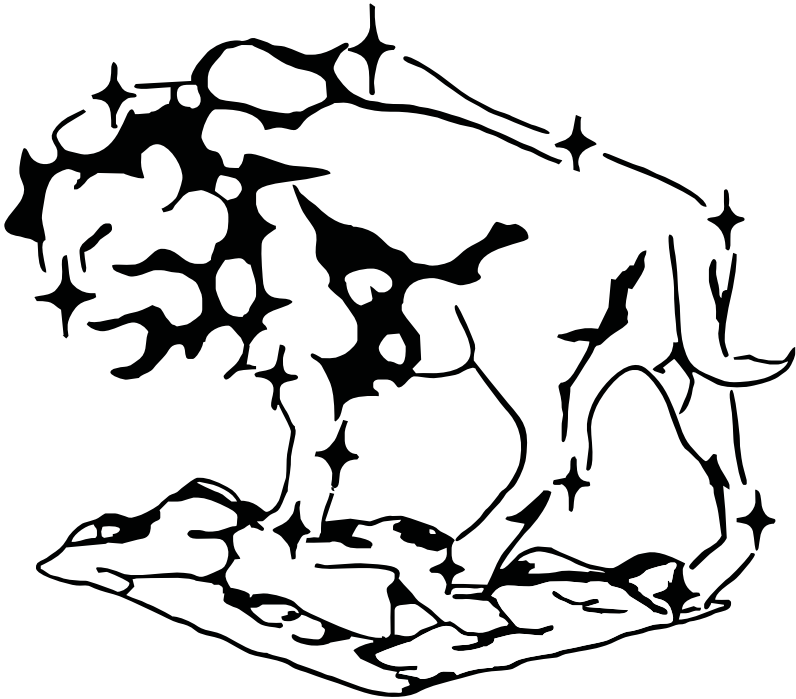


NATIONAL NEWSLETTER

December, 1985

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OF CANADA

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1986 GENERAL ASSEMBLY

June 27–30, 1986

Winnipeg, Manitoba

Plan to attend!

NATIONAL NEWSLETTER

December, 1985

Editor: IAN G. MCGREGOR

Editorial Staff: HARLAN CREIGHTON, PETER JEDICKE, BETTY ROBINSON,
B. FRANKLYN SHINN, STEVEN SPINNEY

Press Liaison: AL WEIR

Redacteur pour les Centres français

DAMIEN LEMAY
6230 Ravine Way
Orleans, Ontario K1C 2V4

Please submit all materials and communications to:

IAN G. MCGREGOR
McLaughlin Planetarium
100 Queen's Park
Toronto, Ontario M5S 2C6

Deadline for April issue is February 15.

Editorial

by Ian G. McGregor

Halley has arrived!

By the time you read this issue probably many will have seen the smudge of light in the sky which has been eagerly awaited since 1910. In talks presented across the country and in articles written in newspapers and magazines, people will be commenting on this 30th recorded return of Comet Halley to our skies. And just as each return has served as a marker in human history, I wonder what people at the 31st return in 2061–2062 will be saying about what life was like in 1985–1986?

While preparing the *Across the R.A.S.C.* column, I was struck by how community-minded our members are. Every Centre is busy organizing public events for Comet Halley with little thought of personal cost and time consumed. I believe this is a real tribute to our hobby and Society, particularly when Halley is putting on its best appearance in Canadian skies when our weather conditions are so unfavourable.

This issue completes another volume of the *National Newsletter*. I am looking forward to 1986 as an exciting year not only because of Comet Halley and the big spacecraft missions (Voyager encounter with Uranus, Galileo to Jupiter, and Hubble Space telescope in orbit) but also as a big year for amateur astronomy and its perception in the public eye. Perhaps this will be a legacy of Halley.

Redit Cometes Halleii

by J.E. Kennedy
University of Saskatchewan

A computer-enhanced image of Comet Halley is reproduced on the cover of *A Teachers' Guide 1985–1986* issued by NASA, with the title: “Comet Halley Returns.” Four photographs of Comet Halley, taken at the Helwan Observatory, Egypt, on 25th May, 1910, were used to produce this image; these photographs were digitized, added together and computer-enhanced at the Interactive Astronomical Data Analysis Facility of the Goddard Space Flight Center. A modern approach using high technology to reproduce a print of his famous comet would, in all likelihood, impress Edmund Halley; possibly, he would give commendation as well to the alternate title in the language of his choice.

The 1985–86 return of Comet Halley has already received, and should continue to merit, extensive coverage in both scientific and popular journals. As Canadians, we have been forewarned that the comet's display on this occasion will not be nearly as spectacular as we received on its last return in 1910. The media may find “computer-enhancing” essential in order to offer television viewers a satisfactory image of the comet. While this technology is relatively new, the ability to predict this forthcoming astronomical disappointment in 1985–86 is not. In a course of lectures on the Solar System, read at Gresham College, London, in 1882, a footnote on Halley's Comet predicted that:

“To its return in 1910, in what will probably be a most effective position for observation in our latitudes, those who are now young may look forward with pleasing anticipations.”

Why does Comet Halley, or in fact, why does any bright comet, generate so much public interest and media coverage? On this return, the two periods when Comet Halley will be most readily observed in our northern latitudes are the last week of November and the first week of December 1985, and late March and early April of 1986. At these times, the media will be searching for important events to cover (the winner of the Grey Cup for 1985 will have been decided and the interminable playoffs for the Stanley Cup will not have started).

In the latter part of the nineteenth century, the answer to the basic question of public interest in comets was provided by Camille Flammarion in his *Popular Astronomy*:

“Of all the heavenly bodies, comets are assuredly those whose appearance strikes most forcibly the attention of mortals. Their rarity, their singularity, their mysterious aspect astonish the most indifferent minds. The things which we see every day, the phenomena which are constantly or regularly reproduced before our eyes, no longer strike us, and excite neither our attention nor our curiosity.”

For most mortals, Comet Halley appears only once in a lifetime. Unquestionably, it should arouse my attention and curiosity to the extent that I can ignore the invigorating climatic conditions experienced in Saskatchewan during late November and early December, and venture forth to view the comet directly. I should ponder, as the Teachers' Guide suggests, “what will Comet Halley look like.” It is essential to disregard the textbook on astronomy which boldly states: “What we observe as a beautiful comet sweeping across the sky was described by Percival Lowell as a ‘bag-full of nothing’.”

Would a quick review of the comet model, proposed by Whipple in 1950, provide the stimulus needed to excite my attention and curiosity? If the nucleus of Comet Halley is visible, surrounded by a fuzzy coma, I shall be looking at “a dirty iceberg, a large mass of frozen water, methane, ammonia, carbon dioxide, and other constituents, in which is embedded meteor-like solid particles of various sizes.” Excluding those meteor-like solid particles, all of the elements of the comet nucleus (and a few more besides) may be found in the human body. Without adequate protective clothing, does one return from a prolonged session of viewing Comet Halley resembling a small comet nucleus?

The “dust-model” of comets put forward by Lyttleton has not, in general, been well received by the majority of astronomers. In Saskatchewan, particularly after extended periods of dry weather, you do not rush outdoors to see a dust storm. Hence, my curiosity is dampened once more.

In earlier times, comets were supposed to foretell calamities, their strange, hairy appearance gave

rise to fear, and on occasion, apprehension. Comet Halley has been blamed for the outcome of the battle of Hastings in 1066. On this return, there are so many conflicts raging between nations or races, that it may be difficult to single out one calamity and hold Comet Halley responsible for it.

With reference to Comet Halley, in a recent letter to the Editor of *The Globe and Mail*, a professor of history at the University of Alberta has assured readers that: "It is safe to say that one can expect some major changes in history in any 75-year epoch." A statement so profound unquestionably leads to an examination of how astronomical history has changed since the apparition of Comet Halley in 1910.

The science of radio astronomy has been born and reached great stature, borrowing optical techniques along the way, but adding a new dimension to the study of the Milky Way Galaxy. Space-age astronomy has appeared and with it new approaches of great value in unravelling the mysteries of the universe. A number of values of Hubble's constant are available, leaving considerable choice as to the actual number used.

The historians of astronomy will remember well in the years ahead that for the first time, the observational data in the 1985–86 return of Comet Halley will be "archived." Exactly what is involved in this process, I have been unable to determine, and details on it would be welcomed from all readers of *Cassiopeia*.

Another eye-catching headline has just appeared in the most recent issue of the *International Halley Watch Newsletter*:

"Old Halley Data Being Re-Reduced."

Once more, an appeal for an explanation of this procedure is made to readers of *Cassiopeia*. This mental image is conjured up quickly – the old Halley data is taken to a Diet School, and should the weight change be less than satisfactory, the data will be returned to the Diet School to proceed through the diet rules once again!

Comet Halley Returns! This headline may appear once more in the year 2061 or 2062. Should the advances in astronomy be major, and the modifications to the English language continue at the present rate in this 75-year epoch, read only the headline; it is quite possible that you will not understand anything beyond it!

Reprinted from *Cassiopeia*

Alice Springs Prepares for Halley

Editor: The following article is from the newsletter of the Alice Springs Astronomical Society. The Society's address is: P.O. Box 739, Alice Springs, Northern Territories, Australia 5750.

No doubt you are aware that Central Australia is a premier viewing location for Comet Halley, an opinion expressed in *Sky & Telescope* and *Mercury* magazines, both of which are sponsoring tours to this area to back up their opinions. A large number of other groups and individuals from all over the world are also coming here. We expect upwards of 50,000 visitors here in the period from mid-March to the end of April 1986.

In order to cater for this number of visitors in this town of only 24,000 people, a committee has been formed to plan for adequate facilities and an extensive range of day and night activities and entertainment, as well as viewing sites at the outskirts of town in order to avoid the town lights. A Comet Festival to be known as "Cometfest 86" is being planned.

The Cometfest will run from Thursday April 3 through Sunday April 20. In general terms, the aim is to ensure that the return of the comet is a richly rewarding experience for visitors to Alice Springs. Activities such as a sound and light/laser show, science fiction film festival, lectures and films, exhibits, etc. will operate during this period. A number of events such as "Night of the Stars" (lectured star parties), Mardi Gras, and other events with a purely Central Australian flavor are currently being organized as part of the Cometfest. A Cometfest time capsule and a "Back to Halley's" ball featuring old-timers who recall the 1910 apparition will be included. The entire town is mobilizing behind these activities and we believe this is the first time in world history that a town-wide effort of such scope in support of an astronomical event will have been done.

In addition to Comet Halley, the southern hemisphere sky will be seen in all its blazing and brilliant glory for the first time by most of the Northern hemisphere visitors.

Upon arrival in Alice and after some rest, your tour could include a visit along the highway west of Alice. This route is very scenic, with the MacDonnell ranges straddling both sides of the highway, with many beautiful gaps and gorges along the way to Glen Helen Gorge at the end of the trip, a distance of about 140 kilometres from Alice.

A tour of Alice Springs would be interesting, with a visit to the Telegraph Station, Flynn's Grave, Anzac Hill which overlooks the town, several art galleries which feature local European and Aboriginal works, Pitchie Ritchie Sanctuary, the Aero Museum, the Stuart Auto Museum, the Camel Farm, the Date Farm, and Emily Gap which has some ancient aboriginal rock wall paintings.

Outside Alice Springs you might also consider the trip to or from Ayers Rock by coach, enabling your group to visit the Henbury Meteorite Craters, a cluster of 13 craters.

A free 16 page information pamphlet aimed at amateur and professional astronomers intending to visit Central Australia has been prepared by our Society. I urge you to obtain a copy by placing a toll-free call to the Los Angeles office of the Northern Territory Tourist Commission:

Charles Blackwell
1-800-468-8222

Charles has visited Alice and Ayers Rock and he can supply you with travel planning and booking information, maps, and brochures.

CASCA Celebrates 50th Anniversary of the David Dunlap Observatory

**by John R. Percy
University of Toronto**

The annual scientific meeting of the Canadian Astronomical Society was hosted by the Department of Astronomy of the University of Toronto from May 27 to 31, 1985, coincident with the fiftieth anniversary week of the David Dunlap Observatory. By all reports, the week was a great success. Over a hundred participants from outside Toronto were in attendance.

At the opening reception in University College on May 27, Principal Peter Richardson gave a fascinating verbal tour of the College building, and outlined its connections with the growth of science teaching and research at the University of Toronto. He and Don Fernie then "unveiled" the DDO Fiftieth Anniversary Booklet, which was partially financed by the College.

On May 28, the Canadian Astronomical Society and the Planetarium Association of Canada sponsored a very successful joint session on "Education in Astronomy." This was followed in the evening by the first annual Helen Sawyer Hogg public lecture, given by Owen Gingerich of Harvard University. Happily, Helen was able to be present at the lecture, and at the dinner which preceded it and the reception which followed. Several hundred people attended the lecture.

The formal scientific sessions began on May 29. There were excellent review papers by Gilles Fontaine and Don Vandenberg (on "White Dwarfs" and "The Ages of the Globular Clusters," respectively), and a good balance between contributed oral papers and poster presentations. On the evening of May 29, Charles Townes delivered the Petrie Memorial Lecture, in which he described some of the exciting new developments in our understanding of "The Galactic Centre." The conference banquet was held at the Park Plaza Hotel on the evening of May 30, featuring an excellent meal of poached salmon and some appropriate dinner music – nostalgic piano pieces from the era of the opening of DDO.

Interspersed among the scientific sessions were special meetings and sessions devoted to national facilities and other areas of interest. Summaries of these sessions have recently been published in *Cassiopeia*. A full three hours were devoted to the annual business meeting, but even this time was barely adequate to discuss all the matters of interest and concern.

The highlight of the week (at least for the locals) was the fiftieth anniversary celebration on the evening of May 31. The day began ominously, with disastrous tornados which caused extensive

damage and loss of life only a few tens of kilometres from the Observatory. By early evening, however, the skies had magically cleared. About 150 participants gathered in the dome to hear short speeches by Don Fernie, George Connell (President of the University of Toronto), John MacLeod (President of the Canadian Astronomical Society) and Al Duffy (Mayor of Richmond Hill). The Hart House Chorus, stationed around the catwalk, contributed musical interludes. The participants then retired to the Administration Building for a tour of the premises, and appropriate refreshments (birthday cake!).

Dozens of members of the Department contributed to the success of the week, and all agreed that they would not want to do it again – at least for a decade or so. Nevertheless, it was an enjoyable and memorable celebration of the Observatory's first fifty years, and an optimistic preview of the next fifty.

Reprinted from *David Dunlap Doings*

Awards of the R.A.S.C. for 1985–86

As outlined in the Annual Report of the Society for 1978, page 31 ff, awards may from time to time be conferred upon members in recognition of meritorious service or achievement. Recommendations for such awards should in most cases be made through the Council of the local Centre. Members at large may submit recommendations, if they so wish, to the National Office for consideration of the National Council. Centre Councils will, of course, submit recommendations as they see fit to the National Council for final approval.

CHANT MEDAL

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 any amateur astronomer resident in Canada on the basis of the value of the work which he or she has carried out in astronomy and closely allied fields of investigation. Nominations (including citations) should reach the National Office by December 31.

SERVICE AWARD MEDAL

The Service Award was established in 1959, on recommendation of a special committee of the National Council. This bronze medal is presented to members who have performed outstanding service to a Centre or to the National Society. Nominations should reach the National Office by December 31.

KEN CHILTON PRIZE

The Ken Chilton Prize was established in 1977 by the National Council of the Society in remembrance of K.E. Chilton, an active member of the Hamilton Centre. The prize is awarded annually to an amateur astronomer resident in Canada, in recognition of a significant piece of astronomical work carried out or published during the year. Nominations should reach the National Office by December 31.

SIMON NEWCOMB AWARD

The Simon Newcomb Award is named in honour of the famous Canadian astronomer Simon Newcomb (1835–1909) who was born in Nova Scotia and later served for 20 years as Superintendent of the American Ephemeris and National Almanac Office at the United States Naval Observatory in Washington. The award was created in 1978 by the National Council on the initiative of the Halifax Centre. The intent of the Simon Newcomb Award is to recognize literary ability among members of the Society who are not professional astronomers. Submitted articles must be original and should not have been previously published in any substantially similar form (although appearance in Centre newsletters is permissible).

Who can enter? Any member of the Society who does their astronomy purely as a hobby.

Topics: The article(s) should be no more than 2,500 words in length, be written in proper grammatical form, and be presented typewritten and double-spaced. Diagrams need not be in finished form but should be complete and ready for drafting. Photographs may also be submitted and, if possible, original negatives should accompany the submission. The author(s) name(s) should appear only on the title page and references to Centre affiliation should not appear in the article.

Submission of Entries: Articles must be received by the National Awards Committee between January 1 and March 31. Members of Centres must first submit their entries to their Centre Executive for its approval before submission to the National Awards Committee. Unattached members make their submissions directly to the Committee c/o R.A.S.C. National Office.

Judging: Articles are judged on their scientific accuracy, originality, and literary merit.

Presentation: The award is presented at the General Assembly and remains in the hands of the winner's Centre for display until the following April.

For further details on the Simon Newcomb Award, contact the Awards Committee, R.A.S.C., 136 Dupont Street, Toronto, Ontario M5R 1V2 or your Centre Secretary.

Fundraising for a New Canadian Telescope

Last May the David Dunlap Observatory in Richmond Hill celebrated its 50th anniversary. Operated by the Department of Astronomy of the University of Toronto, the Observatory's 1.88 m telescope is the largest in eastern North America but many things have changed since its construction. Local sky conditions have noticeably deteriorated, much larger instruments have been constructed, and southern hemisphere skies have been opened to a new generation of giant telescopes. In 1970, a 61cm telescope was constructed at Las Campanas, Chile with the intention of eventually adding a larger telescope.

To coincide with the anniversary, the Department of Astronomy has announced a \$5 million fundraising campaign to finance two major projects.

First, to upgrade the existing Observatory a new \$2 million wing would be added to house a new computer, modern research equipment, and more space – a high priority item if the Observatory is to maintain its high standards into the 21st century.

Second, to expand the research instruments available a 2 m class telescope would be built at Las Campanas to give telescopes of comparable size operating in both hemispheres. The dome, building, and telescope would cost about \$3 million.

The Astronomy Department hopes to find corporate and private donors who will be as generous as the David Dunlap estate was in the 1930's. This will help to ensure the Department's continued reputation as one of the world's leading institutions. Professor Robert F. Garrison is chairman of the Fund-raising Committee.

Planetarium Association Meets

The biannual conference of the Planetarium Association of Canada was hosted by the McLaughlin Planetarium in Toronto between May 25 and May 29. The over seventy delegates present came from all over Canada as well as the United States and from as far as East Germany and Sweden. It was more than just a planetarium conference as teachers, astronomy educators, students, and commercial representatives participated. Over thirty papers were presented on subjects ranging from artwork techniques, astronomy in the classroom, historical astronomy, student-run planetariums, and public relations. In addition, there were four special workshops and opportunities to see no less than five different planetariums in operation.

After a Saturday evening reception, Sunday featured a full-day of activities. Paper sessions and a well-attended Scriptwriting Workshop led by Fran Bidy of the Strasenburgh Planetarium in Rochester highlighted the day's business program. A sumptuous banquet at Ontario Place followed by an IMAX show in the Cinesphere capped off a good day.

Monday's activities were concentrated at the McLaughlin Planetarium. Displays, paper sessions, a fascinating Storytelling Workshop led by professional storyteller Marylyn Peringer of Toronto, and demonstrations of two different models of portable planetariums by Cathy McWatters, David Joyce, and Klaus Richter were programme highlights. The delegates then toured the full production facilities of the McLaughlin Planetarium – one of North America's top facilities. In the evening wine and cheese added that extra "dimension" to presentations in the Star Theatre of two astronomy shows and a laser light show.

The fourth conference day featured the Planetarium Association of Canada's Annual Meeting and the election of the Association's new Council. The 1985–87 Council consists of:

PRESIDENT – Ian McGregor (McLaughlin Planetarium)
 SECRETARY-TREASURER – Bob Hawkins (Seneca Planetarium)
 MEMBERSHIP SECRETARY – Ed Barker (Manitoba Planetarium)
Northstar EDITOR – Chris Sasaki (McLaughlin Planetarium)
 COUNCILLORS – Ian Cameron (Lockhart Planetarium), Jennifer Bushman (Calgary Centennial Planetarium), Paul Deans (Edmonton Space Sciences Centre)
 PAST PRESIDENT – Robert Ballantyne (Manitoba Planetarium)

That evening, delegates attended the First Annual Helen Sawyer Hogg Lecture with speaker Dr. Owen Gingerich of Harvard University. This was a public lecture attended by over 300 people and was Sponsored jointly by the Canadian Astronomical Society, the Planetarium Association of Canada, the Royal Astronomical Society of Canada, and the Royal Canadian Institute.

By Wednesday, many delegates had started the trip homewards but for those remaining, a visit to the David Dunlap Observatory, the Seneca College Planetarium, and the Ontario Science Centre and its planetarium completed the Conference program.

The conference was a great success. Not only did everything run smoothly from an organising viewpoint but there was a good mixture of activities of interest to not only "big" and "small" planetariums but also for the general astronomy educator who does not have a planetarium but is involved in the communication of astronomical ideas. There were many opportunities for delegates to discuss ideas of common interest – sometimes more important than the "official" program and there were representatives present from almost all of the over two dozen planetariums in Canada. The Association's next major conference will be hosted by the Edmonton Space Sciences Centre in 1987.

Note: A conference report and abstracts of papers appears in the Autumn Equinox 1985 issue of *Northstar*. Membership in the Association is open to anyone interested in promoting the spread of knowledge of astronomy and its related disciplines among the general public at all levels of age and interest. Educators not associated with a planetarium may join as Associate Members.

Astronomy News

Congratulations Terry: Well-known Canadian science writer and amateur astronomer Terence Dickinson, author of the popular book *Nightwatch* and writer of a weekly astronomy column for the Toronto star newspaper, has received recognition for his efforts. His article "In the Beginning" which appeared in *Equinox* magazine won a Canadian Science Writers' Association award at the Association's May conference. Another article, "Probing the Galaxies of Mauna Kea", came first among the articles entered in the annual Hughes Aircraft contest run by the *Griffith Observer* magazine. The *Griffith Observer* is a monthly publication of the Griffith Observatory and a highly-recommended source of popular and informative astronomical articles.

New Slide Sets: The Astronomical Society of the Pacific has recently released two new slide sets. *Telescopes of the World* includes 50 colour slides, a 32-page booklet, and costs \$44.95 US. *Comets* has 31 colour and black-and-white slides, a 16-page booklet, and costs \$25.95 US. The Society is a non-profit organisation and revenue from slide sales goes to support the Society's public education activities. Slide sets can be ordered from the Society by writing to it at 1290 24th Street, San Francisco, California 94122.

Astronomy Day 1986: All Centres mark this down in your calendars. The 15th Annual Astronomy Day has been set for April 19, 1986. The date was chosen to coincide with one of the last weekends that the predicted brightness of Comet Halley will allow naked-eye observations although for many Canadians, the comet is too close to the horizon for observation.

Two Canadian Award Winners: Congratulations to Jayanne English, a second year master's candidate in physics and astronomy at the University of Toronto and Felicity Harrison, a master's graduate in environmental studies at York University who have won \$1 000 scholarships sponsored by Spar Aerospace of Toronto and Bristol Aerospace of Winnipeg. Ms English founded a space-oriented club at the University of Toronto and hopes to seek linkages between the humanities and sciences as they relate to space. Ms Harrison hopes to work on the design of space stations and is the founder of the Canadian Space Society.

Halley Time Capsule: On November 24, the Ontario Science Centre in Toronto sealed a plexiglass time capsule containing artifacts and pictures of the world of 1985. It will be opened in 2061 when Comet Halley next returns. A similar capsule is being planned by our Society but it will contain more material on the 1985–1986 return of Comet Halley.

Sudbury Astronomy Club: There were nine official star parties for members and the public last summer. A June 24 star party with 300 people present featured a twilight talk by John Dobson of the San Francisco Sidewalk Astronomers. Members of the club recovered Comet Halley on the night of September 13–14 when the first of a series of comet parties was held. Membership is swelling with the excitement of Comet Halley and one new member is the first graduate of Telescopes North – the joint venture of the Club and Science North. Regular meetings are held every second Friday at the Doran Planetarium. If you are in the area drop in for a visit.

Peru for Halley?: Members of the Association of Amateur Astronomers of Peru will be hosting observing activities at the Arequipa site for two international expeditions they have organised. Contact Alfredo E. Ferreyros, Asociacion Peruana de Astronomia, Av. Bolognesi 159 Miraflores, Lima 18, Peru for further information.

Report of September 1985 National Council Meeting

by Leo Enright
National Recorder

The fourth meeting of 1985 of the National Council took place at the National Office in Toronto on September 28. Ten Centres were represented by officers or Council Representatives while an observer attended from one other Centre.

The Treasurer presented the Third Quarter Interim Statement and reports were received from the editors of the *Journal*, the *Observer's Handbook*, and the *National Newsletter*. It was expected the 1986 *Handbook* would be available by the end of October.

Council approved twenty-seven requests for unattached memberships and one for unattached life membership in the Society. Eleven requests for Membership Certificates were approved and three more were conditionally approved. In addition, two members of the Toronto Centre were awarded Messier Certificates.

As a result of some misunderstanding with a past entry for the Simon Newcomb Award and at the suggestion of both the Journal editor and the Halifax Centre, National Council approved a revision of the regulations governing the award (see page L86).

Mr. Loehde, as chairman of the Nominating Committee, invited nominations for the four positions on Council which would be open for election in the coming year (see L96).

The Constitution and By-Laws Committee presented a set of model Centre By-Laws which were approved by Council and which were to be mailed to all Centres. The Computer Utilization Committee reported on its ongoing work to replace the outdated typewriter at National Office with a suitable word processor and to honour requests from many Centres for a computerized link among themselves and with the National Office. The Society's Gold Medal was presented to Mr. Gordon Alan Drukier, the 1985 winner. The Gold Medal Committee has been studying a number of options for the future of this long-standing award and will report at a future Council meeting.

Among other items considered was a request, which was approved, from the Hamilton Centre for a loan amounting to \$1000. for the completion of its observatory. Council also approved the retention of Dr. John Percy as the Society's representative on the National Research Council's Associate Committee on Astronomy. A Toronto Centre proposal for a committee to collect memorabilia associated with the current apparition of Halley's Comet and to have such items enclosed in a time-capsule was also approved.

More complete details concerning all the items discussed at the meeting may be found in the official Minutes distributed to all Centre Presidents and National Council Representatives.

Across the R.A.S.C.

OTTAWA: Brian Burke had a good summer vacation with visits to three planetariums, three observatories, and the Edmonton General Assembly. The Annual Dinner Meeting was held on November 22 with Bob Thirsk of the Canadian Astronaut Programme as guest speaker. Meteor Coordinator Frank Roy reports that the August Perseids were one of the best displays in recent years. About 20 members attended the Stellafane conference in Vermont in August but Rolf Meier comments that the number and quality of telescopes on display was not impressive. The Centre has produced a Comet Halley Information Booklet 17 pages in length. Due to the increasing size of the membership (now over 200), the search is on for a new larger meeting room.

WINDSOR: Lorison Durocher reports that the Centre has been very active doing public programmes in astronomy and that these have generated numerous TV, radio, and newspaper interviews. The result is public attendance between 60 and 150 people at each event. A series of monthly slide presentations at the Windsor Library featured a guide to viewing Comet Halley and two public talks by Brian Perry

described the famous monument Stonehenge. Not surprisingly, the Centre's membership total is at a record high.

HALIFAX: The Messier Marathon started by the Centre earlier in the year had its first successful completion when Bill Thurlow observed all 110 Messier objects between January and May. David Chapman completed his Marathon in the late summer. The Centre has decided to hold Astronomy Day in October rather than May because of the better weather conditions in the autumn. The 1985 event was held on October 18.

CALGARY: Stephen Edberg of the International Halley Watch was the guest speaker at a public lecture in October. Don Hladiuk was the guest speaker at the Annual Banquet on November 27. The *Starseeker* newsletter changed its format with the October issue due to the editor, Alison Laffra, having recently changed her place of employment.

SASKATOON: The newsletter *Saskatoon Skies* has also changed its format. Discussions are taking place regarding some changes in the Centre's organization and programme. One proposal has been to hold meetings on weeknights instead of Saturday nights. Richard Huziak and his fiancée set off in September on a one-year around-the-world excursion. Naturally they are taking a star atlas, variable star charts, and a 500 mm f/8 Maksutov telephoto lens! The Centre presented a public star night at Pike Lake Provincial Park in July and the Tenth Annual Saskatoon Public Star Night held at Diefenbaker Park in the same month drew over 300 people. A weekly astrophotography workshop started in August. A public lecture on Comet Halley was organized by the Centre for October 31.

TORONTO: The Annual Awards Banquet was held October 26 with Fred Espenak of the Goddard Space Flight Centre as guest speaker. Membership Certificates were presented to several members, Kim Row and Teo Talevi received the Messier Certificate, and Randy Attwood, Steven Spinney, and Michael Watson received Centre awards. Comet Halley events include a major public lecture on November 21, a live phone-in television show on December 5, and public Halley parties at 3 or 4 locations held simultaneously in a three-day period in early January. An award for observing Comet Halley had gone unclaimed by early November because of horrible weather conditions in the Toronto area during much of the autumn.

WINNIPEG: Centre members were celebrating with champagne when they learned the Centre had received a provincial government grant of over 10 thousand dollars for the Glenlea Observatory. It will be used to purchase a new Ash dome. An official dedication will take place at next June's General Assembly hosted by Winnipeg. Stan Runge reports that during the summer nine weekends in a row were cloudy and every planned astronomical event was clouded out. However, a joint star party organized by the university, the Manitoba Astronomy Club, and the Winnipeg Centre on September 21 was finally a clear night despite Weather Office predictions for clouds.

KINGSTON: Leo Enright received a letter from Father Lucien Kemble, one of Canada's premiere observers, of the Calgary Centre. He reported that he had also observed the unusual aurora of August 12-13 which was reported in *Regulus* and the *National Newsletter* (see October 1985 issue). It is interesting to note that such an event was seen by observers over so great a distance.

VICTORIA: The Centre's Annual General Meeting and Dinner was held on October 9 on board the Princess Mary Restaurant Vessel. Dr. Kenneth Wright, the Centre's new Honorary President, was the after dinner speaker. Jack Newton successfully photographed Comet Halley on August 10-11. Several members have been doing photometric timings of the mutual events of the Galilean satellites of Jupiter using a 0.5 m telescope. A telescope making group has formed under Roger Williams. The Centre has accepted an invitation from the Dominion Astrophysical Observatory to participate in a series of public "Halley-Look" nights during November and December.

Across the R.A.S.C. is a regular feature of the *Newsletter*. We need your contributions and reports of Centre activities if this feature is to be of interest and relevance to our readers. Deadline for April issue is February 15.

Exhibit Details for the 1986 General Assembly

The following is a list of the exhibit categories for the 1986 General Assembly in Winnipeg (June 27–30). Entries are at the discretion of the submitter(s), providing that they follow the requirements listed below. The entries do not necessarily have to be based on observations.

1. Solar
2. Lunar and Planetary
3. Comets, Asteroids and Other Phenomena (*except* Halley)
4. Comet Halley
5. DeepSky
6. Astrophotography
7. Variable Stars
8. Radioastronomy
9. Computer Astronomy and Software
10. Centre Display
11. Open Category
12. Telescopes and Equipment

Entrance Requirements:

1. Any member or group of members in good standing are eligible to enter displays. If the display is a group project and wins an award, then one prize will be awarded to the group.
2. Entries must be original ideas, not having been previously exhibited at a General Assembly, and must have been completed within the last two years.
3. Individuals may enter in a maximum of four categories, with only one entry per category. A group of members may enter in only one category, but members of the group may enter their own exhibits.
4. Entrants are not required to appear in person, although this is preferred. If submitters do not accompany their exhibits, then they must make their own arrangements for the transportation of their displays.
5. Persons wishing to enter exhibits should obtain an application form from:

Exhibit and Papers Committee
RASC Winnipeg 1986 General Assembly
Box 215
St. James Post Office
Winnipeg, Manitoba
Canada R3J 3R4

Détails du Concours pour l'Assemblée Générale 1986

Voici la liste des diverses catégories de travaux pour l'Assemblée Générale 1986 (27 juin au 30 juin). Chaque entrée, basée ou non sur l'observation, est à la discrétion des participants à condition qu'ils suivent les règles ci-après définies.

1. Soleil
2. Lune et Planètes
3. Comètes, Astéroïdes et autres phénomènes (pas Halley)
4. Comète Halley
5. Objets Lointains
6. Astrophotographie
7. Étoiles Variables
8. Radioastronomie

9. Astronomie de Micro-ordinateur et Programmes
10. Exposition d'un Centre
11. Catégorie Libre
12. Télescopes et Équipement

Règlements

1. Tout membre ou groupe de membres en règle peut participer. Si un groupe gagne dans une catégorie, un seul prix sera remis au groupe.
2. Chaque entrée doit être originale (ne pas avoir été présentée à une Assemblée Générale) et avoir été complétée au cours des deux dernières années.
3. Un individu peut participer à un maximum de quatre catégories, avec seulement une entrée par catégorie.
4. Les participants ne sont pas requis de participer en personne, bien que ce soit préférable. Si non présent, vous devez faire vos propres arrangements pour le transport et l'installation de votre matériel.
5. Ceux qui désirent participer doivent se procurer et compléter le formulaire qui peut être obtenu à:

Exhibit and Papers Committee
RASC Winnipeg 1986 General Assembly
Box 215
St. James Post Office
Winnipeg, Manitoba
Canada R3J 3R4

Due\$ Due

The 1986 membership year of the Society started last October 1, 1985 and runs until next September 30, 1986. If you have not renewed your membership by now, what are you waiting for? The Society's publications, the *Journal*, the *Observer's Handbook*, and the *National Newsletter* are distributed for the 1986 calendar year and for new 1986 members, the first issues of the *Journal* and *National Newsletter* which will be received are the February 1986 issues.

Annual fees are still only \$20.00 for regular members and \$12.50 for members under the age of 18 years as of October 1, 1985. Proof of age is required to be eligible for the reduced rate. Please note that about one-half of the Society's twenty Centres add their own surcharges to these basic national rates. Please consult your Centre Treasurer to whom your fees should be sent.

Society membership is one of the best bargains around. Not only does a member obtain the highly respected *Observer's Handbook* but also six issues of the *Journal*, six issues of the *National Newsletter*, plus the local newsletters of their Centre if they are affiliated with a Centre. The activities of their own Centre are available to them as well as the Society's own national gathering, the General Assembly, hosted each year by one of the Centres.

Centre Treasurers are reminded that your lists of 1986 members should be mailed to the National Office by December 31, otherwise your members may miss the February publications.

National Library

The Society's National Library located at the National Office in Toronto will be open on the following Saturday afternoons over the next few months: January 18, February 15, and March 22. The hours are from 1 to 5 pm.

The Library is also open during regular business hours during the week Monday to Friday 9:30 am to 4:30 pm. The National Office can be contacted at (416) 924-7973.

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Nominations for RASC Officers, 1985–86

The By-Laws of the Society provide for a Nominating Committee composed of the three surviving immediate Past Presidents, whose duty it is to prepare a slate of candidates for the offices of the Society.

Next year, we must elect the following officers specifically: President; 1st Vice-President; 2nd Vice-President; and Treasurer.

If any member wishes to make suggestions in this regard, he should contact the Committee Chairman, Mr. Franklin Loehde, 136 Dupont Street, Toronto, Ontario M5R 1V2, as soon as possible (preferably by December 31).

The By-Laws provide that "any five members of the Society, in good standing, may nominate additional candidates for any vacant office, provided that such nomination, accompanied by a letter of acceptance from the nominee shall be received by the National Secretary of the Society, not less than sixty days before the date of the annual meeting".

It would be appreciated if any such nominations, (together with a short biography of the candidate) were submitted to the national office no later than February 15th, 1986, in order to allow for the printing and mailing of ballots.

Full details pertaining to nominations are outlined in By-Law 1, Article 11(a) as published in the *Journal*, June 1969, pages 155–168.