



Supplement to the **JOURNAL**  
of the **ROYAL ASTRONOMICAL**  
**SOCIETY** of **CANADA**

**ANNUAL REPORT 1975**

**APRIL 1976**

## PRESIDENTS OF THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

1890-1894	C. Carpmael	1936-1937	R. E. DeLury
1895	L. W. Smith	1938-1939	W. Findlay
1896-1897	J. A. Paterson	1940	J. A. Pearce
1898-1899	A. Harvey	1941-1942	F. S. Hogg
1900-1901	G. E. Lumsden	1943-1944	A. V. Douglas
1902-1903	R. F. Stupart	1945-1946	A. E. Johns
1904-1907	C. A. Chant	1947-1948	J. W. Campbell
1908-1909	W. B. Musson	1949-1950	A. Thomson
1910-1911	A. T. DeLury	1951-1952	C. S. Beals
1912-1913	L. B. Stewart	1953-1954	J. F. Heard
1914-1915	J. S. Plaskett	1955-1957	R. M. Petrie
1916-1917	A. D. Watson	1957-1959	H. S. Hogg
1918-1919	A. F. Miller	1959-1960	A. McKellar
1920-1921	J. R. Collins	1960-1962	P. M. Millman
1922-1923	W. E. W. Jackson	1962-1964	R. J. Northcott
1924-1925	R. M. Stewart	1964-1966	K. O. Wright
1926-1927	A. F. Hunter	1966-1968	M. M. Thomson
1928-1929	W. E. Harper	1968-1970	J. E. Kennedy
1930-1931	H. R. Kingston	1970-1972	H. Simard
1932-1933	R. K. Young	1972-1974	J. L. Locke
1934-1935	L. Gilchrist	1974-	J. D. Fernie

## SECRETARIES OF THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

Corresponding Secretary 1890-1901; Secretary 1902-1919, General Secretary 1920-1949;  
National Secretary 1950 onwards.

1890-1899	G. E. Lumsden	1932-1935	R. A. Gray
1900-1901	W. B. Musson	1935-1958	E. J. A. Kennedy
1902-1917	J. R. Collins	1958-1964	J. E. Kennedy
1918-1919	W. E. W. Jackson	1964-1971	N. Green
1920-1923	A. F. Hunter	1971-1974	C. E. Hodgson
1924-1927	F. T. Stanford	1974-	D. J. FitzGerald
1928-1931	L. Gilchrist		

## REPORT OF THE NATIONAL PRESIDENT

The 1975 General Assembly took place at St. Mary's University in Halifax, June 27-29, and maintained the continuing high standards of recent Assemblies. The only contretemps was the absence of the Northcott Lecturer, Dr. Owen Gingrich, due to a sudden bereavement in his family. We thank and congratulate the Halifax Centre for their hard work in producing an excellent program.

During the year the National Council decided to proceed with the sale of the National Headquarters building in Toronto. It long seemed as though a favourable settlement would be reached with the neighbouring Clarke Institute, but cut-backs in provincial spending resulted in this falling through, and the property has now been placed on the open market. The National Secretary and a small committee will deal with the concomitant problem of where to relocate our Headquarters once a definite date of sale is known, although Council has several times debated general ideas on this matter.

The Society's library has become a matter of increasing concern during the year. Although any member anywhere in the country may borrow books by mail from the library, it is in fact a service that is hardly used at all. Council must now face the question of whether it is worth trying to maintain the library in view of the current very high prices for books (as well as the cost of the space they occupy), or whether to convert it into purely a slide- and film-library. No decision has yet been made on this, but members who have strong feelings on the subject should make them known to Council as soon as possible.

Dr. Ian Halliday has now left the post of editor of the Journal and been replaced by Dr. Lloyd Higgs. We thank Dr. Halliday for his years of hard work on our behalf, and welcome Dr. Higgs to the editorship.

It is a pleasure to announce that two new Honorary Members were appointed during the year: Dr. Allan Sandage of the Hale Observatories, California, and Dr. Audouin Dollfus of the Paris Observatory.

Once again, I am most grateful to the many people who have given generously of their time in assisting the Council during the past year.

J. D. Fernie

## REPORT OF THE NATIONAL SECRETARY

1975 has been another year of extensive and varied activity by the Society's Centres across Canada as described in the reports which follow.

During the year Council Meetings were held in Toronto on January 25th, April 26th, and September 27th. The Annual Meeting was held in Halifax on June 28th in conjunction with the General Assembly and Council Meetings.

Membership in the Society at September 30th, 1975 decreased by 5% compared to 1974. Comparative figures are listed below.

	1974	1975
Calgary	61	61
Edmonton	42	63
Halifax	33	37
Hamilton	66	62
Kingston	18	12
London	36	35
Montreal	139	102
La Society D/Ast. Mtl	54	53
Niagara	31	25
Ottawa	206	195
Quebec	69	55
St. John's	11	12
Saskatoon	58	56
Toronto	647	594
Vancouver	112	129
Victoria	85	104
Windsor	45	37
Winnipeg	53	52
<b>Unattached</b>		
Canada	173	186
United States	369	327
Overseas	26	26
Honorary	14	15
<b>TOTAL:</b>	<b>2348</b>	<b>2238</b>

The Society gratefully acknowledges the receipt of annual grants from the National Research Council of Canada and the Ministry of Colleges and Universities of the Province of Ontario.

In addition, we are grateful for a donation of \$10,000. bequeathed to us by the Estate of the late Edward Russell Paterson, who died January 2nd, 1975.

D.J. FitzGerald, *National Secretary*

## REPORT OF THE NATIONAL LIBRARIAN

I am pleased to submit the following report on the activities of your Library Committee during 1975.

The Committee consisted of Mr. Peter Broughton, Mr. Ralph Chou, Mr. Cyril Clark, and Dr. Helen Hogg. Valuable assistance was also rendered by Mr. Moody Kalbfleisch (Toronto), Mr. Paul Brown (Kingston), Mr. B. F. Shinn (Winnipeg), and Miss Rosemary Freeman, Executive Secretary.

Circulation was disappointingly low this year, primarily because of a long postal

strike in the fall. However, about 125 books were borrowed during the year. Requests for books came from members from such diverse places as St. John's, Newfoundland; Port Elgin, Ontario; Mould Bay, N.W.T.; and Prince Rupert, B.C. Plans to add a number of new volumes to the Library were postponed when the postal strike slowed to a trickle the cash inflow to the National Office.

A new storage facility for our slide collection arrived in the autumn. However, there is still quite a lot of work to be done before the collection will be ready for circulation again. Mr. Paul Brown (Kingston) and Mr. Frank Shinn (Winnipeg) were able to overcome a number of technical hurdles and record a sound track on Mr. Shinn's film *Sand, Silver and Stars*, which describes the fabrication of a 12-inch Cassegrain telescope for Jack Newton. Finally, a number of old films were discarded as they were worn beyond repair.

The September, 1975, meeting of National Council included a discussion about the future of your National Library. In particular, concern was expressed over the relatively little use being made of the facility. As Librarian, I would ask that interested members communicate to me their feelings on how the Library might best serve the Society. In particular, what kinds of materials (books, slides, films, etc.) should the Library stock, and for what purposes? Any suggestions will be welcomed.

In closing, I should like to express my sincere gratitude to all of those who assisted with the operation of the Library during the year. It has been a pleasure to serve the Society in this capacity.

Harlan Creighton, *National Librarian*

## REPORT OF THE EDITOR OF THE NATIONAL NEWSLETTER

It is with pleasure that I submit the following report on the *National Newsletter* for 1975.

During the year, the Editorial Committee consisted of Marie Fidler, Norman Green, Dr. J. F. Heard, William Peters and Celeste Peters, as Assistant Editors, with the undersigned as Editor.

A total of seventy-two pages were published – twice the number of any previous year. As the result of work by Mr. Peters, photographs became a regular feature in the *Newsletter* and we hope to add a photographer to our committee in the new year. The response of the membership, in terms of contributions, has been very gratifying. In fact, we were unable to print all of the material submitted for the December issue, since the addition of another leaf would have made the Journal too fat for its binding!

The Editorial Committee aims to publish material that is of interest to our membership at large. We want the *Newsletter* to be an expression of the varied interests and activities of the entire membership. We hope that the *Newsletter* will provide a national forum through which our membership may share their fascination of astronomy with others.

In closing, I wish to pay tribute to the entire Editorial Staff for their exceptionally fine work. It has been a real pleasure to work with them. Special thanks are due to Bill and Celeste Peters who have been responsible for a number of innovations, some of which will appear in 1976; also to Jan Davidse of the University of Toronto Press, who has assisted in many ways. Finally, I am deeply grateful to our growing number of contributors, without whom the *Newsletter* would not exist.

The Editorial Committee looks forward to serving you in the coming year.

Harlan Creighton, *Editor*

## CALGARY CENTRE

1975 was another interesting year for the Calgary Centre. The usual number of Council meetings were held together with special committee meetings to plan for the 1976 General Assembly in this city. Our membership increased about ten percent and the meetings were all well attended. These included:

- January 16 "The Black Hole Mystery": Dr. D. J. I. Fry, University of Calgary
- February 20 "Junior Forum": Cameron Treleven on "Using a Camera with your Telescope"
- March 20 "Fact and Fiction in Astronomy": J. Brian Clarke
- April 17 "Relativity and Randomness in the Universe": Dr. Philip Greenberg (exchange speaker from the Edmonton Centre)
- May 15 "Immanuel Velikovsky – Let's Take a Look": Dr. E. R. Milton, University of Lethbridge
- September 18 "Aurora, Modern Ideas": Dr. T. Berkey, University of Calgary
- October 16 "Observatory Night" at Rothney Astrophysical Observatory, Priddis
- November 20 "Archaeological Astronomy": Dr. G. Milone, University of Calgary
- December 11 Annual Banquet held at Hy's Steak House. The entertainment included a slide show by Dr. Fry on his recent visit to India.

In October over 150 members and guests enjoyed a special Planetarium Night, hosted by John Findlay.

The Centre is again indebted to the University of Calgary for the use of their facilities for some of our meetings as well as access to the Observatory at Priddis and to Dr. Alan Clark for his assistance in this regard. Meeting places were divided between the University and the Calgary Centennial Planetarium.

Marie Litchinsky, *Secretary*

## EDMONTON CENTRE

The Edmonton Centre held nine regular and five council meetings during the 1974-75 season. The regular meetings were held in the Queen Elizabeth Planetarium. The first meeting was on October 21 at which time the new executive and council were elected. At the Centre's Annual Banquet, in November, the President's Award and McBain Astrophotography Award were presented.

Speakers and topics for the regular meetings were:

- October Dr. Jack Winzer: "Polluted Stars".
- November Annual Banquet; Dr. Philip Greenberg: "General and Special Relativity"
- December Film presentation: "The Crab Nebula".
- January Dr. Doug Hube: "Binary Stars", or "Seeing Double".
- February Planetarium presentation: "The Year of the Younger Wood Rabbit".
- March Anthony Whyte: "The Light of the Night Sky – the Gegenschein, Zodiacal Light, Aurora, *et cetera*".
- April Dr. D. J. Fry, exchange speaker from the Calgary Centre: "The Black Hole Mystery".
- May Paul Deans: "Here, There and Everywhere - the Case for Extraterrestrial Life" and Alan Dyer: "Are We Alone?"
- June Film presentation: "The Jupiter Odyssey" and "Space in the 70's – the Knowledge Bank".

The Edmonton Centre and the Queen Elizabeth Planetarium again jointly hosted *Star Night*, a two day public programme of displays, lectures, films and telescope observing. It was held in September, 1975.

Membership, attendance at meetings and the Centre's bank account all showed a healthy increase this season and this will make for a very active Centre next year.

Anthony J. Whyte, *Secretary*

## HALIFAX CENTRE

Our major activity in 1975 was of course the General Assembly held at Saint Mary's University, June 27-29. From all accounts, it was a successful undertaking attracting almost 100 registrants from 14 of 18 centres across the country.

Our regular meetings (normally held in the Nova Scotia Museum) are briefly described below. In addition, we held several general observing sessions.

- January 17 Spacecraft: Manned Vehicles to the Planets – Past, Present, Future by Martin Zatzman.
- February 21 Black Holes, White Holes and Worm Holes by Dr. Robert Roeder, University of Toronto.
- March 21 Members Night: slides and movies.
- April 18 Weather Patterns in Atlantic Canada by Reid Dexter.
- May 16 Mirror Optics and Grinding by Roy L. Bishop and Peter Edwards.
- June 20 The 1975 General Assembly: a final organizational meeting.
- September 19 Current Research in Astronomy at Saint Mary's University by Dr. David L. DuPuy, S.M.U.
- October 17 The Dunn Observatory, a description and tour of the new facility by members of the Dalhousie Physics Department.
- November 21 The Plate Tectonic Revolution by Dr. B. D. Loncarevic, Bedford Institute of Oceanography, Dartmouth, N.S.
- December 19 A Cylindrical Astrolabe by Dr. L. Bogan, Acadia University.

P. H. Reynolds, *Secretary*

## HAMILTON CENTRE

The Hamilton Centre had a rather mixed year of activities and events. The regular monthly meetings were quite successful and the other weekly activities were generally well attended. The Observers Group with its regular meetings at the end of the month had the main problem of being clouded out but it was encouraging to see that members were willing to come out when there was a scheduled time rather than have a poor individual response. Also much was learned and the big event of the year, the lunar eclipse of May 24, was well attended with a dozen or so members coming out. It's too bad that the eclipse was clouded out just at totality.

The large event of the year was the third tri-annual congress of the International Union of Amateur Astronomers, that was held at McMaster University during the summer. The week long event attracted members from 8 countries and the programme was enjoyed by all. The lecture part of the programme was shared between professional and amateur papers and various business meetings of the Union. The elections of the officers saw Ken Chilton elected to President of the Union for three years and Peter Ashenhurst elected as secretary for the same three year period.

A new activity of the centre is the monthly shopping mall tours in which the centre has a travelling display go to various covered malls in the area. This display is to advertise the existence of the Hamilton Centre and the various services made available to the public by the Centre such as school lectures, etc. This has been so successful that the programme is being continued during 1976. In the short fall term that the displays have been in use the membership has increased by 11 people. While not a great number, as a percentage of the total membership, it is quite large.

In the regular programme at the monthly meetings, the format is being changed to include about a half hour of films on astronomy along with the regular monthly lecture. The local Library has an excellent collection of new films of astronomical and physical sciences and it was thought that this would add a new dimension to the meetings.

Project Starlab, the Centre's efforts to build an observatory, has fallen on difficult times with the current economic downfall. It is hoped that by this time next year things will have changed sufficiently for the main dome to be constructed and be in use.

P. H. Ashenhurst, *Secretary*

## KINGSTON CENTRE

During most of this year the centre at Kingston has been a small tightly-knit centre. We did not consider ourselves large enough to warrant inviting outside speakers. Thus we contented ourselves with films and mini-lectures from members themselves. We hold a meeting every other Tuesday night and in good weather we hold an observing session for the whole centre on the intervening Mondays. Most of our lectures have been concerned with observing, the solar system and telescope-making. We had for instance a lecture on the moons of the planets and one on celestial coordinate systems. We were lucky to get some films from the Soviet Embassy in Ottawa that were excellent. A new addition to the National Film Library *Sand, Silver and Stars* made by Frank Shinn about the making of Jack Newton's 12 inch reflector, was screened recently. This was in connection with the several telescope-making projects which are in progress. Right now, (early March) we are all continually trying to get ourselves up at 4 o'clock in the morning to see Comet West, and we hope to get some good pictures.

As we exist as a double entity – being the Queen's University club as well – the AMS, the governing student body at Queen's, has required that all clubs on campus submit a constitution and be ratified. This means that the financial year of the club must run from September to September, therefore we are unable to submit our financial report for 1975 at this time. However, in the summer when the AMS has reimbursed us a report will be sent to the National Office.

Paul Brown, *Secretary*

## LONDON CENTRE

London Centre held nine regular meetings at the University of Western Ontario campus, and ten executive meetings, chaired by president Peter Andreae. The Program for 1975 was as follows:

- January 18 Annual Meeting and Third Annual Banquet of the London Centre.  
Dr. T. Bolton, U. of T. – “Observational Evidence of Black Holes.”
- February 14 Mr. Christopher McAlery, U.W.O. Astro. Dept. – “Explosive Variables.”
- March 14 Mr. G. Christopher Essex, U.W.O. Astro. Dept. – “AAVSO and the Role of the Amateur Astronomer.”
- April 11 Dr. H. R. Kingston Memorial Lecture – Dr. W. H. Wehlau, PhD. U.W.O. Astro. Dept. – “3.6 metre C.F.H.T.”
- May 9 Mr. L. Huneault and Mr. Gary Drouin, exchange speakers from the Windsor Centre, presented “Astronomical Extravaganza.”
- June 12 Mr. Peter Jedicke – “Colonizing Space.”
- July-August Weekly Observer's Group meetings at the London Urban Resource Centre.
- September 12 Member's night. Mr. Peter Andreae and Mr. John Conville – “Stellafane 1975” and John Conville – “General Assembly Halifax N.S.”
- October 12 Mr. Steven Zronik, field investigator A.P.R.O. – “U.F.O.s”
- November 14 Mr. Martin Connors, U.W.O. Physics Dept. – “Cosmic Rays.”
- December 12 Film night, BBC productions of “Crab Nebula” and “Continental Drifting”.



The London Centre Annual Banquet in January saw the presentation of the Merit award to two outstanding members of the Centre, past President Martin Connors, and "London RASC News" Editor Dr. David Turner.

The Observer's Group held two, well attended expeditions away from the polluting lights of London this year, the May 25th Lunar Eclipse and Perseid Meteors and Comet Kobayashi Star Night in August. Unfortunately like many observing sessions in the past, these were also plagued with poor sky conditions. Also held under the leadership of Observer's Group head Mike Wallis, were several summer public education sessions on theoretical astronomy and observational techniques, held at the London Public Library's Urban Resource Centre. Several of our members took part in AAVSO variable star programs, such as Recorder and Variable Star head Steven Sharpe who recorded 4,000 estimates from September 1974 to August 1975. Congratulations, Steve.

The Centre's newsletter again this year published many pages of informative reading, and thanks for a job well done Editor Michael Wallis. Seven years of publication, six Editors and (what else) five different printing formats later, "Astronomy London" newsletter is pioneering the techniques of editing, typesetting and mass producing with the aid of an economical, and efficient computer at Western. Our young executive hopes 1976 will be a progressive year for the centre and we can only hope, if the weather permits, for better observing nights for those whose telescope making efforts have paid off successfully.

Eric Clinton, *Executive Secretary*

## MONTREAL CENTRE

The Montreal Centre held two general meetings during the last fiscal year, i.e., October 1, 1974 to September 30, 1975.

In addition, the Observatory was open to the public every Saturday night. At these meetings, talks were given by members of the Centre, and when the weather permitted, various celestial objects were viewed through the Centre's 8-inch Celestron.

Observation nights, for members only, were held every Wednesday, at the Observatory, while the telescope makers met on Tuesday evenings, at a member's house.

Our observatory building was in constant use for additional activities such as Board of Directors and various Committee Meetings, courses, visits by interested groups, newsletter production, etc.

Some of our members lectured to various organizations in the Montreal area.

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

Work on the 20½ inch mirror has progressed slowly but steadily.

"Deep Sky Nights" for members were held successfully during the year. One of these was attended by some members of the Ottawa Centre.

Last but not least, 1975 was the year of "Smog and Telescope", a special issue of our monthly newsletter "Skyward". It was a spoof on "Sky and Telescope" and it drew many favourable comments from all over North America.

Constantine Papacosmas, *Secretary*

## LA SOCIÉTÉ D'ASTRONOMIE DE MONTREAL

La grève des postes nous a forcé à tenir notre assemblée générale le 16 décembre 1975 seulement.

Au cours de l'année dernière la Société a acquis un terrain à St.-Valérien, situé à environ 42 milles au sud-est de Montréal, dans le but d'y ériger un observatoire. Les travaux préliminaires ont débuté et on espère qu'à l'automne 1976 la construction de l'édifice

sera terminée. Puis on procédera par la suite à l'installation d'un télescope de 16 pouces.

Dix numéros de notre journal "Le Québec Astronomique" ont été publiés au cours de l'année 1975. Vu le coût de production, le journal sera à l'avenir imprimé avec les appareils disponibles au secrétariat de la Société.

Les conférences du mardi soir n'ont pas été aussi nombreuses, mais une réorganisation du comité des conférences nous assure dorénavant une continuité plus stable.

Quoique le nombre de télescopes construits par nos membres à notre salle d'optique soit moins nombreux que par les années passées, on note une amélioration très sensible dans la perfection des miroirs polis et des télescopes construits. La Société possédera sous peu son propre atelier d'aluminage.

La Société d'Astronomie de Montréal a terminé l'année 1975 avec 374 membres dont 54 étaient également rattachés à la Société Royale d'Astronomie du Canada.

Le Conseil d'administration s'est réuni onze fois au cours de l'année 1975. Le banquet annuel de la Société fut tenu à l'auberge du Vieux Foyer, à Val David (prop. M. Franco Caverzelli, membre actif de notre Société). A cette occasion, le trophée "Etoile d'Argent" fut remis au Dr. Jean-Louis Tassoul, astrophysicien de l'Université de Montréal, pour son travail de vulgarisation de l'astronomie au sein de la population francophone du Québec, et le prix Georgette LeMoynes fut décerné à M. Pierre Beauchamp en témoignage d'appréciation pour les nombreux services rendus à la Société.

La soirée populaire d'astronomie, que l'on organise chaque année en septembre, n'eut pas un grand succès en raison de la température inclémente. Toutefois plusieurs centaines de personnes vinrent nous rencontrer au Planétarium Dow.

Au cours de l'année, des représentants de divers groupes intéressés à l'astronomie au Québec se sont réunis dans le but de favoriser des relations et des échanges entre les intéressés. On l'appelle l'Association des Groupements des Astronomes Amateurs.

Rolland Noël de Tilly, *Secrétaire*

## NIAGARA CENTRE

During 1975 the Niagara Centre completed its arrangements for forming the Corporation. We are now a Corporation, we are still continuing our plans for our Observatory.

During the year we had a number of public Star Nights which were well attended. (When we weren't rained out.)

Our regular meetings were held at the Drummond Hill Library in Niagara Falls and were as follows:

- January 9 Election of Officers. Annual Tres. Report, Joe Hauser's Slide Show. Constellations and Deep Sky Objects. Mariner 9 Slides, and The Four Royal Stars.
- February 13 Ken Chilton was the speaker: topic "Future of Space Flight and a few other things".
- March 13 Film Show.
- April 10 Tony Aakerman, Demonstration and Lecture on "Making a Newtonian Telescope, and some hints on mirror grinding".
- May 15 "Astronomical Discussion General".
- June 12 "Film Night".
- July 12 Public Star Night.
- August 11 Meteor Watch "Perseus Showers".
- September 11 "Astronomical Discussion General".
- October 9 Robert Winder's "Paper on Grazing Occultations".  
Al Kindy "Astronomical Yard Sticks".
- November 13 Film Night.
- December 11 General Meeting and Film Night.

Lawrence Redman, *Secretary*

## OTTAWA CENTRE

In 1975 the Ottawa Centre conducted a varied and well-attended series of programs at the National Research Council building:

- January 22 Annual Dinner Meeting, Dr. C. C. Costain, National Research Council, "Is Absolute Time Absolutely Necessary"
- February 19 Film Night – "The Story of Mariner X"
- April 4 Observers' Group – "Comets and Comet Hunting"
- April 24 Dr. Alan H. Bridle, Queens University, "Interstellar Eavesdropping – Radio Searches for Extraterrestrial Life"
- September 16 Dr. M. Quigley, Appleton Laboratories, Slough, England, "Millimetre Radio Astronomy"
- October 16 Film Night – "Lunakhod" and "Who's Out There", Commentary by Rolf Meier
- November 17 Film Night – "The Planets", Commentary by Dr. P. Millman, National Research Council
- December 11 Dr. P. A. Feldman, National Research Council, "The Broom-Star of Bethlehem"

The Observers' Group continued its active programs with regular meetings the first Friday of each month and frequent observational evenings at the North Mountain Observatory and the Quiet Site. In July the Centre was thrilled when one of its members, Art Fraser, independently sighted a new comet in the sky, becoming the first Canadian to find it – and just missing the world recognition of having his name attached to it. At the prestigious annual gathering of amateur telescope makers in Stellafane, Vermont, in August, Rolf Meier and Pierre Lemay, both very active Observers' Group members, won awards of excellence for their telescopes. In late summer the group lost its very popular chairperson, Cathy Hall, to the University of Victoria. Her office was ably filled 'till the end of the year by Doug Welch, who was also selected as Observer of the Year for his many activities in the group.

The Centre's newsletter, Astronotes, prepared under the very capable Editorship of Rolf Meier continued to be a focus for shared experiences and activities of Observers' Group members. For the first time twelve numbers were issued during the year and distribution included not only all Ottawa Centre members and copies to all Centres in Canada but, on an exchange or subscription basis, copies have been sent to the United States and Great Britain.

The membership for 1975 was 194 including 21 life members and 37 student members.

It was with regret that the Centre learned of the death in December 1975, of one of its members, Mr. George A. Browne, formerly Canadian Consul General in Sydney, Australia.

E. H. Dudgeon, *Secretary*

## CENTRE DE QUEBEC DE LA S.R.A.C.

L'année 1975 a été des plus riches en activités pour notre centre. De 56 membres que nous comptions au 31 mai 1975 (année 1974-75), nous voici maintenant avec 80 membres en février 1976 (année 1975-76). Le "*Bulletin*", dont la qualité n'a rien à envier aux autres Centres, a paru à 10 reprises. La bibliothèque s'est enrichie de 50 volumes (30 achats et 20 dons), de brochures et revues, de photos et diapositives d'observations, de cartes du ciel. "*L'Almanach Graphique*" a été édité pour la 31<sup>e</sup> année consécutive et a été distribué gratuitement (sur demande) dans toute la province de Québec.

Deux de nos membres sont parus à des émissions télévisées concernant l'astronomie. M. Damien Lemay, membre et conseiller de notre Centre, a été le premier canadien (presqu'en même temps que le premier américain) à observer la Nova du Cygne le 30.06

août T.U. Cette observation extraordinaire a fait l'objet d'un article du journal "*Le Soleil*" le 3 septembre 1975.

De nombreuses conférences et des soirées d'observation, qui s'adressaient – à nos membres et au public en général (annoncées à la radio et dans les journaux), ont été tenues:

- 23 janvier Soirée d'observation de l'occultation de par Eros l'étoile K des Gémeaux.
- 12 février "*Les Missions Mariner*" par M. Claude Frémont, univ. Laval. Conférence.
- 5 mars "*La Photographie Astronomique*" par M. Yvon Dufour. Conférence.
- 21 mars Soirée d'observation – à l'observatoire du Collège de Lévis, à St-Nérée de Bellechasse.
- 2 avril "*La Naissance et l'Evolution de l'Univers*" par M. Hermanno Borra, Ph.D., univ. Laval. Conférence.
- 14 mai "*L'Astronomie Amateur*" par M. Damien Lemay. Conférence.
- 24 mai Observation de l'éclipse totale de la lune – à l'observatoire du Collège de Lévis, à St-Nérée.
- 31 mai Visite au Planétarium Dow à Montréal.
- 28 juillet Pique-nique et soirée d'observation populaire à la base de Plein-Air de Ste-Foy.
- 28 septembre Soirée d'observation à l'observatoire de l'université Laval, à St-Elzéar. Cet observatoire est doté d'un télescope Cassegrain de 16 pouces, f/11.
- 8 octobre "*La Nova du Cygne*" par M. Damien Lemay. Conférence.
- 12 novembre Soirée consacrée aux réalisations des membres.
- 10 décembre "*La Dérive des Continents*" par M. Roger Laurent, D.Sc., univ. Laval. Conférence.

Réjean Dutil, *Secrétaire*

## ST JOHN'S, NFLD. CENTRE

The year started off as its usual slow self, with the first meeting being held on the 23rd of September, 1974.

The annual election of officers in October saw Mr. Gary Dymond elected to the post of president, Mr. Peter Allston elected as vice-president, Mr. David Bennett elected as secretary, and Dr. Peter Lockwood returned to the position of treasurer.

In February, we received notice of the forthcoming General Assembly that was to be held in Halifax in June. This announcement prompted the discussion of what type of display the centre would send to the assembly with the centre's representative.

Prof. John Hodych, of Memorial University, was kind enough to give the centre's members a very informative lecture concerning the origins of the atmosphere, on our March 10th meeting.

The April meeting was concerned mostly with the question of how to attract new members. This action prompted the formation of a Public Relations Committee, consisting of Mrs. D. Russel, Mr. G. Dymond, Mr. D. Bennett, Mr. R. Dodge, and Mr. B. Hurley. The committee's goal is to make the public aware of the centre's activities, and encourage new memberships. It was also brought to the committee's attention that they should study the possibilities of organizing classes in astronomy for the benefit of any teacher in the city who must have some knowledge of astronomy for their courses.

During the summer recess our centre had the pleasure of entertaining Harlan Creighton, a visiting member of the Toronto Centre.

We began the new year with a meeting on the 22nd of September 1975.

David Bennett, *Secretary*

## SASKATOON CENTRE

The year 1975 was a fascinating year for the Saskatoon Centre.

Astrophotography activities have been centred at Gordon Patterson's observatory and will be expanding to Doug Beck's, with the completion of his observatory later this summer. During a regular outing in July, Lillia Wilcox made the independent discovery of COMET 1975h and the group tracked it as long as practicable. Later, when NOVA CYGNI became obvious, the Astrophotography group re-examined some previous photographs of the area and found the Nova showing on at least one of these.

Our third annual wiener roast and picnic was held in July, at Diefenbaker Park, a cold and damp evening and not much of a turnout.

The annual outing in August, at Awklands farm, 20 miles west of Saskatoon was well attended, with at least seven telescopes set up. But again the weather did not co-operate, the night remained overcast.

At the monthly General Meetings, we had either a Film or a Lecture, with Speakers as follows:

Dr. Ray Skinner . . . . .	Black Holes.
Mr. Ron Waldron . . . . .	Pioneer and Mariner Close-ups.
Dr. M. Watson, from Ottawa . . . . .	Meteors and Infrasonics.
Prof. J. E. Kennedy . . . . .	Halifax General Assembly.
Mr. Gordon Patterson . . . . .	Building an Observatory.
Dr. J. A. Koehler . . . . .	Radio Astronomy.
Mr. Alan Blackwell . . . . .	Meteorite Impact Craters.

A great vote of thanks goes to our Editor Mr. Greg Towstego, for an informative and interesting monthly Newsletter for this past year.

Lillia Wilcox, *Secretary*

## TORONTO CENTRE

In 1975 the Centre completed its first full year as an incorporated association, and while the Fiscal Year ended 30 September, this report covers activities for the calendar year.

During 1975 the Toronto Centre held 11 regular meetings. In addition there were 9 Members' Nights arranged for the most part by the Observational Activities Committee. The Council held 4 meetings.

Regular meetings were:

January 10	Andreas Gada reported on the Astronomy for Campers program.
January 24	Annual Meeting, followed by a film, "The Crab Nebula."
February 7	Dr. Pim Fitzgerald. "Probing the Edge of the Milky Way."
March 7	Dr. Janet Mattei of the AAVSO spoke on Variable Stars.
April 4	Dr. Philipp Kronberg. "Super Explosions in the Universe."
May 9	David Haines spoke on the Hubble Constant.
September 12	Open House at the David Dunlap Observatory.
September 26	Dr. Ian Halliday, Ottawa, "Meteorites and the Solar System."
October 31	Steve Shore. "Peculiar Spectra Stars on the Main Sequence."
November 28	Dr. J. D. Fernie. "Incidents on the Way to the Solar Parallax."
December 12	Dr. E. R. Seaquist. "Fair Dinkum Astronomy."

Members' Nights, largely given to plans for observing and reports on observations and other activities were held on February 21, March 21, April 18, May 23, June 6 and 20, October 3 and 17, November 14.

Activities of the Public Education Committee included arranging four Star Nights in the Toronto area, an exhibit during the 10-day run of the Canadian National Sportsmen's Show (in association with the Youth Science Council), and providing telescopes and other exhibits on numerous occasions at the Harbourfront park.

The Optical Workshop Committee continued to maintain the telescope-making classes and associated activities at the McLaughlin Planetarium and during most of the year held two classes a week. A dozen members completed telescope mirrors and, in addition, the staff completed work on the optics for the 12½-inch telescope which is to be mounted on a trailer for portable use. It is also hoped to have the 10-inch Cave Cassegrain telescope installed in a semi-permanent observatory building within a few months.

The Study Group ran one program in the spring, and another in the autumn, with an average of 20 attending the 11 Saturday-morning meetings; about half of them being adult members.

Astronomy Day was held November 8 with about 150 attending, most of them young members of astronomy and science clubs in Toronto and region schools. Several members of the Centre gave talks on various aspects of astronomy and visits were made to the McLaughlin Planetarium Star Theatre for a show, and to the University of Toronto astronomy department facilities and rooftop observatory in the McLennan Physics Building.

Frederic L. Troyer, *Secretary*

## VANCOUVER CENTRE

1975 was a successful and exciting year for the Vancouver Centre. With the strong guidance of President David Hurd the Centre has managed to increase membership and offer a greater number of activities for it. In 1975, we held ten regular monthly meetings, featuring guest speakers, special displays, members observations (of which there was a healthy increase over 1974), special planetarium shows at the H. R. MacMillan Planetarium, movies, and field trips. In addition to the regular meetings there were a number of major activities conducted by individuals and sections of the group.

In May the Centre staged a Lunar Eclipse Party for the public. On May 24, more than two thousand people gathered on the Planetarium grounds to look through more than two dozen telescopes at the eclipse, Venus, Saturn and other objects. Though weather became bad for much of the eclipse, it improved later on, affording a good view of the event for everyone.

In June some members of the Centre attended the "Conference on Amateur Astronomy" in Seattle. Several members set up displays for the two day event.

Late July saw the arrival of Comet Kobayashi-Berger-Milon, and despite moon interference, the Centre once again opted for a public star party to celebrate the event. On two nights late in July, hundred of members filed past the telescopes, many took pictures, and some even caught a glimpse of the comet with the unaided eye.

In mid-August, six members took off to the Kootenay Region in the British Columbia interior for the purposes of recording the Perseid meteor shower. The team did exceedingly well, getting four clear nights in a row, centred on the night of maximum. The comet peaked in brightness at this time, too; observations thus gained from these nights filled our meetings with material for several months in a row!

The Centre made its annual excursion to Victoria in October, for a visit with that Centre. We were privileged to once again be received at the Dominion Astrophysical Observatory for a visit and tour before proceeding to the University and the joint meeting. Dr. David Crampton addressed us there on "The Franco-Canadian-Hawaii Telescope". His talk was well received.

Following the Victoria trip, the Centre succumbed entirely to cloudy weather, the best remaining event of the year turning out to be the election of officers on December 11. This new council has been inspired by recent surges in membership and Centre activities and therefore promises to invoke new changes and improvements for the Vancouver Centre.

Ken Hewitt-White, *Secretary*

# AUDITOR'S REPORT

MORRIS ALTMAN

CHARTERED ACCOUNTANT

95 KING STREET EAST

TORONTO 1

CANADA

To the Members and Council of  
The Royal Astronomical Society of Canada.

I have examined the statement of financial position of The Royal Astronomical Society of Canada as at December 31, 1975 and the statements of revenue and expense and equity 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.

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.

In my opinion, subject to the limitation in the scope of my examination as noted in the preceding paragraph, the accompanying statements present fairly the financial position of the Society as at December 31, 1975 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 5, 1976.

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

STATEMENT OF FINANCIAL POSITION

AS AT DECEMBER 31, 1975

(With comparative figures for December 31, 1974)

1975 1974

A S S E T S

Current Assets

Cash		\$10,856	\$19,490
Term deposits		2,000	2,000
Accounts receivable	\$ 9,547		
Less: Allowance for doubtful accounts	316	9,231	8,009
Marketable securities (at cost)		3,019	3,019
Accrued bond interest		197	197
Prepaid expenses		135	30
		\$25,438	\$32,745

Current Liabilities

Accounts

Deferred R

Membersh

Advance

Prepaid

Unapprop

(per s

Special Funds (per schedule)

Ruth Northcott Memorial Fund	\$12,419	\$ 8,647
Edward Russell Paterson bequest	10,000	-
	22,419	\$ 8,647

Reserve fo

Fixed Assets (at cost)

Land	\$17,000	\$17,000
Building	17,500	17,500
Office furniture and equipment	5,918	5,465
Apartment equipment	1,641	1,378
	\$42,059	\$41,343
Less: Accumulated depreciation	13,718	12,821
	28,341	\$28,522

E q u i t y

Library (nominal value)

100 \$ 100

\$76,298 \$70,014

APPROVED ON BEHALF OF THE COUNCIL

J. D. Fernie PRESIDENT

C. G. Clark TREASURER





ASTRONOMICAL SOCIETY OF CANADA  
 SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA

STATEMENT OF FINANCIAL POSITION

AS AT DECEMBER 31, 1975

(Comparative figures as at December 31, 1974)

1 9 7 4		1 9 7 5	1 9 7 4
<u>LIABILITIES AND EQUITY</u>			
<u>Current Liabilities</u>			
\$19,490 2,000	Accounts payable and accrued charges	\$ 9,459	\$ 5,058
<u>Deferred Revenue</u>			
8,009 3,019 197 30	Membership fees for ensuing year	\$ 6,021	\$ 6,428
	Advance subscriptions for Journal and Handbook	13,347	19,560
	Prepaid advertising	-	2,320
\$32,745	Unappropriated life membership fees (per schedule)	<u>5,983</u>	<u>5,050</u>
		25,351	\$33,358
\$ 8,647 -	<u>TOTAL LIABILITIES</u>	<u>\$34,810</u>	<u>\$38,416</u>
\$ 8,647	<u>Reserve for Special Funds</u>	22,419	\$ 8,647
<u>Equity</u> (per statement)			
\$17,000 17,500 5,465 1,378		19,069	22,951
\$41,343 12,821			
\$28,522			
\$ 100			
\$70,014		<u>\$76,298</u>	<u>\$70,014</u>

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

STATEMENT OF GENERAL REVENUE AND EXPENSE

FOR YEAR ENDED DECEMBER 31, 1975

(With comparative figures for 1974)

<u>REVENUE</u>	<u>1975</u>	<u>1974</u>
Membership fees		
R.A.S.C. Centres	\$10,406	\$11,285
Individual members	5,732	6,349
Life membership reserve - annual appropriation	566	491
	<u>\$16,704</u>	<u>\$18,125</u>
Grants and Donations		
Government of Canada - annual grant	\$ 6,000	\$ 5,000
Province of Ontario - annual grant	1,000	1,000
Miscellaneous donations	5	46
	<u>7,005</u>	<u>\$ 6,046</u>
Publications		
Journal of the R.A.S.C.	\$ 6,273	\$ 6,039
Observer's Handbook	29,833	30,691
Reprints and publication fees	5,650	8,651
Advertising	2,320	1,870
	<u>\$44,076</u>	<u>\$47,251</u>
Less: Agent's discounts	<u>5,394</u>	<u>5,106</u>
	38,682	<u>\$42,145</u>
R.A.S.C. Building (per statement)		
Excess of revenue over expense	350	\$ 633
Miscellaneous Revenue		
Interest earned	\$ 760	\$ 469
Insignia sales	269	21
	<u>1,029</u>	<u>\$ 490</u>
<u>TOTAL REVENUE</u>	<u>\$63,770</u>	<u>\$67,439</u>
<u>EXPENSE</u>		
Printing of publications	\$46,642	\$42,575
Office salaries and editorial assistance	12,340	10,503
Postage and shipping	1,652	2,347
Stationery, printing and supplies	1,457	1,533
General and office expenses	1,332	1,325
Telephone	566	332
Canada pension plan and unemployment insurance	310	242
Library accessions	267	247
Annual life membership allotment to Centres	500	492
General assembly and travelling expenses	1,088	1,265
Insignia, medals and awards	725	122
Bank charges and exchange	120	996
Depreciation of office furniture and equipment	295	250
Bad debts	358	233
	<u>67,652</u>	<u>\$62,462</u>
<u>TOTAL EXPENSE</u>	<u>67,652</u>	<u>\$62,462</u>
<u>EXCESS OF REVENUE OVER EXPENSE (EXPENSE OVER REVENUE)</u>	<u>(\$ 3,882)</u>	<u>\$ 4,977</u>

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

STATEMENT OF BUILDING REVENUE AND EXPENSE

FOR YEAR ENDED DECEMBER 31, 1975

(With comparative figures for 1974)

	<u>1 9 7 5</u>	<u>1 9 7 4</u>
<u>R E V E N U E</u>		
Rentals for space not occupied by the Society	\$ 4,560	\$ 4,563
<u>E X P E N S E</u>		
Property taxes	\$ 1,225	\$ 1,102
Heating	1,173	1,011
Light, gas and water	363	265
Maintenance and repairs	177	870
Insurance	170	106
Property appraisal	500	-
Depreciation of building	438	438
Depreciation of equipment	164	138
<u>TOTAL EXPENSE</u>	4,210	\$ 3,930
<u>EXCESS OF REVENUE OVER EXPENSE</u>	<u>\$ 350</u>	<u>\$ 633</u>

SCHEDULE OF FIXED ASSETS AND ACCUMULATED DEPRECIATION

AS AT DECEMBER 31, 1975

	COST	<u>ACCUMULATED DEPRECIATION</u>		
		Balance Dec. 31/74	Depreciat'n For Year	Balance Dec. 31/75
Land	\$17,000	\$ -	\$ -	
Building	17,500	7,751	438	8,189
Office furniture and equipment	5,918	3,816	295	4,111
Apartment equipment	1,641	1,254	164	1,418
	<u>\$42,059</u>	<u>\$12,821</u>	<u>\$ 897</u>	<u>\$13,718</u>

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

STATEMENT OF EQUITY

FOR YEAR ENDED DECEMBER 31, 1975

(With comparative figures for 1974)

	<u>1 9 7 5</u>	<u>1 9 7 4</u>
Balance at beginning of the year	\$22,951	\$17,974
Excess of revenue over expense (expense over revenue) for the year	( 3,882)	4,977
Net equity at end of the year	<u>\$19,069</u>	<u>\$22,951</u>

SCHEDULE OF UNAPPROPRIATED LIFE MEMBERSHIP FEES

Balance at beginning of the year	\$ 5,049	\$ 4,041
Add: Life membership fees received during the year	<u>1,500</u>	<u>1,500</u>
	\$ 6,549	\$ 5,541
Deduct: Appropriation to general revenue for the year	<u>566</u>	<u>491</u>
Balance at end of the year	<u>\$ 5,983</u>	<u>\$ 5,050</u>

SCHEDULE OF SPECIAL FUNDS

Ruth Northcott Memorial Fund

Balance at beginning of the year	\$ 8,647	\$ 7,861
Add: Proceeds from Ruth Northcott Estate	3,107	-
Public contributions	50	-
Interest earned	<u>800</u>	<u>786</u>
	\$12,604	\$ 8,647
Deduct: Allocation for guest speaker at General Assembly	<u>185</u>	<u>-</u>
Balance at end of the year	<u>\$12,419</u>	<u>\$ 8,647</u>

Edward Russell Paterson Bequest

Proceeds from testator's estate	<u>10,000</u>	<u>-</u>
<u>TOTAL FUNDS AT END OF THE YEAR</u>	<u>\$22,419</u>	<u>\$ 8,647</u>

Composition of funds: Bank balances	\$15,156	\$ 1,384
Securities	7,000	7,000
Accrued interest	<u>263</u>	<u>263</u>
	<u>\$22,419</u>	<u>\$ 8,647</u>

**REPORTS OF TREASURERS OF CENTRES**

	Calgary	Edmonton	Halifax	Hamilton	Kingston	London	Montreal	Centre d'Astronomie Montreal	Niagara Falls
<b>REVENUE</b>									
Membership Fee	\$ 905.00	\$ 850.00	\$ 837.50	\$ 688.38	N O	\$ 345.00	N O	\$ 411.00	\$ 345.00
Life Members Grants	36.00			12.00				8.00	
Donations	22.00		10.00	211.00	R E		R E		3.90
Educational Activities	162.69	23.85	5.68	2.98	E P	11.25	E P		3.12
Interest & Dividends		3.00	35.50	3.00	O R	12.00	O R		30.00
Sales of Handbooks Net					T		T	55.00	
Advertising	150.00		3701.99	1982.64	A V	44.50	A V		
General Assembly	11.50	19.18	5.00		A I		A I		
Miscellaneous					L L		L L		163.50
<b>Total Revenue</b>	<b>\$1287.19</b>	<b>\$ 896.03</b>	<b>\$4595.67</b>	<b>\$2900.00</b>	A B L E	<b>\$ 412.75</b>	A B L E	<b>\$ 474.00</b>	<b>\$ 382.02</b>
<b>EXPENDITURES</b>									
Fees Remitted to N.O.	663.00	594.30	660.00	420.00	A I	207.00	A I		
Library	91.83	5.20			L L		L L		
Meetings & Newsletter		75.00	62.64	44.00	A B	74.01	A B		75.40
Annual Dinner-Net	27.00				L E		L E		
General Assembly	150.00		3142.00	1851.85					
Equipment & Supplies	48.13	16.00		179.42					
Office Administration		3.01		61.00		10.58			
General Expenses & Audit			6.60	25.33				91.00	
Education Activities									42.37
Insurance				35.00					
Awards & Donations		23.55							
Operating Expense-Observatory			20.00	78.31		15.90			41.00
Miscellaneous	1.00								
<b>Total Expenditures</b>	<b>\$1335.70</b>	<b>\$ 717.06</b>	<b>\$3891.24</b>	<b>\$2694.91</b>		<b>\$ 307.26</b>		<b>\$ 474.00</b>	<b>\$ 322.27</b>
Surplus or (Deficit) on Operations		48.51 D)	704.43	205.09		105.26			59.75
<b>Balance from 1974</b>	<b>\$ 743.35</b>	<b>\$ 837.47</b>	<b>\$ 76.62</b>	<b>\$ 120.52</b>		<b>\$ 112.06</b>			<b>\$ 204.54</b>
<b>Balance to 1975</b>	<b>\$ 694.84</b>	<b>\$1016.44</b>	<b>\$ 781.05</b>	<b>\$ 325.61</b>		<b>\$ 217.32</b>			<b>\$ 264.29</b>
Other Assets	\$1500.00	\$5000.00							

## REPORTS OF TREASURERS OF CENTRES

	Ottawa	Quebec	St. John's	Saskatoon	Toronto	Vancouver	Victoria	Windsor	Winnipeg
<b>REVENUE</b>									
Membership Fee	\$1965.00	\$ 832.50	\$130.00	\$ 582.50	\$ 6342.89	\$2048.00	\$ 560.00	\$ 327.76	\$ 637.50
Life Members Grants	80.00	8.00		4.00	144.00		72.00		16.00
Donations	176.95	154.50							
Educational Activities	254.78	100.00		143.75	880.26	75.69	32.00	72.50	64.62
Interest & Dividends	55.81					78.00	205.57	7.40	
Sales of Handbooks Net	59.00			125.20	384.00		61.50	5.25	
Advertising									
General Assembly	34.13	95.15		130.00	3000.00	155.00	165.00		90.14
Miscellaneous						66.28	240.00		127.50
<b>Total Revenue</b>	<b>\$2625.67</b>	<b>\$1190.15</b>	<b>\$ 130.00</b>	<b>\$ 985.45</b>	<b>\$10751.15</b>	<b>\$2422.97</b>	<b>\$1336.07</b>	<b>\$ 412.91</b>	<b>\$ 935.76</b>
<b>EXPENDITURES</b>									
Fees Remitted to N.O.	\$1179.00	\$ 552.00	\$ 78.00	\$ 349.50	\$ 3705.00	\$1942.50	\$ 387.50	\$ 243.00	\$ 318.75
Library	164.45		29.45				15.34		
Meetings & Newsletter	434.58	185.25		167.82	1190.60	530.98	96.64	123.65	68.70
Annual Dinner-Net							269.00		
General Assembly					410.00	310.00	450.00		263.96
Equipment & Supplies	12.09			70.13	637.13				
Office Administration	134.16		17.35		485.97		80.45		
General Expenses & Audit	20.56				777.32	60.68			.76
Educational Activities		150.00			160.14		27.00	82.00	
Insurance	50.00								22.00
Awards & Donations	4.00				80.50				
Operating Expense-Observatory	119.73							2.25	
Miscellaneous		22.42	7.50	2.00	1304.56	374.60			
<b>Total Expenditures</b>	<b>\$2118.57</b>	<b>\$ 909.67</b>	<b>\$ 132.80</b>	<b>\$ 881.04</b>	<b>\$ 8751.22</b>	<b>\$3218.76</b>	<b>\$1325.93</b>	<b>\$ 450.90</b>	<b>\$1992.74</b>
Surplus or (Deficit) on Operations	507.10	280.48	2.80 D)	104.41	1999.93	795.79 D)	10.14	37.99 D)	1056.98 D)
<b>Balance from 1974</b>	<b>\$2388.29</b>	<b>\$ 260.48 D)</b>	<b>\$ 80.79</b>	<b>\$ 275.39</b>	<b>\$ 1562.49</b>	<b>\$2105.03</b>	<b>\$4019.40</b>	<b>\$ 287.38</b>	<b>\$1553.04</b>
<b>Balance to 1975</b>	<b>\$2895.39</b>	<b>\$ 20.00</b>	<b>\$ 131.66</b>	<b>\$ 379.80</b>	<b>\$ 3562.42</b>	<b>\$1309.24</b>	<b>\$4029.54</b>	<b>\$ 249.39</b>	<b>\$ 496.06</b>
<b>Other Assets</b>					<b>\$ 9500.00</b>		<b>\$2082.52</b>		

## VICTORIA CENTRE

Regular meetings of the Victoria Centre were held at the University of Victoria, through the kindness of the University authorities. Seven meetings were held in 1975, and were as follows:

- January 10 Annual Meeting and Dinner, held at the University of Victoria. Elections were held, and Dr. E. H. Richardson showed slides of his European travels.
- February 12 Dr. C. H. Costain, D.R.A.O.: "Aperture Synthesis in Radio Astronomy".
- March 12 Mr. D. Dundee, Victoria Centre: "Legends of the Stars".
- April 9 Activities Night – Exhibits and Films.
- September 10 Dr. B. Harris, Victoria Centre: "Celestial Spheres".
- October 5 Joint Meeting with Vancouver Centre, in Victoria. Dr. D. Crampton, D.A.O.: "The Hawaiian Telescope".
- November 12 Panel Discussion.
- December 10 Mr. E. Pfannenschmidt, D.A.O.: "Hints and Wrinkles on Amateur Telescopes".

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

Mr. George Ball was on duty at the University of Victoria each Saturday evening, weather permitting, for observing sessions. Also, through his leadership, several members have completed mirrors during 1975.

Membership of this Centre for 1975 consisted of 18 life members and 93 regular members.

Frank Younger, *Secretary*

## WINDSOR CENTRE

January 21, 1975

Mr. Hallum gave an informative presentation on how to use The Observer's Handbook and a film entitled "Radio Sky" was shown.

February 18, 1975

Mr. Huneault reported on the February sky and mentioned several articles he found to be most interesting. A film entitled "About Time" was viewed.

March 18, 1975

Mario Fabris gave a very informative talk on current events including chalkboard diagrams and a home-made moving model of the earth, moon and sun. Walter Manzig reported on the legal problems of space and extracts from a meeting held at the United Nations in 1963. Robert Thibert presented the members with constellation maps of the northern sky which he had prepared. Three movies were shown:-

1. Mystery of the Sun
2. Exploring the Universe
3. The Powers of Ten

April 15, 1975

Mr. Henry Lee reported on the current state of the universe and explained the computerized star process.

Michael Wallace, a London Centre member, gave a slide shown on his expedition to Costa Rica to study Comet Kohoutek with EEI (Educational Expeditions International).

May 10, 1975

Field trip – Cranbrook Institute of Science.



June 17, 1975

Mr. Huneault gave an interesting talk on current events which dealt with such things as the total eclipse in Maine, sun spots, and some of the recent discoveries concerning the planet Venus. Robert Thibert conducted an Astronomical Quiz which included skill-testing questions, puzzles and diagrams and Dr. Shannon Sanborn presented a lecture on Celestial Navigation covering definitions, concepts, and how to use a sextant and an accurate timepiece in order to determine position at sea – all of which were most interesting.

September 16, 1975

Mr. Huneault presented a lecture on such things as quasars, pulsars, neutron-stars, black holes, a new nova in the constellation of Cygnus. Two films were presented – Flaming Sky and Tornadoes. A lecture followed presented by Mr. John Mornan, officer-in-charge of the weather office at the Windsor Airport. Mr. Mornan explained exactly what tornadoes were and answered questions most explicitly.

October 21, 1975

Henry Lee gave a report on the annual meeting of the R.A.S.C. held in Halifax last summer and showed some slides he took.

The President handed out a questionnaire with about 40 topics and asked the members to indicate their choice of at least ten topics. From these topics will be planned a series of educational talks with a duration of thirty minutes or less for the year 1976. These talks will be part of a planned on-going series, and every member is asked to participate and give a talk of his or her choice.

Mr. Jim McTavish showed a thirty minute film on measuring the distance of astronomical dimension.

November 18, 1975

Mr. Dan Bodenheimer presented a brief history of the Windsor Centre of the R.A.S.C. indicating that our group was composed of only 4 persons who met at John Campbell School back in 1944.

Elections of Officers and Council was conducted by Mario Fabris.

A film entitled "The Nearest Star" was presented by Bert Huneault, which he acquired from Mr. Mornan of the weather office at the Windsor Airport.

Heather Hurst, *Secretary*

## WINNIPEG CENTRE

The Winnipeg Centre was on the move again in November, changing meeting locations from the University of Manitoba, to the University of Winnipeg. Ten general, and five secondary membership meetings were scheduled with President, Roy Belfield as chairman, and on one occasion First Vice-President Herb Davis presided. Snow storms during January cancelled one meeting, but, sixty percent of our membership managed to attend on the night of the "Great White-Out" storm. The activities of our programme committee, Don Hladiuk, Hans Thater, and Bill Krosney, have proven successful, with better than fifty percent membership attendance at most meetings. The October 1974 Annual Meeting resolved the membership proposal, limiting the age of Winnipeg Centre members to sixteen years and over, plus setting a single membership fee of fifteen dollars. The other major decision of the year, the goal of the Observatory Fund, reached its high point at the May Special Meeting of Members. The membership voted to purchase a large professional telescope, if the University of Manitoba erects and maintains an observatory for the instrument. The membership shall be active in the next year raising funds for this project.

The City of Edmonton gained our first Vice-President, Alan Dyer, in April. He was replaced by Herb Davis, and the vacant councillor position was filled by Jay Anderson. Three meetings of the Executive Council dealt effectively with the business of the Centre. Miss Ella Dack volunteered to be our Observing Recorder, and helps keep the membership

informed of activities by way of our newsletter Winnicentrics. Steps were taken by Council to improve the Centre's Cooke refractor, by purchasing a portable mount, thus insuring a fully serviceable instrument for the membership. Most observational activities are centred on the astrophotographers, however, serious contributions are made by a few in the fields of occultations, grazes, variables, planetary and solar work. A few members involved in the public and school observing sessions were: Roy and Phyllis Belfield, Jay and Judy Anderson, Frank Shinn, Bill Krosney, Paul Moffat, and Jim Gould. Other members participate in telescope making, general observing, and everyone shows an interest in the Observatory Fund.

Programmes for the year were:

- November 8 Festival of Astronomical Films. Eclipse at Grand Mère, Flaming Sky, to the Edge of the Universe, Story of Palomar.
- November 22 Mr. Roy Belfield, Mr. Alan Dyer – Constructing an Observatory.
- December 13 Mr. Frank Shinn – Why Watch Variables. Film – Exploring the Milky Way. Roy and Phyllis Belfield, Alan Dyer – Eclipse slides. Mr. Don Hladiuk, Mr. Hans Thater – The Star. Mr. Tom Wujec – Lunar slides.
- January 10 Mr. Paul Moffat – Construction Techniques 14-inch Schmidt-Cassegrain. Mr. Don Hladiuk – Apollo Missions and Lunar Science. Mr. Alan Dyer – Extraterrestrial Intelligence. Discussion – Observatory Fund. (“Great White-Out” snow storm)
- January 24 Astrophotography Night – cancelled by snow storm.
- February 14 Dr. Hesse – Radio Astronomy and Pulsars.
- February 28 Mr. Wayne Keith – History of the Winnipeg Centre. Mr. Frank Richardson – One Amateur's Homebuilt Observatory and Telescope Installation. Film – Skylab III. The Events of 1975.
- March 14 Dr. Richard Bochonko – Black Holes. Mr. Frank Shinn, Dr. Richard Bochonko – April 19 Graze Expedition. Discussion – Observatory Fund.
- April 11 Mr. Jay Anderson – Astronomy and Weather Forecasting – preview. Mr. Frank Shinn, Mr. Paul Moffat, Mr. Rene Lamontagne – Telescope Discussion. Mr. Frank Shinn – Occultations and Grazes. Discussion – Observatory Fund.
- April 25 Mr. Jay Anderson – Astronomy and Weather Forecasting.
- May 9 Astrophotography Night. Mr. Bill Krosney, Mr. Hans Thater – Colour Films. Slides and photographs from members.
- May 9 Special Meeting – Observatory Fund Proposal.
- May 24/25 Lunar Eclipse – Belfield residence. Mr. Don Hladiuk – Eclipse Expedition at the Scatliff Observatory.
- June 6 Mr. Malcolm Ellis – Programmes of the British Astronomical Association.
- July and August Summer Observing. Halifax Convention – Mr. Del Stevens.
- September 12 Mr. Paul Moffat – Report from Stellafane. Mr. Del Stevens – Report from the General Assembly at Halifax. Mr. Frank Shinn – Three Dimensional Cometary Models. Mr. Don Hladiuk, Mr. Hans Thater – Summer Observing.
- October 10 Annual Meeting. Reports of chairmen. Election of Officers.

Lewis J. McQueen, *Secretary*

**THE ROYAL ASTRONOMICAL SOCIETY OF CANADA  
OFFICERS AND COUNCIL OF THE CENTRES FOR 1976**

**CALGARY CENTRE**

*Honorary President* – Dr. T. A. Link  
*Past President* – Glen Reed, 1118 Ninga Road, N.W. T2K 2P1  
*President* – Ulrich Haasdyk, 3123 – 48th St. S. W. T3E 3X6  
*Vice-President* – W. Burley, 5408 Thornton Rd., N.W. T2K 3B7  
*Secretary* – Mrs. Marie Litchinsky, 314–12 St., N.W. T2N 1Y5  
*Treasurer* – G. Lee Robertson, 3112–5 St., N.W. T2M 3C9  
*Recorder* – J. Brian Clarke, 2015–19 Ave. N.W. T2M 1C1  
*Librarian* – Cam Treleaven, 117 Springwood Dr. S.W. T2W 0K8  
*Editor* – F. John Howell, 185 Fairview Dr. S.E. T2H 1B4  
*Council* – W. Burley, R. Nelson, E. Airey, Dr. Alan Clark, J. Findlay, Dr. T. Swaddle,  
 Ruth Guengerich, Dr. D. J. I. Fry, Hank Geerloff  
*National Council Representative* – F. John Howell

**EDMONTON CENTRE**

*Honorary President* – Prof. E. S. Keeping, 8703 Saskatchewan Dr.  
*Past President* – Dr. Gary Prideaux, 5435 – 113A St.  
*President* – Barry Arnold, 9624–85 Avenue T6V 1H4  
*Vice-President* – Alan Dyer, No. 1505–10145 – 121 St.  
*Secretary* – Anthony Whyte, 7103–112 St. T6G 1J2  
*Treasurer* – Christine Kulyk, 15407–80 Ave. T5R 3M1  
*Social Committee Chairperson* – Audrey Loehde, 11107–63 St. T5W 4E3  
*Librarian* – Tom Morrison, 9210–159 St.  
*Editor* – Paul Deans, No. 1511–8515 – 112 St.  
*Member at Large* – Barnard Archer, 9524–151 Ave. T5E 2R3  
*Educational Director* – Gary Finley, Michener Park, Edmonton  
*National Council Representative* – Franklin Loehde, 11107–63 St. T5W 4E3

**HALIFAX CENTRE**

*Honorary President* – Rev. M. W. Burke-Gaffney  
*Past President* – Dr. Roy L. Bishop  
*President* – Dr. Roy L. Bishop, Dept. Physics Acadian Univ. Wolfville B0P 1X0  
*Vice-President* – Miss D. Burleson, 6360 Summit St. B3L 1R9  
*Secretary* – Dr. Peter H. Reynolds, Dept. Physics Dalhousie Univ. B3H 3J5  
*Treasurer* – Mr. W. Sheppard No. 206–1122 Tower Rd. B3H 2Y5  
*Editor* – Mr. Randall C. Brooks, 71 Woodlawn Rd., Dartmouth B2W 2S2  
*National Council Representative* – Dr. Roy L. Bishop

**HAMILTON CENTRE**

*Honorary President* – Mr. Norman Green  
*Past President* – K. E. Chilton  
*President* – Robert Speck, 448 East 13th St.  
*1st Vice-President* – Eric Orr, 342 Queensdale Ave. E. L6J 1W8  
*Secretary* – Peter H. Ashenurst, 135 West 18th St. L9C 4G3  
*Treasurer* – K. E. Chilton, 93 Currie St. L8T 3N1  
*Recorder* – Mrs. B. Chilton  
*Librarian* – A. Moore, 139 Victoria Ave. N.  
*Editor* – M. Bodnar, 44 Oxford St., No. 301, Brantford N3R 5C6  
*Council* – J. Hudak, 2nd Vice-President M. Holmes, Paul B. Ashenurst, W. Korber,  
 L. V. Powis, John Tierney

*National Council Representative* – Michael Holmes, 115 Cameron Ave., Dundas L9H 1R3

### **KINGSTON CENTRE**

*Honorary President* – Dr. Vibert Douglas

*Past President* – Paul J. R. Brown

*President* – Christopher Sergeant, 420 Albert St. K7L 3W3

*Vice-President* – Andrew E. Wollin, 65 Sheiling Cr. K7M 4M7

*Secretary-Treasurer* – Susan E. McDougall, 186 University Ave. K7L 3P4

*National Council Representative* – Paul J. R. Brown, 66 Barrie St. No. 3 K7L 3J7

### **LONDON CENTRE**

*Honorary President* – Dr. William Wehlau, U.W.O. London

*President* – Peter Andreae, RR 3, London N6A 4B7

*1st Vice-President* – Robert Cornforth, 325 Simcoe St., Woodstock M4S 1J2

*2nd Vice-President* – Peter Jedicke, 289 Windermere Rd., Rm. 943 N6G 2J8

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

*Recording Secretary* – Steven Sharpe, 901 Quinton Rd. N6H 3A8

*Treasurer* – Dr. Richard Sorrentino, U.W.O. Psych. Dept., London

*Librarian* – Owen Ash, 479 Briarhill Crt. N5Y 1P8

*Editors* – Michael Flegel, R. Sawyer, 1107–1209 Richmond St. N., London N6A 3L7

*Council* – Walter K. Campney, Paul Clinton, Richard McCammon, Martin Carswell

*National Council Representative* – R. Sawyer, No.1107-1209 Richmond St. N. N6A 3L7

### **CENTRE D'ASTRONOMIE DE MONTREAL**

*Past President* – Henri Simard

*President* – J. A. Dumas 65–89 ieme av. Chomedey J7W 3G9

*Vice-President* – Henry Coia, 124-ieme av. Laval-des-Rapides H7V 2B5

*Secretary* – Rolland Noël de Tilly, 3860 est Rachel app No. 1 H1X 1Y9

*Treasurer* – Mlle Mariette Berthiaume, 9172 10e Av. H1Z 3C6

*Recorder* – Mme Huberte Palardy, 6009 Pierre-Bedard H1M 1K3

*Librarian* – Henry Coia, Jr.

*Editor* – Max Jougla

*Council* – Jean Vallières, Mlle Colette Boyer, Pierre Beauchamp. Lucien Coallier,

Claude Girard, Victor Lefebvre, Marcel Legris, Jean-Louis Neault,

Adélarde Rousseau, Albert Roussin, Philippe Turcotte, Raymond Pelletier

*National Council Representative* – Rolland Noël de Tilly

### **MONTREAL CENTRE**

*Honorary President* – Dr. Peter Millman

*Honorary Vice-President* – Walter Scott Houston

*President* – Constantine Papacosmas, P.O. Box 1003 Stn. "B" H3B 3K5

*Vice-President* – Dr. T. F. Morris, 114 Dobie Av. T.M.R. H3P 1S4

*Secretary* – Walter Jutting, 37 Palmerston Ave. H3P 1V1

*Treasurer* – Henry Nothof, 4416 Harvard H4A 3X1

*Record Secretary* – W. J. Cullinan, 5009 King Edward Ave. H4V 2J5

*Librarian* – Nora Hague, 950 Wilson H4A 2T2

*Director of the Observatory* – Leo Nikkinen

*Director of Observatory Activities* – Boyd Ramsay

*Board of Directors* – David H. Levy, Roch Simard, Gordon Jones, David Brown,

Eric Bentley, Barnard Schirdewahn, Donald Alexander, Fred Clarke,

B. Butler, Carl Jorgensen

*National Council Representative* – Boyd Ramsay, 69 Fieldsend Ave., Montreal H9W 5H9

**NIAGARA CENTRE**

*President* – R. C. Doran, 250 So. 4th St. Lewiston, N.Y. 14092

*Vice-President* – H. N. A. Maclean, 655 Vine St., St. Catharines L2M 4T2

*Secretary* – L. Redman, P.O.Box 241, Niagara Falls L2E 6T3

*Treasurer* – A. G. Kindy, 2025 Drummond Rd.

*National Council Representative* – H. N. Maclean

(*Alternate*) – J. Hauzer

**OTTAWA CENTRE**

*Honorary President* – Dr. C. S. Beals, Manotick, Ont. K0A 2N0

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

*President* – Mrs. Mary W. Grey, 1867 St. Laurent Blvd. K1A 0M8

*Vice-President* – Dr. F. P. Lossing, 95 Dorothea Dr. K1V 7C6

H. M. Harris, 667 Highland Dr. K2A 2K5

*Secretary* – E. H. Dudgeon, 545 Bathurst Ave. K1G 0X4

*Treasurer* – R. Wlochowicz, Carlsbad Springs, Ont. K0A 1K0

*Recorder* – R. Meier, 77 Meadowlands Dr. K2G 2R9

*Librarian* – S. A. Mott, 2049 Honeywell Ave. K2A 0P7

*Editor* – R. Meier, 77 Meadowlands Dr. K2G 2R9

*Council* – T. E. D. Bean, A. Fraser, J. L. Horwood, B. L. Matthews, D. L. Welch

*Observers' Group* – Doug Somers, 73 Costello Ave. K2H 7C3

*National Council Representative* – R. Wlochowicz, Carlsbad Springs, Ont. K0A 1K0

**QUEBEC CENTRE**

*Past President* – Benoit Drolet

*President* – Jean-Pierre Bernier, 1005 Grenoble, Ste. Foy G1V 2Z8

*Vice-President* – Paul Darisse, 161 Lockwell G1R 1V6

*Secrétaire* – Rejean Dutil, C.P. 9396, Ste. Foy G1V 4B5

*Tresorier* – Eloi Bolduc, 111 Jermie Neufchatel

*Secrétaire de l'Exécutif* – Alphonse Tardif

*Bibliothécaire* – Michel Noreau

*Éditeur* – Jean-Pierre Bernier

*Conseillers* – Maurice Goupil, Michel Lavoie, Nicolas Marotte, Damien Lemay

*Directeur des Observations* – Robert Mailhot

*Directeur des Conférences* – Jean-Marie Fréchette

*National Council Representative* – Robert Mailhot, 3415 Quatre Bourgeois, No.10, St. Foy

**ST. JOHN'S CENTRE**

*Past President* – G. Dymond

*President* – G. Dymond, 22 Pilots Hill A1C 3M2

*Vice-President* – B. Hurley, 3 St. Michaels Ave. A1E 1R7

*Secretary* – D. Bennett, 53 Sudbury St. A1E 2T9

*Treasurer* – Dr. P. Lockwood, 1A Church Hill A1C 3Z7

*Editor* – R. Dodge, 63 Forbes St. A1E 3L7

*National Council Representative* – Mrs. Dora Russell, 1 Stoneyhouse St. A1B 2T5

**SASKATOON CENTRE**

*Honorary President* – Dr. B. W. Currie, 416 Bate Cr. S7H 3A7

*Past President* – Halyna Kornuta

*President* – Halyna Kornuta, 2314 St. Andrew Ave. S7M 0M6

*Vice-President* – J. Young, 2513 Melrose Ave. S7J 2C3

*Secretary* – Lillia Wilcox, 2527 Clarence Ave. S7J 1M3

*Treasurer* – Alan Blackwell, 233 Simon Fraser Cr. S7H 3T3  
*Activities* – Merlyn Melby, 1614 Argyle Ave. S7H 2W7  
*Librarian* – Hugh Hunter, 213–32nd St. W. S7L 0S3  
*Editor* – Grey Towstego, 3418 Dieppe St. S7M 3S9  
*Council* – Doug Beck, 812–31st. W. S7L 0R8  
*National Council Representative* – G. N. Oatterson, 79 Baldwin Cr. S7H 3M5

#### **TORONTO CENTRE**

*Honorary President* – Dr. Helen B. S. Hogg  
*Past President* – R. Vernon Ramsay, Harlan Creighton  
*President* – Jack B. Newton, 156 Thoms Cr., Newmarket L3Y 1C9  
*1st Vice-President* – Mrs. Ann E. Scott, 63 Don Lea Dr. M4G 2M2  
*2nd Vice-President* – Dr. Christine M. Clement, 21 Grenview Blvd. N. M8X 2J9  
*Secretary* – B. Ralph Chou, 225 Harvard Pl. No. 1009, Waterloo M2L 1N5  
*Treasurer* – Alfred W. Scott, 965 Avenue Rd. M5P 2K9  
*Recorder* – Frederic L. Troyer, 53 Woodlawn Ave. E. M4T 1B9  
*Editor Scope* – Mrs. Celeste Peters, 95 Dunelm St. M1J 3G3  
*Council* – I. G. McGregor, G. Foster, A. Pelletier, I. McLennan, M. Watson,  
 W. T. Peters, J. A. Cobban, R. Pike, S. Morriss  
*National Council Representative* – J. B. Newton, A. E. Scott, I. G. McGregor  
*Alternates* – R. Berry, R. Pike, J. A. Cobban

#### **VANCOUVER CENTRE**

*Honorary President* – Dr. Valdimir Okulitch  
*Past-President* – J. F. Wright, D. F. Hurd  
*President* – K. Hewitt-White, 1438 Arbutus St. V6J 3W8  
*Vice-President* – F. Wm. Gosse, 1011 Beach Ave.  
*Secretary* – Dr. C. Schwerdtfeger, 6405 MacKenzie Pl. V6N 1H6  
*Treasurer* – Mrs. D. Choukalos, 4612 W. 12th Ave. V6R 2R6  
*Director of Telescopes* – A. Stoneberg  
*Council* – T. Puerzer, P. Sykes, J. T. Tothill, G. Winter, Miss J. Booth,  
 Miss J. Hoskinson, D. A. Rodger  
*National Council Representative* – N. Laffra, No. 404–720 7th Ave., New Westminster  
 V3M 2J4

#### **VICTORIA CENTRE**

*Honorary President* – Dr. J. L. Climenhaga  
*Past President* – R. G. Napier  
*President* – Dr. C. D. Scarge, 4090 Gordon Hd. Rd. V8N 3Y1  
*1st Vice-President* – D. Dundee, 928 Claremont Ave. V8Y 1K3  
*2nd Vice-President* – Dr. B. L. Harris, Astro. Dept. Univ. Victoria V8W 2Y2  
*Secretary* – P. F. Younger, 585 Aurora Way V8Z 3J8  
*Treasurer* – J. M. Wozny, 4147 Hawkes Ave. V8Z 3Y9  
*Recorder* – Miss J. Regan, 2380 Mt. St. Michael, Saanichton, B.C. V0S 1M0  
*Librarian* – E. E. Bridgen, 2159 Central Ave. V8S 2R6  
*Director of Telescope* – G. R. Ball  
*Council* – C. Aikman, M. Fletcher, N. Rogers, M. Shepherd, P. Teece, R. Williams  
*National Council Representative* – G. R. Ball, 54 Maddock Ave. V9A 1E7

#### **WINDSOR CENTRE**

*Honorary President* – Dr. R. C. Quittenton  
*Past President* – Lambert Huneault  
*President* – Dr. Shannon Sanbor, 2088 Willistead Cr. N8Y 1K5

*Vice-President* – Mario Fabris, 2614 Westminster N8T 1Y5  
*Secretary* – Heather Hurst, 2253 Huron Church N9C 2L9  
*Treasurer* – Cyril Hallam, 1184 Windermere N8Y 3E6  
*Librarian* – James Meredith, 842 Villaire N8S 2J4  
*Director Observing* – Gary Drouin, 2253 Huron Church N9C 2L9  
*Council* – Felice Bondy, James Court, Andrew Taylor, Walter Manzig, Robert Thibert,  
 Henry Lee, Lambert Huneault  
*National Council Representative* – Henry Lee, 4271 Riverside E. N8Y 1S7

### WINNIPEG CENTRE

*Honorary President* – Dr. Duckworth, Univ. of Winnipeg  
*Past President* – Del Stevens, 22 Rowand Ave. R3J 2N5  
*President* – Roy Belfield, 14 Argonne Bay R2J 2K6  
*Vice-President* – Herb Davis – Jay Anderson  
*Secretary* – Miss Ella Dack, 24 Carlton St., No. 505 R3C 1P1  
*Treasurer* – Frank Richardson, 17 Waterford Bay R3T 1H4  
*Librarian* – Phyllis Belfield  
*Editor* – Jay Anderson, 695 Mulvey Ave. R3M 1G3  
*Council* – Art Butterworth, Paul Moffat, Don Hladiuk, Phyllis Belfield, Bill Krosney,  
 Jans Thater  
*National Council Representative* – Paul Moffat, No. 804 – 800 Corydon Ave. R3C 1N8  
*Alternate* – Jay Anderson, 695 Mulvey Ave. R3M 1G3

### 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 University of Toronto 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. J. 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 – P. G. 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. Topham (Toronto)     | 1951 – DeLisle Garneau (Centre d’Astronomie de Montréal) |
| 1941 – H. Boyd Brydon (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) | W. J. McCallion (Hamilton)                  |
| J. H. Horning (National Treasurer)       | W. A. Warren (Montreal)                     |
| 1960 – Charles M. Good (Montreal)        | 1967 – H. S. Hogg (Toronto)                 |
| Miss F. Laforest (Montréal)              | P. M. Millman (Ottawa)                      |
| Frederic L. Troyer (Toronto)             | *R. J. Northcott (Toronto)                  |
| 1961 – *Robert Peters (Victoria)         | *H. Simard (Montreal)                       |
| 1962 – Jean Asselin (Montréal)           | J. F. Wright (Vancouver)                    |
| Robert J. Clark (Vancouver)              | 1968 – *D. R. P. Coats (Calgary & Winnipeg) |
| *Jesse Ketchum (Toronto)                 | George Ball (Victoria)                      |
| Joseph A. Pearce (Victoria)              | Herbert Fox (Hamilton)                      |
| 1963 – Edwin E. Bridgen (Montreal)       | 1970 – Norman Green (Hamilton)              |
| Miss M. Burland (Ottawa)                 | J. F. Kennedy (Saskatoon)                   |
| A. Vibert Douglas (Kingston)             | 1971 – K. B. Meiklejohn (Calgary)           |
| 1964 – C. S. Beals (Ottawa)              | J. N. R. Scatliff (Winnipeg)                |
| M. W. Burke-Gaffney, S. J. (Halifax)     | 1972 – Vern Ramsay (Toronto)                |
| W. T. Goddard (Hamilton)                 | B. F. Shinn (Winnipeg)                      |
| 1965 – D. C. Bawtenheimer (Windsor)      | F. Schneider (Hamilton)                     |
| John F. Heard (Toronto)                  | 1973 – Fred P. Lossing (Ottawa)             |
| A. M. Crooker (Vancouver)                | 1974 – Ian Halliday (Ottawa)                |
| Ernest S. Keeping (Edmonton)             | Fred Williams (Victoria)                    |
| *W. S. Mallory (Hamilton)                | 1975 – D. J. FitzGerald                     |
| 1966 – P. Lemieux (Montreal)             |   |
| *S. Litchinsky (Calgary)                 |   |

\* Deceased

It is with regret we record the decease of the following members in 1975:

- |  |  |
|--|--|
| Mr. E. Anema (Winnipeg)                    | Miss J. Agnes McDonald (Vancouver)     |
| Mr. G. A. Browne (Ottawa)                  | Mr. Ernest Ambrose Morgan (Hamilton)   |
| Mr. Edgar A. Butterfield (Can. unattached) | Mr. Edward Russell Paterson (Montreal) |



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

Dr. V. A. Ambartsumian (U.S.S.R.)	Dr. A. R. Sandage (U.S.A.)
Dr. Bart J. Bok (U. S.A.)	Dr. Martin Schwarzschild (U.S.A.)
Dr. A. Dollfus (France)	Dr. Josif S. Shklovsky (U.S.S.R.)
Dr. Leo Goldberg (U.S.A.)	Prof. Bengt G. Stromgren (Denmark)
Dr. W. Iwanowska (Poland)	Dr. A. Unsold (Germany)
Dr. J. H. Oort (Netherlands)	Prof. H. C. van de Hulst (Netherlands)
Prof. H. H. Plaskett (England)	Dr. R. v.d. R. Woolley (S. Africa)
Sir Martin Ryle (England)	

**THE ROYAL ASTRONOMICAL SOCIETY OF CANADA**

**NATIONAL OFFICERS AND COUNCIL FOR 1975**

*Honorary President* – Gerhard Herzberg, Dr. Ing., F.R.S.C., F.R.S., C.C.  
*President* – J. D. Fernie, Ph.D., F.R.S.C., Toronto  
*1st Vice-President* – A. H. Batten, Ph.D., Victoria  
*2nd Vice-President* – John R. Percy, Ph.D., Toronto  
*Secretary* – D. J. FitzGerald, 252 College St., Toronto, M5T 1R7  
*Treasurer* – Cyril G. Clark, 252 College St., Toronto, M5T 1R7  
*Recorder* – P. Ashenhurst, C.S.T., Hamilton  
*Librarian* – H. Creighton, B.Sc., Toronto  
*Editor of Journal* – I. Halliday, Ph.D., Ottawa  
*Assistant* – Mrs. Marie Litchinsky  
*Editor of Observer's Handbook* – John R. Percy, Ph.D., F.R.A.S., Toronto  
*Executive Secretary* – Miss Rosemary Freeman  
*Council – Past President* – J. E. Kennedy, M.Sc., Saskatoon, J. L. Locke, Ph.D., F.R.S.C., Ottawa

**Representatives from Centres:**

Calgary – J. Findlay  
 Edmonton – F. Leohde  
 Halifax – Dr. R. L. Bishop  
 Hamilton – R. L. Allen  
 Kingston – Paul Brown  
 London – J. Conville  
 Centre d'Astronomie – R. Noel de Tilly  
 Montreal – B. Ramsay  
 Niagara – H. N. Maclean  
 Ottawa – R. Wlochowicz, Dr. L. A. Higgs  
 Quebec – R. Mailhot  
 St. John's – G. Dymond  
 Saskatoon – W. Frenzel  
 Toronto – J. B. Newton, Mrs. A. Scott, A. W. Scott, R. V. Ramsay  
 Vancouver – N. Laffra  
 Victoria – E. E. Bridgen  
 Windsor – H. Lee  
 Winnipeg – R. Belfield