography."      |
| June     | Dr. Helen Hogg.                    |
| July     | Dr. John Percy.                    |

The past year saw the initiation of our newsletter on a regular monthly basis. Two observation sessions were scheduled without successful results. Attendance at meetings left a lot to be desired, but the general business of the Centre was carried out.

R. Dodge, *Vice President*

## SASKATOON CENTRE

General Meetings and Executive Meetings were held monthly throughout 1972; the minutes of these have been published in successive issues of the Centre's Newsletter. The General Meetings were highlighted by speakers drawn primarily from the membership, the showing of a number of films on astronomy, and preparation for special astronomical events. These activities combined to provide an involved and busy year for all members.

The signed attendance for 1972 at the Observatory, which is jointly operated by the University of Saskatchewan and the Saskatoon Centre, exceeded 7100. The planetary configuration in April and the total solar eclipse in July added substantial numbers to this impressive total. The organization of new activity groups within the Centre has stimulated interest to the extent that it is difficult to find an evening when the Observatory is not open and operating.

The Library has been relocated in the basement of the Observatory; purchases and loans, including a number of complete volumes of the R.A.S.C. Journal, have increased its holdings significantly. Two members of the Saskatoon Centre delivered lectures in a series on astronomy entitled "The Sky Above" held in October and November at the Saskatoon Public Library and sponsored jointly by the Library and the Extension Division of the University of Saskatchewan. The summer series of lectures was not scheduled as in previous years in view of this commitment.

Eclipse Bulletins were distributed to a number of teachers in the province of Saskatchewan, requesting that the information supplied by the Centre be disseminated to the news media in each locality. This project met with considerable success in stimulating interest in this spectacular astronomical event. Income from the sale of filters for "safe viewing" of the eclipse on July 10th has been used to establish a telescope fund.

J. E. Kennedy, *Secretary*

## TORONTO CENTRE

The year 1972 was a very hectic and eventful one for the Toronto Centre. In addition to the regular activities, which by themselves are enough to keep the Centre busy, there were addi-

tional undertakings which further taxed the time and energies of those involved, especially the council, who attempt to provide as active and varied a life for your Centre as possible.

Among the extra activities which helped make 1972 a most enjoyable year for the Centre there was the following:—

The expedition to the Gaspé to observe the total eclipse of July 10th. About 50 members participated in this outing, the success of which was due in particular to 5 members: Harlan Creighton, Ralph Chou, Denis Halley, Penny McCabe and René Racine.

The Centre participated in the third annual Astronomy Club Day, held October 28th for high school astronomy clubs across the city. Several centre members were involved, but special mention should be made of Andreas Gada, who chaired the project.

An impressive display, "Heavens Above" was presented by the Toronto Centre in the lower rotunda of the Royal Ontario Museum. Fred Troyer and Richard Berry did a fine job in directing the talents of the many members who worked on this special project.

Discussions were reopened with the Metropolitan and Region Conservation Authority for the establishment of a Centre Observatory.

Toronto Centre decided to proceed with the necessary legal steps leading to incorporation of the Centre. Mr. Syd Fagan has greatly assisted with the legal aspects of this undertaking.

The programme of general meetings was arranged by a committee chaired by Dr. Ernie Seaquist and composed of Richard McWatters, Andreas Gada, D. J. Fitzgerald and Penny McCabe. This included eleven Member's Nights, eight guest lecturers, the annual meeting, a joint meeting with the R.C.I., a picnic and Member's Star Night, and two open houses. The Refreshment Committee headed by Penny McCabe served coffee, tea and cookies after each General Meeting.

- January 14 Annual Meeting and Members' Night.
- January 21 Mr. R. J. Ballantyne: "Stellafane."
- January 29 Joint Meeting with Royal Canadian Institute
- February 4 Members' Night
- February 18 Professor J. D. Fernie: "The Historical Search for the Nature of the Spiral Nebulae."
- March 3 Members' Night
- March 17 Professor Derek York: "How Old Is The Moon?"
- April 7 Members' Night
- April 21 Dr. H. C. King: "Geared To The Stars."
- May 5 Members' Night
- May 26 Professor J. Van Kranendonk
- June 9 Members' Night
- June 22 Members' Night
- August 10 Members' Night
- August 26 Picnic and Members' Star Night
- September 8 Members' Night
- September 16 Open House at Maple Observatory
- September 22 Members' Night
- October 6 Open House at the David Dunlap Observatory
- October 20 Dr. N. Walborn: "Some Recently Discovered Phenomena Among the O & Early B Stars."
- November 3 Members' Night
- November 17 Professor R. C. Roeder: "Quasars & Cosmology at Kitt Peak."
- December 1 Professor H. I. Schiff: "The Atmospheres of the Earth and Planets."
- December 15 Members' Night



Four Public Star Nights were held in the summer at Scarborough College, Amesbury Park, Sunnybrook Park and Huron Park. These were organized by a committee chaired by Ralph Chou. Two evenings were rained out while the other two resulted in good public attendance.

The Study Group this year held 16 regular meetings on Saturday mornings, attended by an average of 15 to 20 people. This group, headed by Ian McGregor, Robin Macfarlane, Enid Comars and Bob Simpson, provides an informal setting on both elementary and advanced levels for instruction and discussion in the areas of basic and practical astronomy. This programme is especially beneficial to newer members. In addition, the Study Group participated in the Special Education Programme and the Special Enrichment Programme of the Toronto Board of Education. The Study Group is one of the most active and productive activities of the Toronto Centre and one which the organizers can be very proud of.

For the first time in the Centre's history, the Workshop, under the direction of George Foster, was conducted on a weekly basis and towards the end of the year, on alternate Saturdays and Sundays. There were plenty of enthusiastic telescope makers, with over a dozen mirrors being completed.

Jim Cobban, Editor of "SCOPE," faced with rising postage and production costs, late submissions and thousands of other problems, managed to maintain a high standard of editorial content, keep close to the mailing schedule and still reduce the net costs of producing the newsletter.

Doug Gies and the Observational Activities Committee have assisted many members in establishing their own observing programmes and assisting members to secure more success and enjoyment from telescopes built or purchased.

It was a busy and enjoyable year for the Centre and we hope that 1973 will be even more enjoyable and successful.

Dan H. Ostler, *Secretary*

## VANCOUVER CENTRE

Members of the Vancouver Centre of the R.A.S.C. can look back on 1972 as a prosperous and successful year, with numerous enjoyable functions for Vancouver members, members of other Centres, and the Vancouver public at large.

The highlight of the year, undoubtedly, was General Assembly '72. This was the West Coast's first opportunity to host the Society's annual gathering, and over 120 delegates from all Centres were in attendance. Under the guidance of Vancouver Centre President Dr. Donald Smellie, and Victoria Centre President Dr. Alan Batten, the Assembly was enjoyed by all. We look forward to again hosting the Assembly in the future.

The Observer's group within the Centre did not have as successful a year as many would have liked. This was due to inclement west coast weather conditions and the usual apathy on the part of many members. Nevertheless, there were a few good highlights on observing. A trial run of a summer public star party was conducted in Stanley Park. A large number of telescopes were present, and the public response was very favourable. Plans are already underway to repeat and expand this program for 1973. Other observing members of the Centre attended the 1972 eclipse; both at Tuktoyaktuk and the Maritimes. One other Centre member acquired valuable observing time at the U.B.C. telescope facility, while our National Representative toured major U.S. observatories with members of the Ottawa observer's group. The year 1973 holds a lot in store for our Observer's group, with plans to send a substantial delegation to the African eclipse, and with tentative plans to acquire a good observatory for Centre use.

Membership within the Centre was somewhat static in 1972. It's hoped that recent attempts at increasing membership, particularly in the case of the grade school student and teacher community, will result in an influx of new members in 1973.

Even though the membership was relatively static in 1972, the actual operation of the Centre did prosper from an injection of young blood into some of the key operational positions. The General Assembly and the recent expansion of NOVA, the Centre newsletter, are but two examples of this.



All in all, 1972 was a successful year for the Vancouver Centre, and it's hoped that 1973 carries on this tradition.

Mrs. P. Mills, *Secretary*

## VICTORIA CENTRE

The regular meetings of the Victoria Centre were held at the University of Victoria, through the kindness of the University authorities. A total of seven meetings were held in 1972, and the Council held six meetings to plan the lectures and to conduct the business of the Centre.

The speakers and topics at the regular meetings were:—

### 1972

- January 14 Annual meeting and dinner — Mr. George Ball showed slides of his recent trip to England.
- February 9 Dr. J. A. Burke, University of Victoria: "Interstellar Clouds."
- March 8 Dr. J. Andersen, Copenhagen University Observatory: "Practical Work with the Schmidt Telescope."
- April 12 ACTIVITIES NIGHT. Exhibits and Films.
- October 11 Dr. D. Brownlee, University of Washington: "Clues to Genesis of the Solar System."
- November 12 Dr. J. L. Locke (National President). Joint meeting in Vancouver with Vancouver Centre.
- December 13 Dr. G. J. Odgers: "Problems in Design of Large Telescopes."

On Sunday, May 21, the Centre had the pleasure of hosting the delegates to the General Assembly, who came over from Vancouver for the day.

Again this year the Centre maintained a booth at the Hobby Show held in April by the Victoria Lapidary Society, and also looked after a booth at the Dominion Astrophysical Observatory on Saturday evenings when the Observatory was open to the public.

Observing sessions were held each clear Friday evening under the direction of Mr. George Ball, our Director of Telescopes, using the 12-inch reflector of the University of Victoria. Mr. Ball also conducted a mirror-making class once a week in a room made available for this work by the University of Victoria. By the end of the year, one 6-inch mirror was completed and six others were in the last stages of polishing.

Membership of this Centre for 1972 consisted of 17 students and 41 regular members, making a total of 58 members, plus 15 life members.

N. B. Manson, *Secretary*

## WINDSOR CENTRE

The Windsor Centre held 8 regular meetings, 2 Council meetings and 1 field trip in 1972. A brief resumé of the regular meetings follows:—

### 1971

- November 15 Election of officers for 1972  
A lecture on Quantum Mechanics by one of our members, Kevin Kolodzy.

### 1972

- January 18 James Townsend and Brian Dorrepaal led a discussion to determine what improvements could be made to our Centre's publication, the "Aurora."  
A movie, "Close-up of Mars."
- February 15 A panel discussion by several student members as to what kind of observational programme our Centre should undertake.
- March 21 A film, "Satellite Astronomy."
- April 18 A collection of talks by B. Dorrepaal, P. Price, G. Drouin, and D. Toth regarding the July 1972 solar eclipse.

- May 6 A field trip to the McMath-Hulbert Solar Observatory in Lake Angelus, Michigan.
- June 20 A talk, slide show, and tape recording by Ben Faulkner about his trip to Cape Kennedy for the Apollo 16 launch.  
C. Hallam discussed the upcoming solar eclipse and methods of photographing the eclipse.  
D. Toth showed slides that he had taken of Astronomical subjects.
- September 19 Current Events by J. Townsend.  
Several members spoke about their experiences during the July solar eclipse; Arthur Rae, Jim Meredith, Cyril Hallam, Cameron Montrose, Bert Huneault and Brian Dorrepaal on behalf of Ben Faulkner who is presently in Australia.
- October 17 A film, "Radio Sky."

David B. Toth, *Secretary*

### WINNIPEG CENTRE

Under the very capable guidance of our president, Mr. Jack Newton, our Centre, for 1972, enjoyed a very active and exciting year. Two major phenomena were observed: the total eclipse of the moon on January 30, via closed circuit T.V., and the expedition to Baker Lake to view the total eclipse of the sun on July 10, 1972. Our members also participated in public viewing nights during the summer and attended to the telescopes during the Open House of the Manitoba Museum of Man and Nature. Several of our members attended the National Assembly in Vancouver and displayed the results of one of our most active observing groups, Astrophotography. We are also advancing well in our plans to build an Observatory which will have either a 14" Celestron telescope or a 20" Winnipeg Centre built reflector. We have also formed a Maksotov Club with the expectation of 8 members building themselves this versatile instrument. The Winnipeg Centre made a major change in its housing facility by moving to the University of Manitoba campus.

Future plans involve the 1974 General Assembly in Winnipeg and the completion of the Winnipeg Centennial Observatory at Sanford, Manitoba.

During 1972, four executive council meetings and ten regular meetings were held with the following programmes:

- January Mr. J. N. R. Scatliff – Solar Observations
- February Mr. Paul Moffat – Asteroids or Minor Planets. Slides  
Mr. Andrew Lindsay – Shadow Passage of Craters in the Lunar Eclipse  
Film: "Ontario Pavilion at Expo 67"
- March Professor Ed Leith – Meteorites and Bolides. Slides.
- April Film: "January into Light" (Kitt-Peak Solar Telescope)
- May Mr. Bill Webster: "Apollo 16 Launch"  
Mr. John McCarthy: "Skylab"
- June Mr. Jack Newton – Photographing an Eclipse of the Sun  
Mr. Frank Shinn – Experiments on the Eclipse of the Sun  
Dr. J. N. R. Scatliff – Phenomena of an Eclipse of the Sun
- July Summer observing programme
- August Summer observing programme
- September Dr. Joseph Smock: "Close Binary Stars"
- October Mr. Jack Newton: "The 1972 Solar Eclipse Expeditions"
- November Dr. Martin Samoiloff: "Amateur Science in the 70s"
- December Annual Meeting, Committee and Observing Chairman reports and elections.

A. Luchik, *Secretary*

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA 1968  
 LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA 1968

ST

(With comp

		<u>1 9 7 2</u>	<u>1 9 7 1</u>	
<u>A S S E T S</u>				
<u>Current Assets</u>				<u>Current Liabil</u>
Cash	\$ 6,978			Accounts pay
Accounts receivable	5,061		9,2	
Grants receivable	1,000		1,0	
Marketable securities (at cost)	3,019		2,0	ferred Rever
Accrued bond interest	112			
Prepaid expenses	<u>243</u>			Membership f
		\$16,413	\$14,8	Advance subs
				Unappropriat
				(per state
<u>Special Funds</u>				
Ruth Northcott Memorial Fund (per statement)		6,901	\$ 6,1	
<u>Fixed Assets (at cost)</u>				<u>with Northcott</u>
Land	\$17,000		\$17,0	
Building	17,500		17,5	plus (per
Office furniture and equipment	4,339		4,3	
Apartment equipment	<u>1,128</u>		<u>1,1</u>	
		\$39,967	\$39,9	
<u>Less: Accumulated depreciation</u>	<u>11,213</u>		<u>10,3</u>	
		28,754	\$29,6	
<u>Library (nominal value)</u>		100	\$ 1	
		<u>\$52,168</u>	<u>\$50,1</u>	

I have  
 The Royal Astron  
 1972 and the stat  
 the year ended or  
 review of the acc  
 records and other  
 in the circumstar

The rec  
 are not susceptib  
 and are therefore  
 have been records  
 of these items wa  
 with bank deposit

In my o  
 of my examination  
 accompanying fina  
 position of the S  
 of its operations  
 generally accepte  
 consistent with t

APPROVED ON BEHALF OF THE COUNCIL:

J. L. Locke President

Cyril G. Clark Treasurer

Toronto, Canada,  
 April 12, 1973.

DA 1968  
DA 1968STATEMENT OF FINANCIAL POSITIONAS AT DECEMBER 31, 1972

(With comparative figures as at December 31, 1971)

	<u>1 9 7 2</u>	<u>1 9 7 1</u>
<u>LIABILITIES AND SURPLUS</u>		
<u>Current Liabilities</u>		
\$ 9,241	Accounts payable and accrued charges	\$ 3,639      \$ 50
1,000		
3,000	<u>Deferred Revenue</u>	
1		
2	Membership fees for ensuing year	\$ 6,724      \$ 5,772
	Advance subscriptions for Journal and Handbook	9,682      9,493
113	\$14,500	Unappropriated life membership fees (per statement)
		<u>3,557</u> <u>3,477</u>
		<u>19,963</u> <u>\$18,742</u>
01	\$ 6,100	
	<u>TOTAL LIABILITIES</u>	<u>\$23,602</u> <u>\$18,792</u>
	<u>Northcott Memorial Fund Reserve</u>	<u>6,901</u> <u>\$ 6,127</u>
\$17,000		
17,500	<u>Surplus (per statement)</u>	<u>21,665</u> <u>25,228</u>
4,200		
1,100		
\$39,900		
10,500		
754	\$29,400	
	I have examined the statement of financial position of The Royal Astronomical Society of Canada 1968 as at December 31, 1972 and the statements of revenue and expense and surplus for the year ended on that date. My examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as I considered necessary in the circumstances, except as hereinafter noted.	
100	\$ 10,000	
	The receipts of the Society, because of their nature, are not susceptible to complete verification by audit procedure and are therefore shown in the accompanying statement as they have been recorded in the books of the Society. My verification of these items was limited to a comparison of recorded receipts with bank deposits.	
168	\$50,100	<u>\$52,168</u> <u>\$50,147</u>

In my opinion, subject to the limitation in the scope of my examination as noted in the preceding paragraph, the accompanying financial statements present fairly the financial position of the Society as at December 31, 1972 and the results of its operations for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

*Morris Altman*

Chartered Accountant.

Toronto, Canada,  
April 12, 1973.

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA 1968  
LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA 1968

STATEMENT OF GENERAL REVENUE AND EXPENSE

FOR YEAR ENDED DECEMBER 31, 1972

(With comparative figures for year ended December 31, 1971)

<u>REVENUE</u>	<u>1972</u>	<u>1971</u>	<u>REVENUE</u>
Membership fees			<u>Rentals for</u>
R.A.S.C. Centres	\$ 8,700	\$ 8,300	
Individual members	4,665	3,000	<u>EXPENSE</u>
Life membership reserve - annual appropriations	<u>371</u>	<u>371</u>	<u>Property tax</u>
	\$13,736	\$11,671	<u>Heating</u>
Grants and Donations			<u>Light, gas and</u>
Government of Canada - annual grant	\$ 5,000	\$ 5,000	<u>Maintenance</u>
Province of Ontario - annual grant	1,000	1,000	<u>Insurance</u>
Miscellaneous contributions	<u>17</u>	<u>17</u>	<u>Depreciation</u>
	6,017	\$ 6,017	<u>Depreciation</u>
Publications			<u>CESS OF EXPENSE</u>
Journal of the R.A.S.C.	\$ 4,876	\$ 5,166	
Observer's Handbook	22,452	16,300	
Reprints and publication fees	5,221	3,000	
Advertising	<u>1,605</u>	<u>1,605</u>	
	\$34,154	\$28,071	
Less: Agents' discounts	<u>4,557</u>	<u>2,280</u>	
	29,597	\$25,791	
Miscellaneous Revenue			
Interest earned	\$ 350	\$ 350	
Insignia sales	<u>30</u>	<u>30</u>	
	29,627	\$ 26,141	
<u>TOTAL REVENUE</u>	<u>\$49,738</u>	<u>\$45,643</u>	
<u>EXPENSE</u>			
Publications	\$37,383	\$35,166	
Staff salaries	7,927	7,927	
Pension fund and unemployment insurance	302	302	
Postage and shipping	2,433	1,000	
Stationery, printing and supplies	635	635	
Building expense - net (per statement)	1,486	1,486	
General and office expenses	901	901	
Telephone	194	194	
Library accessions	612	612	
Annual life membership allotment to Centres	412	412	
General assembly and travelling expenses	150	150	
Medals and awards	359	359	
Bank charges and exchange	369	369	
Depreciation of office furniture and equipment	<u>138</u>	<u>138</u>	
<u>TOTAL EXPENSE</u>	<u>53,301</u>	<u>\$49,643</u>	
<u>EXCESS OF EXPENSE OVER REVENUE</u>	<u>\$ 3,563</u>	<u>\$ 3,563</u>	

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA 1968  
 LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA 1968

STATEMENT OF BUILDING REVENUE AND EXPENSE

FOR YEAR ENDED DECEMBER 31, 1972

(With comparative figures for year ended December 31, 1971)

71)				
7.2	19	<u>EVENUE</u>	1972	1971
	\$ 8,	Rentals for space not occupied by the Society	\$ 3,540	\$ 3,200
	3,	<u>EXPENSE</u>		
736	\$13,	Property taxes	\$ 1,037	\$ 941
	\$ 5,	Heating	837	718
	1,	Light, gas and water	236	329
017	\$ 6,	Maintenance and repairs	2,269	1,491
	\$ 5,	Insurance	96	68
	16,	Depreciation of building	438	437
	3,	Depreciation of equipment	113	113
	1,			
	\$28,	<u>TOTAL EXPENSE</u>	5,026	\$ 4,097
	2,			
597	\$25,			
	\$	<u>CESS OF EXPENSE OVER REVENUE</u>	\$ 1,486	\$ 897

288 \$

738 \$45,

SCHEDULE OF FIXED ASSETS AND ACCUMULATED DEPRECIATION

AS AT DECEMBER 31, 1972

\$35,

7,

1,

ACCUMULATED DEPRECIATION

	<u>COST</u>	<u>Balance Dec. 31/71</u>	<u>Depreciat'n For Year</u>	<u>Balance Dec. 31/72</u>
nd	\$17,000	\$ -	\$ -	\$ -
ilding	17,500	6,437	438	6,875
ffice furniture and equipment	4,339	3,205	138	3,343
,301 \$49,artment equipment	1,128	882	113	995
,563 \$ 3,	\$39,967	\$10,524	\$ 689	\$11,213

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA 1968  
 LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA 1968

STATEMENT OF SURPLUS

FOR YEAR ENDED DECEMBER 31, 1972

(With comparative figures for year ended December 31, 1971)

	1972	1971	Centre d'Astronomie Montreal	Niagara Falls
Surplus at beginning of the year	\$25,228	\$29,100		\$426.60
<u>Deduct:</u> Excess of expense over revenue for the year	3,563	3,800		\$14,425.99
Net surplus at end of the year	<u>\$21,665</u>	<u>\$25,300</u>		\$1,516.00

STATEMENT OF UNAPPROPRIATED LIFE MEMBERSHIP FEES

	1972	1971	Kingston (b)	London	Montreal	Niagara Falls
Balance at beginning of the year	\$ 3,478	\$ 3,600				
<u>Add:</u> Life membership fees received during the year	450	1,000				
	\$ 3,928	\$ 3,800				
<u>Deduct:</u> Appropriation to general revenue for the year	371	300				
Balance at end of the year	<u>\$ 3,557</u>	<u>\$ 3,500</u>	\$103.33	\$295.08	\$1,516.00	\$426.60

STATEMENT OF RUTH NORTHCOTT MEMORIAL FUND

	1972	1971	Calgary	Edmonton	Halifax	Hamilton	Kingston (b)	London	Montreal	Niagara Falls
Balance at beginning of the year	\$ 6,127	\$ 4,800								
<u>Add:</u> Proceeds from Ruth Northcott Estate	359	1,200								
Public contributions	-	-								
Interest earned	415	-								
	\$ 6,901	\$ 6,000								
<u>Deduct:</u> Contribution toward library acquisitions	-	-								
Balance at end of the year	<u>\$ 6,901</u>	<u>\$ 6,000</u>	\$ 743.92	\$ 680.01	\$195.71	\$ 834.38	\$103.33	\$295.08	\$1,516.00	\$426.60

1972 balance consisted of: Cash \$ 2,901  
 Securities 4,000  
\$ 6,901

Balance from 1971  
 REVENUE  
 Membership Fees



	Calgary	Edmonton	Halifax	Hamilton	Kingston (b)	London	Montreal	Centre d'Astronomie Montreal	Niagara Falls
<b>Balance from 1971</b>	\$ 743.92	\$ 680.01	\$ 195.71	\$ 834.38	\$ 103.33	\$ 295.08	\$ 1,516.00	\$ 14,425.99	\$ 426.60
<b>REVENUE</b>									
Memberships Fees	657.34	315.00	180.00	625.00	93.00	229.00	1,700.00	4,091.00 (d)	225.00
Donations				43.38			158.00	674.68	1.00
Educational Activities									
Annual Dinner	6.85	152.00							
General Assembly									
Insurance Rebatement		50.00		5.50	1.50	40.50	965.00	1,399.77	6.00
Sales of Handbooks, etc.							5.00		
Advertising									
Interest and Dividends	113.30	22.27	4.26	12.24	.68	24.93	1,839.00	426.33	8.88
Life Member Grants		4.00	12.00	12.00		8.00	68.00		
Revenue from Observatory									
Miscellaneous	709.83 (c)	9.40	16.65	130.00		15.70	57.00	194.85	
<b>Total</b>	<b>\$2,231.24</b>	<b>1,232.68</b>	<b>\$408.62</b>	<b>\$1,619.12</b>	<b>\$241.89</b>	<b>\$613.21</b>	<b>\$6,308.00</b>	<b>\$21,212.62</b>	<b>\$667.48</b>
<b>EXPENDITURES</b>									
Fees Remitted to N.O.	\$ 201.00	\$ 204.00	\$ 108.00	\$ 381.00	\$ 36.00	\$ 157.20	\$ 654.00		\$ 141.00
Library	65.00		9.00			12.14	122.00		
Meetings and Newsletters		243.10	30.16	47.00	8.18	121.60	816.00	3,315.91	
Annual Dinner		200.00							
General Assembly								50.00	
Equipment and Supplies	10.68		155.96	154.34	51.38		1,010.00		29.36
Office and Administration	134.49				5.02	29.21	233.00	1,672.79	28.51
General Expense		1.94		229.82			268.00	525.71	14.57
Handbooks, etc.		24.00		19.20		8.00			
Educational Activities	274.00								
Insurance									
Awards		10.00		51.98					
Operating Expense - Observatory				35.00					
Miscellaneous	139.14	11.46	20.00	38.40		35.25	64.00	60.00	
<b>Total Expenditures</b>	<b>\$ 824.31</b>	<b>\$ 694.50</b>	<b>\$ 323.12</b>	<b>\$ 956.74</b>	<b>\$ 100.58</b>	<b>\$ 363.40</b>	<b>\$ 3,217.00</b>	<b>\$ 5,574.41</b>	<b>\$ 280.34</b>
<b>Balance Carried to 1973</b>	<b>\$ 1,407.93</b>	<b>\$ 538.18</b>	<b>\$ 85.50</b>	<b>\$ 662.38</b>	<b>\$ 141.31</b>	<b>\$ 249.81</b>	<b>\$ 3,091.00</b>	<b>\$ 15,638.21</b>	<b>\$ 387.14</b>
Other Assets	2,503.11							8,033.98	
<b>Total</b>	<b>3,910.24</b>							<b>23,672.19</b>	

(a) Includes North Mountain

(b) May 1 - December 31, 1972

(c) 1973 Eclipse Trip

(d) Net

REPORTS OF TREASURERS OF CENTRES

	Ottawa (a)	Quebec	St. John's	Saskatoon	Toronto	Vancouver	Victoria	Windsor	Winnipeg
<b>Balance from 1971</b>	<b>\$1,274.91</b>		<b>\$ 61.79</b>	<b>\$306.90</b>	<b>\$4,198.73</b>	<b>\$ 960.25</b>	<b>\$2,836.41</b>		<b>\$ 761.56</b>
<b>REVENUE</b>		N						N	
Membership Fees	1,140.18	O	123.00	345.00	5,992.19	755.00	545.00	O	958.50
Donations	220.00	T		92.00	1.00	580.00		T	
Educational Activities		R					435.94	R	
Annual Dinner	375.00	E					200.75	E	
General Assembly		P				4,846.00		P	
Insurance Rebate	298.00	O		58.40			14.00	O	7.50
Sales of Handbooks, etc.		R			378.00			R	
Advertising	14.77	T	.79		329.06	56.26	107.51	T	15.75
Interest and Dividends	80.00	E					48.00	E	8.00
Life Member Grants		D				32.00		D	
Revenue from Observatory	3.56		.15				2.00		
Miscellaneous									
<b>Total</b>	<b>\$3,406.42</b>		<b>\$185.73</b>	<b>\$802.30</b>	<b>\$10,898.98</b>	<b>\$7,229.51</b>	<b>\$4,189.61</b>		<b>\$1,751.31</b>
<b>EXPENDITURES</b>									
Fees Remitted to N.O.	\$ 684.00		\$ 72.00	\$207.00	\$ 3,273.00	\$ 141.00	\$ 410.20		\$1,002.00
Library	99.87		9.53	56.12	4.73				
Meetings and Newsletters	393.80		21.20	88.86	1,673.57	40.00	297.64		224.60
Annual Dinner	398.00						267.15		
General Assembly				43.00	200.00	5,051.47			
Equipment and Supplies	176.40		11.00		193.79	310.00	55.52		100.39
Office and Administration	108.00		8.00	21.81	202.47	45.47	100.50		136.67
General Expense	71.41		11.00		546.87	204.58			27.98
Handbooks, etc.	223.50								
Educational Activities				5.24	234.80				
Insurance									
Awards									
Operating Expense - Observatory				5.00	176.55	19.51			
Miscellaneous	41.41								
<b>Total Expenditures</b>	<b>\$2,196.39</b>		<b>\$132.73</b>	<b>\$427.03</b>	<b>\$ 6,505.78</b>	<b>\$5,812.03</b>	<b>\$1,131.01</b>		<b>\$1,491.64</b>
<b>Balance Carried to 1973</b>	<b>\$1,210.03</b>		<b>\$ 53.00</b>	<b>\$375.30</b>	<b>\$ 4,393.20</b>	<b>\$1,417.48</b>	<b>\$3,058.60</b>		<b>\$ 259.67</b>
Other Assets	370.86			9,661.60			573.28		
<b>Total</b>	<b>1,580.89</b>			<b>14,054.80</b>			<b>3,631.88</b>		

**THE ROYAL ASTRONOMICAL SOCIETY OF CANADA  
OFFICERS AND COUNCIL OF THE CENTRES FOR 1973**

**CALGARY CENTRE**

*President* – John Findlay, 5327 Dalhurst Cr. N.W.

*Vice-President* – Hank Langstaff, 28 Glamorgan Dr. S.W.

*Secretary* – Bob Nelson, 2223 - 7th Ave. N.W.

*Treasurer* – J. G. Bishop, 184 Cornwallis Dr. N.W.

*Recorder* – Brian Clark

*Librarian* – Mike Bandmann

*Editor* – John Howell

*Council* – K. Meiklejohn, Dr. D. J. Fry, P. Costella, Dr. T. A. Clark, U. Haasdyk, N. Lingford, M. McKay, G. L. Robertson.

*National Council Representative* – Mr. S. Litchinsky

**EDMONTON CENTRE**

*Honorary President* – Prof. E. S. Keeping, B.Sc., A.R.C.S. (London), D.I.C.

*President* – Mrs. J. Rusch, 15224 - 81 Avenue

*Vice-President* – D. R. Bruner

*Secretary* – Mrs. Yni Ebbers, R.R. #6 Nth, Edmonton

*Treasurer* – Michael Dostal

*Librarian* – David Ellis

*Editor* – Keith Enhagen

*Director, Educational Activities* – Franklin Loehde, B.Sc., B.Ed.

*Social Committee Chairman* – Mrs. Audrey Loehde

*Assistant* – Mrs. Erna Dostal

*Council* – Robert Paul, Douglas P. Hube, Ph.D., Franklin Loehde

*National Council Representative* – Franklin Loehde

**HALIFAX CENTRE**

*President* – Dr. M. Cunningham, Victoria General Hospital, Apt. 306, Park Victoria, Halifax

*Vice-President* – Dr. P. H. Reynolds

*Secretary* – Dr. David L. Dupuy, Department of Astronomy, St. Mary's University, Halifax

*Treasurer* – Peter K. Stokoe

*Editor* – Mr. P. Edwards

*Librarian* – Miss M. Dunsworth

**HAMILTON CENTRE**

*President* – R. Speck, 448 East 13th Street, Hamilton

*Vice-President* – Mr. John MacDonald

*2nd Vice-President* – Mr. Ken Chilton

*Secretary* – Mr. Peter Ashenhurst, 135 Mohawk Road East

*Treasurer* – Mr. Ned Colquhoun

*Librarian* – Mr. Walter Korber

*Recorder* – Miss Lily Young

*Curator* – Jim Winger

*National Council Representative* – Mr. K. Chilton, 93 Currie Street

**KINGSTON CENTRE**

*President* – Paul Brown, R.R. #1, Sterling Avenue, Kingston, Ontario

*Past President* – Kenneth Heaton

*Vice-President* – Valerie Kirkwood

*Secretary-Treasurer* – Geoffrey Wyght, Room 358, Gordon House, Queen's University

*Council* – Geoffrey Wyght, Dave Ridding

**LONDON CENTRE**

*Honorary President* – Dr. W. H. Wehlau, Ph.D.

*President* – Mr. Martin G. Connors, 362 Baseline Road, W. London N6J 1W1

*1st Vice-President* – Mr. Mike Wallis

*2nd Vice-President* – Mr. Paul Cooper

*Secretary* – Mr. Eric J. Clinton, 8 Trillium Cres. N5Y 4T4

*Treasurer* – Mr. Robert W. Cornforth

*Librarian* – Mr. Chris Essex

*Council* – Peter Andreae, Chris Essex, Ron Lyons, Steve Sharpe, James Livingstone,  
Raphael Thierrin.

**MONTREAL CENTRE**

*Honorary President* – Dr. P. M. Millman

*President* – Mr. B. Ramsay, 69 Fieldsend Ave., Beaconsfield, 870. PQ.

*Vice-President* – Mr. W. Jutting

*Secretary* – Mr. C. Papacosmas, P.O. Box 1003, Station “B”, Montreal

*Treasurer* – Henry Nothof

*Recorder* – Mr. W. J. Cullinan

*Librarian* – Miss N. Hague

*Director, Observatory* – Mr. L. Nikkinen

*Director, Observational Activities* – Mr. J. Allcock

*Council* – J. Amsel, H. B. Berrys, S. Brown, H. Boshouwers, Dr. G. L. Fortier, R. Harding,  
Dr. T. F. Morris, N. Murrison, G. Robertson, H. J. Widdop

**CENTRE D’ASTRONOMIE DE MONTREAL**

*Président* – Henri Simard, C.P. 904 Station “B” Montreal 110

*Vice-Président* – Mme. Huberte Palardy

*Sécretaire* – Rolland Noel de Tilly, 3860 est, Rachel Nol, Montreal 406

*Trésorier* – Guy C. Morin

*Administrateur* – Philippe Mailloux

*Conseil* – MME. L. Beauchamp, Mlle I. Gauthier, A. Aird, P. Beauchamp, P. Beaudoin,  
H. Coia, J. A. Dumas, G. Fraser, R. Gagnon, M. Legris, A. Rousseau, A. Roussin,  
M. Seguin.

*Représentants du conseil national* – Philippe Mailloux

**NIAGARA FALLS CENTRE**

*President* – Frank Scordino, Box 181, St. Davids, Ontario

*Vice-President* – Robert Winder

*Secretary* – Robert Doran, M.B.A. Box 241, Niagara Falls

*Treasurer* – Al Kindy

*Council* – J. Hauzer

**OTTAWA CENTRE**

*Honorary President* – Dr. C. S. Beals

*President* – Mrs. Mary I. Henderson, 661 Golden Ave., K2A 2G3

*1st Vice-President* – Mr. R. W. Tanner

*2nd Vice-President* – Mr. K. Perrins

*Secretary* – Mrs. Mary W. Grey, B.Sc. (C.E.), Earth Physics Branch, 3 Observatory Cres.  
K1A 0E4

*Treasurer* – R. Wlochowicz, B.Eng.

*Librarian* – Mr. S. A. Mott

*Recorder* – Miss Cathy L. Hall

*Council* – Mr. T. E. D. Bean, Mr. J. M. Grant, Mr. J. L. Horwood, Mr. E. Terheijden, Dr. D.W.  
Sida, M.Sc., Ph.D. (Lon). F.R.A.S.

**CENTRE QUEBEC***Président* –*Vice-Président* –*Sécretaire* –

Not Reported

*Trésorier* –*Bibliothécaire* –*Rapporteur* –**ST. JOHN'S CENTRE***President* – Mrs. Dora Russell, 1 Stoneyhouse St., St. John's*Vice-President* – Mr. Randell Dodge*Secretary* – Mr. William Hurley, 3 St. Michael's Avenue*Treasurer* – Dr. Peter Lockwood**SASKATOON CENTRE***President* – Mr. Ronald M. Waldron, 805 2nd St. E., S7H 1P8*Vice-President* – Paul E. Patterson*Secretary* – Miss Melodie Andrews, 419 Mount Allison Cres, S7H 4A6*Treasurer* – Alan T. Blackwell*Education* – Dr. Fred A. Holden*Librarian* – Win Ford*Activities Coordinator* – Murray Strankay*Programming* – Dr. Milton C. Phenneger**TORONTO CENTRE***Honorary President* – Dr. H. S. Hogg*President* – Harlan Creighton, B.Sc., 1442 Lawrence Ave. W., Apr. 712. M6L 1B5*Secretary* – Dan Ostler, 33 Holly St., Apr. 103, M4S 2G8*Vice Presidents* – Dr. René Racine, Dr. J. Van Kranendonk*Treasurer* – Alf Scott*Recorder* – Fred Troyer*Past Presidents* – Dr. John Percy, Ph.D., D. J. Fitzgerald*Council* – Richard Berry, Jim Cobban, George Foster, Vern Ramsay, Peter Tattersall,  
Ray Thompson, Ralph Chou, Denis Halley, D. J. Morris**VANCOUVER CENTRE***Honorary President* – Dr. V. J. Okulitch*President* – Dr. Donald Smellie, 1666 West Broadway, Vancouver 9*Vice President* – James F. Wright*Secretary Treasurer* – Mrs. Patricia Mills, 782 Eyremount Drive, W. Vancouver*Director of Telescopes* – Mr. Stephan Hess*Editor* – Mr. David Dodge*Council* – Mr. David Hurd, Wm. Gosse, Major Paul Sykes, Terry Taylor, John Tomson,  
Mrs. Doreen Choukalos**VICTORIA CENTRE***Honorary President* – Dr. J. A. Pearce*President* – Mr. Roger G. Napier, 80 King George Terrace*1st Vice-President* – Dr. C. D. Scarfe*2nd Vice-President* – Mrs. C. L. Bridgen*Secretary* – Mr. M. A. Shepherd, 3970 Cherrilee Crescent*Treasurer* – Mr. F. R. Williams

*Recorder* – Mrs. S. Ingram  
*Librarian* – Mr. E. E. Bridgen  
*Director of Telescopes* – Mr. G. R. Ball  
*Council* – Mr. D. B. Dundee, Dr. J. H. Moore, Mr. V. L. Stanley-Jones, Mr. Roger Williams,  
 Mr. H. S. Leeder, Mr. F. Younger.

#### WINDSOR CENTRE

*Honorary President* – Prof. John Huschilt  
*President* – Mr. David Toth, 2360 Leonard, Windsor 19  
*Vice President* – Mr. James McTavish  
*Secretary* – Mr. Robert Earl, 3190 Woodlawn, N8W 2H9  
*Treasurer* – Mr. Paul Price  
*Recorder* – Mr. Brian Dorrepaal  
*Librarian* – Mr. Cameron  
*Coordinator of Observing* – Mr. Gary Drouin  
*Council* – Henry Lee, Bert Huneault, Cyril Hallam, Cameron Montrose, Harry Horton,  
 James Meredith, Valentine Hompath, Gordon Scott, Lorison Durocher,  
 Michael Hasting-Trew, Jack McGaffey, J. Townsend.

#### WINNIPEG CENTRE

*President* – Mr. Del Stevens, 22 Rowland Avenue, Winnipeg  
*1st Vice-President* – Mr. Roy Belfield  
*2nd Vice-President* – Mr. Paul Moffat  
*Secretary* – Miss Ella Dack, 505 – 24 Carlton Street  
*Treasurer* – Mr. Frank Richardson  
*Council* – Richard Bochonko, Jim Gould, A. Luchik, Clyde Reid, Dr. J. N. R. Scatliff,  
 B. F. Shinn  
*Junior Member Representative* – John Wunderlich

#### GOLD MEDAL OF THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

The Gold Medal of the Society was established in 1905 as an encouragement to the study of astronomy. It is awarded to the graduating fourth year Arts & Science student who has both an A standing in his fourth year and the highest average mark in the two full courses and two half courses in astronomy which are contained in the Astronomy specialist programme, provided this average is over 80%. If no student satisfies these criteria, the award is not made.

1906 – W. E. Harper	1931 – W. S. Armstrong	1962 – J. R. Percy
1907 – R. M. Motherwell	1933 – K. O. Wright	1963 – P. H. Reynolds
1909 – R. K. Young	1935 – Miss F. S. Patterson	1965 – A. F. I. Moffat
1910 – R. J. McDiarmid	1937 – D. A. MacRae	1966 – W. A. Sherwood
1911 – R. S. Sheppard	1940 – W. F. M. Buscombe	1967 – R. H. Chambers
1913 – E. A. Hodgson	1948 – R. W. Tanner	1968 – R. Martin
1914 – G. S. Campbell	1949 – I. Halliday	1970 – J. Kormendy
1926 – F. S. Hogg	1956 – D. C. Morton	1971 – Blake F. Kinahan
1929 – P. M. Millman	1960 – C. R. Purton	1972 – M. J. McCutcheon
	1961 – R. C. Henry	

### CHANT MEDAL OF THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

The Chant Medal of the Society was established in 1940 in appreciation of the great work of the late Professor C. A. Chant in furthering the interests of astronomy in Canada. This medal is awarded, not oftener than once a year, to an amateur astronomer resident in Canada on the basis of the value of the work which he has carried out in astronomy and closely allied fields of original investigation. Awards have been made to the following:

1940 – Bertram J. Tropham (Toronto)	1951 – DeLisle Garneau (Centre d’Astronomie de Montréal)
1941 – H. Boyd Drydon (Victoria)	1953 – Jean Naubert (Centre d’Astronomie de Montréal)
1942 – W. G. Colgrove (London)	1955 – Frank J. DeKinder (Montreal)
1943 – Cyril G. Wates (Edmonton)	1956 – Maurice Drolet (Quebec)
1945 – Paul-H. Nadeau (Quebec)	1959 – Earl Milton (Edmonton)
1948 – Isabel K. Williamson (Montreal)	1967 – R. R. Thompson (Toronto)
1949 – Frank Sisman (Hamilton)	
1950 – F. Keith Dalton (Toronto)	

### SERVICE AWARD MEDAL OF THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

The Service Award was established in 1959 and, on recommendation of a special committee of the National Council, this small bronze plaque is presented to members who have performed outstanding service to a Centre or to the National Society.

1959 – E. J. A. Kennedy (Nat. Secretary) J. H. Horning (National Treasurer)	1966 – P. Lemieux (Montréal) S. Litchinsky (Calgary) W. J. McCallion (Hamilton) W. A. Warren (Montréal)
1960 – Charles M. Good (Montréal) Miss F. Laforest (Montréal) Frederic L. Troyer (Toronto)	1967 – H. S. Hogg (Toronto) P. M. Millman (Ottawa) *R. J. Northcott (Toronto) H. Simard (Montréal) J. F. Wright (Calgary)
1961 – *Robert Peters (Victoria)	1968 – D. R. P. Coats (Calgary and Winnipeg) George Ball (Victoria) Herbert Fox (Hamilton)
1962 – Jean Asselin (Montréal) Robert J. Clark (Vancouver) Jesse Ketchum (Toronto) Joseph A. Pearce (Victoria)	1970 – Norman Green (Hamilton) J. E. Kennedy (Saskatoon)
1963 – Edwin E. Bridgen (Montreal) Miss M. S. Burland (Ottawa) A. Vibert Douglas (Kingston)	1971 – K. B. Meiklejohn (Calgary) J. N. R. Scatliff (Winnipeg)
1964 – C. S. Beals (Ottawa) M. W. Burke-Gaffney, S. J. (Halifax) W. T. Goddard (Hamilton)	1972 – Vern Ramsay (Toronto) B. F. Shinn (Winnipeg) F. Schneider (Hamilton)
1965 – D. C. Bawtenheimer (Windsor) John F. Heard (Toronto) A. M. Crooker (Vancouver) Ernest S. Keeping (Edmonton) *W. S. Mallory (Hamilton)	*Deceased

It is with regret we record the decease of the following members in 1972:–

Dr. R. L. Aikens – (Halifax)	Dr. H. Shapley – (U.S. Hon.)
Mr. E. E. Bossence – (Hamilton)	Mr. A. D. Smith – (Edmonton)
Dr. H. E. Crull – (U.S.)	Dr. A. J. Watt – (London)
Senator T. C. Desmond – (U.S.)	Dr. G. B. Van Albada – (U.S.)
Miss K. A. Gray – (Tor. Life)	





## THE ROYAL ASTRONOMICAL SOCIETY OF CANADA (1968)

### NATIONAL OFFICERS AND COUNCIL FOR 1972

- Honorary President* – A. Vibert Douglas, Ph.D., LL.D., M.B.E., S.M.  
*President* – J. L. Locke, Ph.D., Ottawa  
*1st Vice-President* – J. D. Fernie, Ph.D., Toronto  
*2nd Vice-President* – R. J. Lockhart, B.A., Winnipeg  
*Secretary* – C. E. Hodgson, 252 College Street, Toronto M5T 1R7  
*Treasurer* – Cyril G. Clark, 252 College Street, Toronto M5T 1R7  
*Recorder* – Leslie V. Powis, Hamilton  
*Librarian* – R. Peter Broughton, M.Sc., Toronto  
*Editor of JOURNAL* – Ian Halliday, Ph.D., Ottawa  
*Editor of OBSERVER'S HANDBOOK* – John R. Percy, Ph.D., Toronto  
*Assistant to the Editor, JOURNAL* – Mrs. Marie Litchinsky  
*Executive Secretary* – Miss Rosemary Freeman  
*Council* –  
*Past Presidents* – M. M. Thompson, M.Sc., Ottawa, J. E. Kennedy, M.Sc., Saskatoon,  
 H. Simard, Montreal

#### Representatives from Centres:

- Calgary Centre – S. Litchinsky  
 Edmonton Centre – E. S. Keeping, B.Sc.  
 Halifax Centre – John Shaw  
 Hamilton Centre – K. Chilton  
 Kingston Centre – K. Heaton  
 London Centre – W. Wehlau, Ph.D.  
 Montreal Centre – S. Sundell, L. Duchow  
 Centre d'Astronomie de Montréal – Mme R. Matteau  
 Niagara Falls – J. Hauzer  
 Ottawa Centre – L. A. Higgs, Ph.D.  
 Centre de Québec – P. Marmet, Ph.D.  
 St. John's Centre – Mrs. D. Russell  
 Saskatoon Centre – Dr. F. A. Holden  
 Toronto Centre – H. Creighton, B.Sc.; E. R. Seaquist, Ph.D.; Dr. R. Racine, D. J. Fitzgerald,  
 D. Ostler  
 Vancouver Centre – David Hurd  
 Victoria Centre – J. L. Climenhaga, Ph.D.  
 Windsor Centre – Henry Lee  
 Winnipeg Centre – B. F. Shinn

### HONORARY MEMBERS OF THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

- |  |                                    |
|--|------------------------------------|
| Dr. V. A. Ambartsumian (U.S.S.R.)      | Prof. H. H. Plaskett (England)     |
| Dr. Bart J. Bok (Australia)            | Dr. Martin Schwarzschild (U.S.A.)  |
| Dr. J. S. Bowen (U.S.A.)               | Dr. Josif S. Shklovsky (U.S.S.R.)  |
| Dr. Gerald M. Clemence (U.S.A.)        | Prof. Bengt G. Stromgren (Denmark) |
| Prof. H. C. van de Hulst (Netherlands) | Dr. A. Unsold (Germany)            |
| Dr. A. H. Joy (U.S.A.)                 | Dr. G. Van Biesbroeck (U.S.A.)     |
| Dr. J. H. Oort (Netherlands)           | Dr. R. v.d.R. Woolley (England)    |
| Dr. Harlow Shapley (U.S.A.) – Deceased |                                    |

