

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

# The Royal Astronomical Society of Canada Annual Report 2005



GA2005- Kelowna, British Columbia

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# **MEMBERSHIP STATISTICS**

A detailed breakdown of membership by Centre, category, country, province, expiry date and much more may be found in the member's-only section of the RASC website at:

http://www.rasc.ca/private/memberstats/20051231-active.pdf

Special Thanks to Bonnie Bird, Jo Taylor, Scott Young, Dave Lane, James Edgar, and Hugues Lacombe, all Centres for their reports and pictures and the members of the RASC for your support. Special Thanks to Mark Bratton who has done the Annual Report for the last five years (2000-2005), and who has been a great help to me.

Thank You Everyone, Kim

Essential and Extended 2005 Annual Report produced by Kim Hay. Using Microsoft Publisher 2000.

# The Royal Astronomical Society of Canada—2006

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Membership & Promotion Coordinator:

Jo Taylor mempub@rasc.ca

### **Officers**

Honorary President: Dr. Robert Garrison

President: Peter Jedicke pjedicke@fanshawec.ca First Vice-President Scott Young scvoung@manitobamuseum.ca Second Vice-President: David Lane dlane@ap.stmarvs.ca Secretary: Kim Hay kimhay@kingston.net davidlclark@rogers.com David Clark Treasurer: jamesedgar@sasktel.net Recorder: James Edgar Past President: Dr. Rajiv Gupta rgupta@telus.net Journal Editor: Jay Anderson editor@rasc.ca Observer's Handbook Editor: Patrick Kelly patrick.kelly@dal.ca Beginner's Observing Guide Editor: Leo Enright tcorbor@frontenac.net

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### 2005 - 2006 Committees

Awards: Dr. Rajiv Gupta rgupta@telus.net Constitution: Randy Attwood randy.attwood@rogers.com Education: Mary Lou Whitehorne mlwhitehorne@hfx.eastlink.ca Executive: Peter Jedicke pjedicke@fanshawec.ca davidlclark@rogers.com Finance: David Clark **Barry Matthews** opticks@sympatico.ca Historical: Information Technology: David Lane dlane@ap.stmarys.ca Robert Dick rdick@ccs.carleton.ca Light-Pollution Abatement: Membership and Promotion: Denis Grey denis.grey@sympatico.ca Nominating: Dr. Rajiv Gupta rgupta@telus.net Observing: Chris Fleming chrisfleming1@sympatico.ca

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### **Centre Representatives on Council**

### Belleville Centre: Donald Town Roland Dechesne Calgary Centre: Dean Huxley Calgary Centre: Charlottetown Centre: Clair Perry Edmonton Centre: Bruce McCurdy Edmonton Centre: Roy Ramdeen Halifax Centre: Pat Kelly Hamilton Centre: Roger Hill Kingston Centre: John Hurley Kitchener-Waterloo Centre: Bernd Mueller London Centre: Gary Hinks Moncton Centre: Paul Gray Centre Francophone de Montréal: Patrice Scattolin Bill Strople Montreal Centre: Niagara Centre: Joe Otonicar Okanagan Centre: Bryan Kelso

### **Centre Representatives on Council**

Gary Boyle

Ottawa Centre:

Barry Matthews Ottawa Centre: Ottawa Centre: Rob Dick Prince George: Alan Whitman Québec Centre: vacant Regina Centre: Lee Beck Sarnia Centre: Richard Weatherston Saskatoon Centre: Jim Young St. John's Centre: **Doug Grouchy** Thunder Bay Centre: Dave Gallant Toronto Centre: Geoffrey Brown Toronto Centre: Charles Darrow Toronto Centre: Tony Horvatin Toronto Centre: Dietmar Kupke Doug Montgomery Vancouver Centre: Vancouver Centre: Jason Rickerby Victoria Centre: David Lee Windsor Centre: Tim Bennett Winnipeg Centre: Jennifer West

# President's Message

he Society's 115th year as a national organization has now slipped into history. I am pleased to have the opportunity to introduce our Annual Report with a summary of what has transpired -- both successes and tribulations.

Publications continue to dominate our activities on the national level. Our Journal approaches an amazing milestone as it completed its 99th year of continuous publication. Not many publications can make that claim! The Observer's Handbook will also soon reach the century mark. Newer projects, such as the Beginner's Observing Guide, the Observer's Calendar, and Skyways, continue to draw members to our fold, readers to our interest, and customers to our eStore. 2005 also saw us add Explorons l'astronomie to our offering. It is a teacher's handbook in French, translated from Skyways, that was made possible by a grant from the National Research Council's PromoScience program. I believe this is the Society's most ambitious undertaking in Canada's other official language.

Journal Editor, Wayne Barkhouse, retired after many years of service and we are indebted to him for his hard work and steady guidance. The new editor is Jay Anderson, a Winnipeg Centre member who recently retired from an illustrious career with the meteorology services of Environment Canada. This is significant because Jay will be the first editor who is not a research astronomer. Jay will guide the Journal through many challenges in the next few years and we wish him well.

Another noteworthy development regarding publications is that the Journal and SkyNews are now mailed separately. The arrangements were outlined by SkyNews editor, Terence Dickinson, and myself during a pleasant stroll by the rapids in Napanee, Ontario, one beautiful spring morning. The "Napanee Accord" resolved the bottleneck that has often plaqued distribution of our own bi-monthly publication and the excellent colour magazine that we purchase for all members. Many members made it known to us that receiving SkyNews many weeks after its issue date was a big problem. Beginning at the end of 2005, members will receive SkyNews at the same time as regular SkyNews subscribers. Another advantage of the new distribution scheme is that members who wish to forego receiving the Journal through the postal system can now do that. Other options include printing the Journal at home or reading it online, where the Journal is available as a pdf file. The Executive Committee has also worked hard on a further initiative that would require members who wish to receive the Journal through the postal system to pay a sur-

We hope that this will ameliorate the pressure for another hefty membership fee increase.

Thanks mainly to the efforts of Denis Grey, Chair of the Membership and Promotion Committee, a Sustaining Membership program was established in 2005. About 60 members have shown their support for the Society's goals through this program. General donations in 2005 were about four times the average of recent years. In addition,

the Society received a major bequest of \$27,951.36 from the estate of Walter A. Feibelman, a researcher at NASA's Goddard Space Flight Center. Walter had been a member of our Society since 1953. That's before I was born! We respectfully express our appreciation to all our donors.

The focus of the day-to-day operation of the Society is our national office in downtown Toronto. Our tireless Executive Secretary, Bonnie Bird, is somehow able to keep us all on track. Over the summer months, Bonnie managed a significant transition in the office when Isaac McGillis left us and Jo Taylor came on board. We thank Isaac for his devotion during his years at Dupont Street, and we most heartily welcome Jo to our staff. I had the opportunity to visit the office a few times during 2005, and it is a pleasure to report that Jo adapted well to our special mix of office procedures. Bonnie and Jo contribute enormously to the success of the Society, and they have our continuing gratitude.

The annual General Assembly was hosted by the Okanagan Centre in May, and it was an amazing weekend. Jim Tisdale was Chair of the Organizing Committee. Jim and his team of merry astronomers did a fabulous job of pulling the various events together. The venue at Okanagan University College (now UBC-Okanagan) was pleasant and convenient. Noteworthy events were the banquets, held at a golf club and a winery, and the tour of the Dominion Radio Astrophysical Observatory. Dianne and I were even accompanied by bagpipes upon our entrance to the banquet. Another nice touch of tradition was the presence of seven Past Presidents, which I think is the most ever at the same event. The zaniness was non-stop and the pyramid made it to the fifth level!

The Society recognized individual members with awards presented during the GA. They were Past Presidents Randy Attwood and Bob Garrison, who received Service Awards, and Attila Danko, who won the Chilton Prize in recognition of his development of software for the Clear Sky Clock. As Attila was not able to attend the GA, I presented the Chilton Prize to him at a meeting of Ottawa Centre a few weeks later. Also on the topic of awards, Christian Marois won the 2005 Plaskett for his Ph.D. thesis at the Université de Montréal, entitled "La recherche de naines brunes et d'exoplanètes: développement d'une technique d'imagerie multibande." The award was presented at the 2005 meeting of the Canadian Astronomical Society (CASCA). At the Canada Wide Science Fair, Shelby Mielhausen took the Junior category award for a project about light pollution, while Jennifer Loong won in the Senior category for writing a program to determine the orbit of asteroid (88) Thisbe. Meanwhile, the Observing Committee granted 13 Explore the Universe certificates, 16 Messier Certificates, 11 Finest NGC Certificates and two Isabel Williamson Certificates to recognize achievements in observing. Congratulations to all award winners and all those who earned their certificates!

During 2005, I was able to attend 30 Centre meetings. Naturally, many of these were in southern Ontario, where it was a simple matter of driving a few hours from our home in London. When Centres farther away invited me, I usually gave a talk to the members. Although most of the 56 national Presidents before me were professional astronomers and often presented news about their work, I am not a researcher. Instead I spoke either about the rewarding experi-

ences my wife, Dianne, and I had in Hawaii during a seven-week stay in January and February, or about my continuing interest in neutrinos, the elusive sub-atomic particles that are captured at the Sudbury Neutrino Observatory. It is a great pleasure for me to visit the Centres, and it gave me the opportunity to meet some of the leaders and members that I didn't already know from past visits and General Assemblies. I am particularly grateful to those members who opened their homes to me in various cities.

By the time my term ends, I'm sure I will have attended a record number of Centre meetings as President.

In the research community, it is noteworthy that CASCA continued to promote the Mid-Term Review (MTR) of their Long-Range Plan for future projects in astronomical research. I had the opportunity to discuss cooperation between CASCA and our Society with CASCA President Jim Hesser in November in his office in Victoria. Earlier in the year, it was announced that Canadian researchers ranked highest among all countries in a statistical study of citations in technical publications, and we share their pride in this recognition.

A stubborn deficit in our finances continues to be our biggest challenge. Despite considerable savings from such initiatives as the new vision of the Annual Report, as described in my remarks last year, and despite the largest single increase in the Society's annual membership fee, our expenses continue to exceed our revenues. We face daunting pressures in the areas of membership administration software, insurance costs, property management, and travel subsidies, even as expanded use of the internet permits us to communicate more rapidly and without increased cost. After our membership peaked just over 5000 in the summer of 2004, an alarming number of members did not renew their affiliation to the Society. I wish I knew why! The Executive Committee discussed finances at great length throughout 2005, and more drastic measures will be considered for 2006. Our Treasurer, David L. Clark, has worked harder than I could have imagined possible to grapple with this complex problem, and we truly appreciate his commitment.

I extend my heartfelt thanks to my fellow Executive Committee members, and also to Kim Hay, who ended a six-year commitment to the Society as Secretary. Vice-Presidents Scott Young and Dave Lane welcomed Stan Runge as the new Secretary. I sincerely thank you for the opportunity to serve as your President. I am enjoying my term very much, and it has been a truly rewarding experience. Clear skies to all!

Peter Jedicke President

# Secretary's Report –Stan Runge

A t the conclusion of 2005, a quick review reminds us that it has been a year filled with many successes and challenges. In his message, President Peter Jedicke has provided a thorough report on what has occurred over the past year.

I will focus on some of my thoughts after my first full year as the Secretary of the RASC. I begin this message by thanking the many persons who have assisted me in this role, which includes our Executive Secretary, Bonnie Bird, former Secretary, Kim Hay, and the full Executive.

In my position as a member of the Executive, I am provided with a unique view of the workings of the National portion of the organization. It has been quite the learning experience, providing me with a greater respect for the running of the Society.

This reminded me of when I first become a National Representative for the Winnipeg Centre. Initially I thought that the National Office appeared to be distant and uncaring. I thought that my inclusion might help make it more beneficial to the local Centres. But I soon learned that the National Council was filled with many hard-working and dedicated individuals, all trying to make the RASC better for all the Centres. Now, joining the Executive has shown me that there is an even greater dedication and desire to ensure the long-term success of the Society. It takes an incredible amount of effort as well. There are long conference calls and vast volumes of email to discuss the ongoing issues of publications and budgets. This year also dealt with insurance issues, upwardly spiraling expenses, and wholesale changes in the staff, including with the publications production teams. It has been both a challenging and rewarding year. This has all led me to truly appreciate the running of the RASC.

Furthermore, in this past year, I have seen greater cooperation of the entire National Council to resolve problems and provide direction to help ensure our long-term survival. It bodes well for our future. Our membership numbers did show a small decrease for a second year. However, I am certain that with both the Centres and National Office working closely together we will reverse this trend.

Finally, on behalf of the Royal Astronomical Society of Canada, I extend our deepest sympathies to the families and friends of the following members whom we have lost during the past year.

Mr. William Campbell (Ottawa), Mr. Alan Cook (Victoria), Dr J. Keys (Unattached), Mr. M. Nash (Unattached), Mr. Russ McLeod (Winnipeg), Mr. C.R. Molson (Ottawa), Mr. Clyde Edward Sears (Hamilton), Mr. Frank Smith (Toronto), Mr. Paul J. Sykes (Vancouver), Mr. John Sylvestre (Montreal), Mr. Glendon Tays (Moncton), Mr. J.P. Wilson (Halifax).

Membership of Centres										
Centre	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
Belleville	32	29	26	N/A						
Calgary	302	323	321	315	315	310	270	267	272	256
C.F.de Montréal	32	30	40	39	36	38	46	46	33	11
Charlottetown	20	19	20	16	18	15	N/A	N/A	N/A	N/A
Edmonton	261	267	271	562	249	222	217	166	152	138
Halifax	171	197	214	196	186	172	157	164	137	127
Hamilton	91	91	113	114	122	109	79	65	45	50
Kingston	128	110	132	145	146	152	176	136	152	142
Kitcener-	127	127	133	114	106	95	80	51	32	32
London	112	115	119	118	115	115	78	65	49	45
Moncton	75	70	59	62	46	29	N/A	N/A	N/A	N/A
Montreal	109	108	121	116	106	102	105	113	108	103
Niagara	114	123	117	109	97	91	83	72	60	48
Okanagan	83	85	92	87	70	61	53	40	35	16
Ottawa	447	469	500	480	457	431	394	298	246	216
Prince George	75	40	43	42	25	N/A	N/A	N/A	N/A	N/A
Quebec	39	38	38	45	50	63	36	50	51	47
Regina	47	53	59	56	47	30	27	31	18	23
St. John's	51	44	54	54	45	47	36	41	39	35
Sarnia	27	32	26	27	27	31	19	10	12	13
Saskatoon	70	67	73	70	73	76	77	75	54	54
Thunder Bay	39	41	43	39	38	32	37	31	17	20
Toronto	748	841	889	886	775	792	723	720	687	682
Vancouver	267	291	313	292	294	275	271	229	233	218
Victoria	186	192	200	188	200	159	148	144	126	100
Windsor	105	122	125	120	107	102	94	71	66	52
Winnipeg	132	140	136	114	105	99	106	97	77	64
Unattached	538	591	610	575	552	558	476	413	357	365
Honorary	15	14	14	13	13	13	14	15	15	15
Total	4443	4655	4901	4688	4420	4230	3802	3410	3071	2872

# Treasurer's Report 2005

he year 2005 brought mixed emotions. Excitement that perhaps we were turning the corner with new cost-saving initiatives, and a general trend in expense coming in under budget. We were overjoyed to receive a generous donation of nearly \$28,000 from the estate of Walter J. Feibelman. RASC members as well, through the new Sustaining Membership program and through regular donations, are contributing more to the general operation of the society. Countering these highs comes the sober realization at year-end that our business model continues to find ways to fail us. Although we have come in well above budget in 2005, we were still in a slight operational deficit. The 2006 budget projects a \$20,000 deficit as we realize less income, increased expenses, and expenses put off from previous years.

The issues are many, and they hit at those items many of us feel are the heart of the Society. The long-anticipated drop in publications sales has apparently begun. Coupling this with an ever-increasing Canadian dollar and increased publications expenses, publications can no longer be relied on to subsidize other benefits and operations of the Society. A contributing factor to the woes with publications is our tendency as a Society to depend on highly skilled work performed on a volunteer basis. When these resources move on, we are left with the challenge of either contracting out for some of this work, or running the risk of producing lesser-quality publications as we hand off to untrained replacements. We have not done a good job of recognizing this exposure, nor have we planned or mentored replacements for these sorts of transitions.

This list goes on with: reduced memberships, increased member-benefit expenses in the form of SkyNews this year and insurance costs in previous years, reduced investment income, rising expenses of maintaining our computer systems, the need to stop ignoring the deteriorating condition of our National Office property, and the realization that the Society carries considerable liability in the form of commitments to life members.

One of my goals as Treasurer has been to ensure that our statements do not carry with them the financial note "Departure from Canadian Generally Accepted Accounting Principals." The most significant impact of conforming to GAAP is the full disclosure of income regardless of the extent that income is placed into our directed funds. In "Schedule 1 – Internally Restricted Net Assets," we see that contributions to directed funds exceed the profit stated in our "Statement of Revenue and Expenditures." We continue to build our directed funds to the extent that our combined liabilities and funds threaten to overtake the total value of our assets. Although we appear at first glance to enjoy a \$43,000 excess in revenue, we have in fact an operational deficit when we account for transfers to funds.

Two items that remain hidden on our reports are the value of our capital assets, and the true liability we have incurred over the years with the Life Membership program. It is my wish that by the end of 2006, we will be able to report estimated values for these items so that we have a complete picture as to the health of the Society.

Since becoming Treasurer in 2003, I have insisted that the difficult policy decisions needed to return the Society to financial health are not the property of the Treasurer, but of Council as a whole. Council members and Committees have begun to propose and implement significant changes to the way we do business. This direction of change must be continued over the coming years to ensure our business model reflects the changing realities of our membership needs, our marketplace, and the costs of providing membership benefits.

Dave Clark Treasurer

# Tinkham & Associates LLP CHARTERED ACCOUNTANTS

To the Members of THE ROYAL ASTRONOMICAL SOCIETY OF CANADA LA SOCIETE ROYALE D'ASTRONOMIE DU CANADA

We have audited the balance sheet of The Royal Astronomical Society of Canada as at December 31, 2005 and the statements of revenue and expenditures, and changes in net assets for the year then ended. These financial statements are the responsibility of the Society's management. Our responsibility is to express an opinion on these financial statements based on our audit.

Except as explained in the following paragraph, we conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In common with many charitable organizations, the Society derives revenue from donations, the completeness of which is not susceptible of satisfactory audit verification. Accordingly, our verification of these revenues was limited to the amounts recorded in the records of the Society and we were not able to determine whether any adjustments might be necessary to donation revenue, excess (deficiency) of revenue over expenditures, assets or unrestricted net assets.

In our opinion, except for the effect of adjustments, if any, which we might have determined to be necessary had we been able to satisfy ourselves concerning the completeness of the donation revenues referred to in the preceding paragraph, these financial statements present fairly, in all material respects, the financial position of the Society as at December 31, 2005 and the results of its operations for the year then ended in accordance with Canadian generally accepted accounting

Tinkham & Associates LLP CHARTERED ACCOUNTANTS

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

Balance Sheet	ALE D'ASTRONOMIE DU CAN	ADA
As of December 31	2005	2004 (notes 3 & 9
Assets		
Current		
Cash	\$38,504	\$110,311
Short-term investments (note 4)	390,956	187,065
Accrued interest receivable	10,356	-
Accounts receivable	56,825	37,828
Inventory	47,442	47,426
Prepaid expenses	19,749	21,108
	563,832	403,738
Long-termInvestments (note 5)	150,000	250,000
Accrued interest receivable	6,144	12,900
Conital access	156,144	262,900
Capital assets Office building, furniture, equipment, library (nominal value)	1	1
(normal value)	\$719,977	\$666,639
Current liabilities		
Accounts payable and accrued charges Deferred revenue	\$30,262	\$22,440
Liabilities		
Membership fees for ensuing years	98,163	98.857
Journal subscriptions	20,239	18,590
Unamortized life membership fees (note 6)	76,030	74,825
	224,694	214,712
Net Assets		
Invested in capital assets	1	1
Unrestricted	71,529	75,309
Internally restricted (note 10)	423,753	376,617
	495,283	451,927
	\$719,977	\$666,639

On Behalf of the Board:

See accompanying notes to financial statements

Treasurer

President

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# Statement of Changes in Net Assets

Invested in Capital Asse		Internally Restricted (Schedule 1)	Unrestricted	d	
Year ended December 31				2005	2004
		(note 11)		(	note 3&10)
Balance, beginning of year Excess (deficiency) of revenue	\$1	\$376,617	\$75,309	\$451,927	\$480,794
over expenditures for the year	-	-	43,356	43,356	(28,867)
Transfers	-	47,136	(47,136)	-	-
Balance, end of year Year ended December 31	\$1	\$423,753	\$71,529	\$495,283 2005	\$451,927 <b>2004</b>

# Statement of Revenue and Expenditures

Revenue Membership fees	\$143,046	(notes 3 & 9) \$136,768
Publication revenue		
Journal	33,595	30,762
Observer's Handbook	123,893	127,720
Beginner's Observing Guide	14,656	19,198
Observer's Calendar	54,866	58,888
Skyways	4,789	6,668
Explorons l'astronomie	1,097	-
Other	313	79
	233,209	243,315
Miscellaneous income Donations	50,598	3,033
Grants (note 7)	21,238	5,055
Interest on investment	15,364	14,393
Rent	15,973	15,690
Promotional products	5,522	4,907
Other income	4,157	4,907
Other income	112,852	38,069
	489,107	418,152
Expenditures Publication costs		
Journal	82,371	87,224
Annual report	3,506	10,129
Observer's Handbook	36,418	43,409
Beginner's Observing Guide	10,450	16,806
Observer's Calendar	30,289	35,032
Skyways	4,667	6,391
Explorons l'astronomie	4,667 20,244	0,381
Other	75	- 193
	188,020	199,184

# Statement of Revenue and Expenditures

Year ended December 31	2005	2004
Operating Costs		
Office salaries and employee benefits	66,350	59,727
Membership services	86,739	88,807
Office expenses	24,045	27,721
Services	34,364	29,762
Committees	9,541	6,593
Travel expenses	27,734	28,706
Building	8,958	6,519
	257,731	247,835
	445,751	447,019
	\$43,356	\$(28,867)

See accompanying notes to financial statements

# Notes to Financial Statements

### **December 31, 2005**

### 1 Organization

The Royal Astronomical Society of Canada is a Canadian corporation without share capital and a registered charitable organization, incorporated for the purpose of stimulating interest in and promoting astronomy and related sciences. The organization is not subject to income taxes pursuant to exemptions accorded to registered charities in the income tax legislation.

### 2 Significant accounting policies

These financial statements have been prepared by management in accordance with Canadian generally accepted accounting principles. The preparation of the Royal Astronomical Society of Canada financial statements in conformance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the balance sheet date and the reported amounts of revenue and expense during the reporting period. Actual results could differ from such estimates.

### (a) Basis of accounting

These financial statements were prepared using the accrual basis of accounting. The accrual basis recognizes revenues as they become available and measurable; expenses are recognized as they are incurred and measurable as a result of receipts of goods or services and the creation of a legal obligation to pay.

### (b) Investments

Short-term investments are carried at the lower of cost (including accrued interest) and market on an individual basis. Long-term investments are carried at cost.

### (c) Inventory

Inventory is comprised of publications and promotional items for re-sale and is carried at the lower of cost and net realizable value.

### (c) Capital assets

The office building, furniture, equipment and library of the Society are carried in the accounts at a nominal value. The cost of additions to and replacements of capital assets are expensed as they are incurred. The Society purchased a computer for \$1,351 in the current fiscal year and received a letter-folding machine via a donation-in-kind valued at \$450. Both assets are included in office expenses (2004 - no capital asset additions).

# Notes to Financial Statements

### d) Membership fees

Members' fees are recognized as revenue for the fiscal year in which the membership primarily falls. Accordingly, fees received for ensuing years are recorded as deferred revenue. Life memberships are credited to deferred revenue when received. Five percent of the life membership fund is transferred at the beginning of each year to membership fees revenue.

### (e) Revenue recognition

The organization follows the deferral method of accounting for contributions. Unrestricted contributions are recognized as revenue when received or receivable, if the amount to be received can be reasonably estimated and collection is reasonably assured.

### (f) Publications

R.A.S.C. Journal subscription revenues are amortized into income over the subscription period.

### (g) Contributed materials and services

The organization is dependant on the voluntary services of many individuals. Since these services are not normally purchased and because of the difficulty in estimating their fair market value, these services are not recorded in these financial statements

### (h) Financial instruments

The organization's financial instruments consist of cash, short term investments, accrued interest receivable, accounts receivable, investments, and accounts payable and accrued charges. Unless otherwise noted, it is management's opinion that the organization is not exposed to significant interest, currency or credit risks arising from its financial instruments. Due to the short term nature of the financial instruments and current pricing, book values approximate fair values.

### 3 Changes in accounting policies

The Society changed its accounting policies with respect to unamortized life memberships and revenues and expenditures of certain internally restricted net assets. As reported in the financial statements in prior years, the policies of recording interest earned on unamortized life memberships as a direct increase in the liability recorded on the balance sheet and recording donations received, interest earned and expenses allocated to the Ruth Northcott and P.M.Millman Funds (Funds) as direct increases in the fund balances in the statement of changes in net assets were not in compliance with Canadian generally accepted accounting principles (GAAP).

The Society has restated prior years to record the interest earned on unamortized life memberships in the Statement of Revenue and Expenditures. The effect of this restatement for the year ended December 31, 2004 is liabilities have been reduced by \$33,500, interest on investment has been increased and deficiency of revenue over expenditures has been decreased by \$6,447, and opening unrestricted net assets at January 1, 2005 has been increased by \$27,053.

The Society has restated prior years to record donations received, interest earned and expenses allocated to the Funds in the Statement of Revenue and Expenditures. The effect of this restatement for the year ended December 31, 2004 is interest on investment has been increased \$3,426, donation revenue has been increased \$37 and the deficiency of revenue over expenditure has been decreased by \$3,463.

The Society has also changed its method of calculating the inventory of publications on hand to more accurately reflect the sales pattern to date. This change in accounting policy has been accounted for retroactively. The effect of this restatement for the year ended December 31, 2004 is inventory has been increased \$15,908, publication costs have been decreased by \$1,188 and opening unrestricted net assets at January 1, 2005 has been increased \$14,720.

### 4 Short-term investments

Short-term investments are comprised of cash on hand of \$290,956 (2004 - \$187,065) with a variable rate of interest and a guaranteed investment certificate of \$100,000 maturing February 14, 2006 and bearing interest at 3.6% (2004 - \$NIL).

### 5 Long-term investments

Long-term investment is comprised of a guaranteed investment certificate maturing March 7, 2007 and bearing interest at 5.00% (2004 - two guaranteed investment certificates maturing February 14, 2006 to March 7, 2007 and bearing interest from 3.60% to 5.00%).

# Notes to Financial Statements

Unamortized life membership fees	2005	2004
Life membership fees as of January 1	(note 3) <b>\$74,825</b>	\$64,732
Add: Life membership fees received in the year	4,946	13,330
Deduct: Amortization to income	(3,741)	(3,237)
Balance, December 31	\$76,030	\$74,825

7 Grants Included in grant revenues is a \$20,000 Promo Science Grant from Public Works and Government Services Canada for the translation and printing of Explorons l'astronomie (Skyways: French translation).

### 8 Statement of cash flows

A statement of cash flows is not presented because it would not provide any additional useful information.

### 9 Comparative figures

Certain comparative figures for 2004 have been reclassified to conform with the financial statement presentation adopted in the current year.

### Internally restricted net assets

The Board of Directors has internally restricted certain funds. The Ruth Northcott Fund was established in 1969 and funds are used for a variety of specified purposes as approved by the Board of Directors. The P.M. Millman Endowment Fund was established for the purpose of providing for the long-term growth of the Society. An amount calculated using the rate of inflation for the previous year is transferred to this fund annually.

In addition, the Board of Directors established three new funds in 2005. The Life Membership Fund was established as a result of a change in accounting policy to conform with Canadian generally accepted accounting principles - see note 3. The Board of Directors established the Centre Projects Fund to encourage and facilitate the development of its member centres. The Board of Directors has segregated a significant donation received in the year from the Estate of the late Walter Feibelman into a separate fund.

All disbursements from these funds must be approved by the Board of Directors. See schedule 1 attached for details of the continuity of these funds.

# Schedule 1 - Internally Restricted Net Assets December 31, 2005

	W.Feibelman Fund	Centre Projects Fund	Life Membership Fund	Ruth Northcott Fund	P.M.Millman Endowment Fund	2005	2004 (note 3)
Fund balance January 1	\$ -	\$ -	\$33,500	\$82,057	\$261,060	\$376,617	\$362,596
Transferred from	Unrestricted net	assets:					
Interest			9,052	3,982		13,034	11,226
Donations	27,951	1,335		1,273	1,060	31,619	37
Expenses			(1,675)	(19)		(1,694)	(1,353)
Inflation Adjustment					4,177	4,177	4,111
,	27,951	1,335	7,377	5,236	5,237	47,136	14,021
Balance, December 31	\$27,951	\$1,335	\$40,877	\$87,293	\$266,297	\$423,753	\$376,617

# **Annual Meeting Minutes 2005**

# THE ROYAL ASTRONOMICAL **SOCIETY OF CANADA** LA SOCIETE ROYALE D'ASTRONOMIE DU CANADA

Minutes of the Annual Meeting held 2005-05-22 at the Grand Theatre - Student Centre, North Kelowna Campus of Okanagan year. University College, Kelowna, B.C.

RASC President, Peter Jedicke, who welcomed delegates to the 2005 General Assembly.

toon, Thunder Bay, Toronto, Vancouver, Victoria, Win- placed the Society in financial jeopardy. dsor, and Winnipeg), plus several unattached members David also addressed the issue of donations and promoand guests were present. There were approximately 110 tional items were reduced and substantially below the members in attendance.

### 1. APPROVAL OF THE AGENDA

### **MOTION AM0501**

Miller, to adopt the agenda as presented.

MOTION AM0501was CARRIED

### 2. MINUTES OF THE 2004 ANNUAL MEETING

### **MOTION AM0502**

It was moved by John Hurley, seconded by Stan Runge, to accept the minutes of the 2004 Annual meeting as presented.

### **MOTION AM0502** was **CARRIED**

### 3. REPORTS: 3.1 OFFICERS

**PRESIDENT** Peter Jedicke

### **FIRST VICE PRESIDENT**

Scott Young explained his committee responsibilities. SECOND VICE PRESIDENT

Dave Lane similarly explained his various positions.

### **SECRETARY**

Kim Hay expressed a Thank You for the Okanagan Cen-

tre hosting the GA. She also thanked Bonnie Bird and Isaac McGillis for their help throughout the year. Kim Hav named all the members who had recently passed away, pausing for a minute of silence to honour their passing.

### **TREASURER**

David Clark explained the financial report, pointing out a deficit in excess of \$40,000. Besides the dollar numbers. there was a 4.5% drop in membership from the previous

### **MOTION AM0503**

The meeting was called to order at 8:36 pdt by the Chair. It was moved by David Clark, seconded by Leo Brodeur, to accept the financial report as presented.

### **MOTION AM0503** was **CARRIED**

Peter Jedicke called the roll of Centres. 23 Centres were David Clark went on to address the 2005 budget, which, represented (Belleville, Calgary, Charlottetown, Edmon- in spite of the current picture, will finally show a substanton, Halifax, Kingston, London, Centre Francophone de tial deficit. He expressed his own personal concern, plus Montreal, Moncton, Montreal, Niagara, Okanagan, Ot- that of the Executive Committee, that publication sales tawa, Prince George, Regina, St. John's, Sarnia, Saska- were down and our ongoing dependency on these sales

> budgeted amounts. One light on the horizon was the U.S. dollar exchange, which was better than the budgeted figure of 85 cents to the Canadian dollar, currently less than 80%.

It was moved by Raymond Auclair, seconded by Karl Various members spoke to the budget, with David Clark responding to the various issues.

### **EXECUTIVE SECRETARY**

Bonnie Bird remarked that National Office was running well, especially because of the number of volunteers who helped throughout the year. She thanked Kim Hay for all her work during the past six years. She mentioned Dave Lane's helping her with computer issues, and Kevin Kell's addressing Web site changes so guickly.

### RECORDER

There was no report. Peter Jedicke expressed his thanks to James for the timely production of the minutes.

### 4. STANDING COMMITTEES

### **AWARDS**

Rajiv Gupta asked members to give suggestions for future awards.

### CONSTITUTION COMMITTEE

Randy Attwood described the ongoing work of the committee.

### **EDUCATION COMMITTEE**

Kim Hay spoke on behalf of Mary Lou Whitehorne, giving a brief description of the committee's ongoing activities.

### **EXECUTIVE COMMITTEE**

Peter Jedicke described the action culminating in reducing the staff at National Office.

### FINANCE COMMITTEE

David Clark talked about the initiatives to change Society investments. He also thanked Bonnie Bird for all her continuing help.

### HISTORICAL COMMITTEE

Barry Matthews spoke on behalf of Peter Broughton, briefly describing the committee's various projects.

A hearty round of applause ensued for Peter Broughton, acknowledging his departure from the committee.

### LIBRARY COMMITTEE

Dr. Bob Garrison talked about ways to reduce the library's stock of extra books, one of which could be an auction to members.

### MEMBERSHIP AND PROMOTION COMMITTEE

Denis Grey announced that the new Society Seal and logo have received approval from the Queen. He went on to describe the committee's continuing projects. Denis encouraged all members to consider making a donation or buying some promotional items to help the Society with the current financial trouble.

### NOMINATING COMMITTEE

Dr. Rajiv Gupta advised of the following new appointments; James Edgar – Recorder, Bruce McCurdy – Astronomy Day Coordinator, William Sheehan – Honorary Member, Jay Anderson – Journal Editor, and Dr. Robert Garrison – Honorary President.

### **OBSERVING COMMITTEE**

Chris Fleming described the new the Isabel Williamson Lunar Certificate program and the continuing work of his committee.

### PROPERTY COMMITTEE

In Robert May's absence, Bonnie Bird said the National Office

Councillors:

Gary Billings Blair Colborne Robyn Foret Phil Johnson Mark Bronson Steve Donaldson Dean Huxley Andrew Jones still needed some work, which was put off until next year.

### **PUBLICATIONS COMMITTEE**

Scott Young addressed some of the steps being taken to help reduce the deficit.

He expressed his appreciation for Dr. Rajiv Gupta's efforts for his work on the Observer's Calendar and for Dr. Wayne Barkhouse's work on the Journal. There was a hearty round of applause.

Scott answered questions from members, particularly addressing the issue of why the Society doesn't market the publications in bookstores nationwide – mainly that the narrow niche market of astronomy publications precludes giving up the required concessions to the major retailers.

### **BEGINNER'S OBSERVING GUIDE EDITOR**

There was no report.

### JOURNAL EDITOR

There was no report.

### **OBSERVER'S CALENDAR EDITOR**

There was no report.

### **OBSERVER'S HANDBOOK EDITOR**

There was no report.

### 5. SPECIAL COMMITTEES:

### **ASTRONOMY DAY CO-ORDINATOR**

Bruce McCurdy reported on the very enthusiastic support across the country for Astronomy Day 2005.

### INFORMATION TECHNOLOGY COMMITTEE

Dave Lane remarked that his report could be found on the Society's Web site.

### LIGHT-POLLUTION ABATEMENT COMMITTEE

There was no report, but Peter Jedicke advised of some initiatives nationwide, particularly the Cypress Hills Interprovincial Park declaration as a Dark-sky site; and Windsor Centre's

### **ASP SYNERGY COMMITTEE**

David Levy spoke about the lack of support for cooperative efforts, but that a remotely-operated telescope would be established for use by both Societies.

### **TASK FORCE 21**

Peter Jedicke spoke about some cost-cutting initiatives – reducing the size of the Journal, curtailing the use of colour in the Journal.

### 6. MOTION TO AMEND BY-LAW #1

It was moved by David Levy, seconded by Ron Jerome, that article 3.05(2) be modified to read as follows (the proposed amendment is underlined)

3.05 (2) Any member of the Society who proposes an ordinary resolution of the Society to change any of the annual Society's membership fees shall give notice of such resolution to the Secretary of the Society at least 90 days prior to the meeting of the Society at which it is proposed to move the resolution, which notice shall specify the change proposed. The agenda for any meeting at which it is proposed to move any such resolution shall include the specifics of the proposed resolution. At the meeting at which the resolution is considered, the resolution may be amended without further notice to the members of the Society. Any resolution to change the membership fees of the Society shall take effect immediately or at such time as may be specified in the resolution.

# MOTION AM0504 was CARRIED by special resolution

### **MOTION AM0505**

It was moved by Patrice Scatollin, seconded by David Brown, that the following errors be corrected in Bylaw #1:

**a)** 3.04(5) Membership of more than one Centre. To allow for membership of more than one Centre, we propose the following change to the second sentence of 3.04(5).

Each member shall have only one membership in the Society. However, a member of one Centre may be elected an associate or affiliate member of another Centre in accordance with the by-laws of the second Centre.

- **b)** 5.02(2) The word 'President.' is out of place and should be removed.
- c) Changes to 6.04 and 6.08 are designed to correct errors propagated during the 1999 By-law revision where paragraph 6.04 (2) was inadvertently struck and paragraph 6.08 (2) was not amended as intended.

### 6.04 ELIGIBILITY FOR OFFICE

- (1) Every member who is not less than twenty-one years of age has the right to stand for appointment as, and to hold the position of, Honorary President of the Society. Every voting member who is not less than twenty-one years of age has the right to stand for election or appointment to, and to hold, any other office of the Society. (amended, July 1999)
- (2) No person who is an elected officer of the Society may simultaneously be the President, Secretary, Treasurer, or a National Council Representative of a Centre.

(2) The first term of office of any member appointed as one of the editors referred to in Article 6.02 shall normally be five years. At the end of that time the appointment is renewable for a mutually agreed term. (amended, July 1999)

### 6.08 TERMS OF OFFICE

- (2) The first term of office of any member appointed as one of the editors referred to in Article 6.02 shall normally be five years. At the end of that time the appointment is renewable for a mutually agreed term.
- **d)** Changes to 6.19 are put forward to correct a reference error (to 6.18) and to clarify the language currently in By-law #1.

### 6.19 VACANCY OF AN OFFICE

- (1) An elected office becomes vacant by reason of death, resignation, or removal under Article 6.198(1), or if the holder of the office ceases to be eligible to hold office under Article 6.04. In such case, another eligible member of the Society may be elected by special resolution of the Council to fill such vacancy for the remainder of the term of office. In the event that a position must be filled prior to the next regularly scheduled meeting of the Council, the Executive Committee may do so on behalf of the Council under Article 7.08(2). (amended, July 1999)
- (2) An appointed office becomes vacant by reason of death, resignation, or removal under Article 6.198(2), or if the holder of the office ceases to be eligible to hold office under Article 6.04 In such case, removal under Article 6.19(2), or if the holder of the office ceases to be eligible to hold office under Article 6.04. In such case, another eligible member of the Society may be appointed by ordinary resolution of the Council to fill such vacancy. In such case, the appointment shall be deemed to have been made under Article 6.08 for such term as is provided therein. In the event that a position must be filled prior to the next regularly scheduled meeting of the Council, the Executive Committee may do so on behalf of the Council under Article 7.08(2). (amended, July 1999)

# MOTION AM0505 was CARRIED by special resolution.

### **MOTION AM0506**

It was moved by Scott Young, seconded by Leo Brodeur, that article 1.01 of Bylaw # 1 be modified to add the following definition: "notice" means a notification delivered either in writing by hand, mail, facsimile, or electronically to the member's then-current address of record.

MOTION AM0506 was CARRIED by special resolution.

### 7. MOTION TO INCREASE SOCIETY FEES

### **MOTION AM0507**

It was moved by David Brown, seconded by Doug Hube, that articles 1.01, 3.05, and 8.01 be amended as indicated below.

### Add to 1.01 DEFINITIONS

(r) "Society portion" means the amount of the annual membership fee that the Society is entitled to, (q) "Centre portion" means the amount of the annual membership fee that a Centre is entitled to.

### 3.05 SOCIETY FEES

- 1) The annual Society membership fees, for ordinary and youth members, including the distribution rates of the Centre and Society portions, and the life membership fee shall be determined from time to time by ordinary resolution of the Council and of the Society. The Centre portion can only be reduced from its then prevailing amount by special resolution of the Council. No fee shall be payable for honorary membership in the Society. (amended, July 1993)
- (2) Any member of the Society who proposes an ordinary resolution of the Society to change any of the annual Society's membership fees shall give notice of such resolution to the Secretary of the Society at least 90 days prior to the meeting of the Society at which it is proposed to move the resolution, which notice shall specify the change proposed. The agenda for any meeting of the Council at which it is proposed to move any such resolution shall include the specifics of the proposed resolution, including the proposed Centre and Society portions of the fee. At the meeting at which the resolution is considered, the resolution may be amended without further notice to the members of the Society Council. Any resolution to change the membership fees of the Society shall take effect immediately or at such time as may be specified in the resolution. (new, July 1993) (amended, July 1999)
- (6) The Society is entitled to sixty percent the Society portion of the annual Society membership fees for all ordinary and youth members attached to Centres, and each Centre is entitled to forty percent the Centre portion of the annual Society membership fees of all ordinary and youth members attached to it. (amended, July 1999) (7) Annual membership fees and life membership fees for members attached to a Centre shall be collected by the Society, or instead by the Centre if it so chooses. Each Centre that collects fees shall submit to the Society, monthly, the Society's Society portion of membership fees collected, together with a report listing the names and addresses of the members who paid

membership fees during that period, the amounts paid, and such other related information as the National Council may determine. The Society shall submit to each other Centre, monthly, that Centre's portion of membership fees collected, together with a report listing the names and addresses of the members who paid membership fees during that period, the amounts so paid, and such other related information as the National Council may determine. (new, July 1999)

(9) Each Centre is entitled to receive for its own use from the Society on or before 1 March in every year an amount, in respect of every life member attached to it as of the previous 31 December, equivalent to forty percent the Centre portion of the then prevailing annual Society membership fee for an ordinary member. (amended, July 1999)

### 8.01 ANNUAL MEETING

(2) At least thirty days before the date of the annual meeting, the Secretary shall send to each voting member of the Society (f) a copy of any proposed change to the Society's annual membership fees referred to in Article 3.05(2), and

Considerable discussion ensued.

### **MOTION AM0508**

It was moved by Andreas Gada, seconded by Patrice Scattolin, that the portion(s) of the motion referring to the right of membership to approve fee increases be split out for a separate vote.

### **MOTION AM0508** was **DEFEATED**

### **MOTION AM0509**

It was moved by Jason Rickerby, seconded by Kevin Kell, to call the question on MOTION AM0507 MOTION AM0509 was CARRIED by special resolution

### **MOTION AM0507** was **DEFEATED**

### **MOTION AM0510**

It was moved by Dave Lane, seconded by Gary Hinks, that article 3.07(4) be amended as follows:

# 3.07 CENTRE FEES AND ENTITLEMENT OF MEMBERS TO CENTRE RIGHTS AND SERVICES

- (4) Subject to Article 3.07(5), every voting member is entitled to exercise the following rights, in respect of the Centre to which he or she is attached:
- (a) to attend and to vote at all Centre meetings;
- (b) to attend all meetings of the Council of the Centre, unless, in exceptional circumstances, the Council of the Centre declares by special resolution of the Council of the Centre, a meeting or a part of a meeting to be closed to the membership;

- c) where permitted by applicable legislation, to stand for election as an officer of the Centre and to the Council of the Centre; and
- (d) where he or she is twenty-one years of age or more, to stand for election as a National Council Representative under Article 4.08.

If a Centre imposes any surcharge upon its members before allowing them to exercise such rights, then this surcharge shall be designated a "basic surcharge", and this basic surcharge must be set in an amount no higher than is necessary to recover the direct costs of providing such rights, including the cost, if any, of meeting facilities for meetings of the Centre and the Council of the Centre. Additional surcharges may be required for additional Centre rights and services, but entitlement to the above-specified Centre rights shall not be conditional upon payment of such additional surcharges.

# MOTION AM0510 was CARRIED by special resolution

### **MOTION AM0511**

It was moved by Dave Lane, seconded by Doug Montgomery, to increase Society fees by \$5.

There was considerable discussion.

# MOTION AM0511 was CARRIED 8. Declaration of the Society Secretary

Peter Jedicke announced the appointment of Stan Runge as Secretary, replacing Kim Hay, who's term has expired.

This was met by a round of applause for Stan's appointment.

Peter Jedicke thanked Kim Hay for all her work and dedication over the course of the past six years.

There was a hearty round of applause for Kim.

# 9. ELECTION OF AUDITOR MOTION AM0512

It was moved by Guy Nason, seconded by Tim Bennett, that Tinkham and Associates be appointed as auditors.

### **MOTION AM0512** was **CARRIED**

### 10. OTHER BUSINESS

Ottawa Centre President, Debra Ceravolo, deferred her presentation of the Centre's proposal to host GA 2006 to the evening banquet.

# 11. ADJOURNMENT MOTION AM0513

It was moved by Charles Darrow to adjourn. **MOTION AM0513** was **CARRIED**.

The meeting adjourned at 12:20 pst.

Respectfully submitted, James Edgar Recorder

# Annual Reports from the Centres



### January 2005

- Lunar 100 challenge launched Members are encouraged to find these 100 lunar features
- Observing Saturday night at Zwick's Island Park, Belleville

### February 2005

 Club member Greg Lisk gave a short talk about Dutch astronomer Christian Huygens to tie in with NASA's Cassini-Huygens spacecraft arriving at Saturn's moon, Titan

### March 2005

RASC President Peter Jedicke speaks at Belleville Topic – Astronomy in Hawaii

### **April 2005**

- Lionel Enright speaks on "Erotosthenes"
- Science Fair at Quinte Mall club members judge any astronomy-related projects and award 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> prizes
- Observing night Saturday April 9

### May 2005

- Simon DeBoer spoke to the club on meteors and displayed his private collection
- May 14 Fourteen club members enjoyed our annual bus trip this year we visited the Ontario Science Centre, Toronto and the David Dunlap Observatory in Richmond Hill. We attended a talk by graduate students and joined the tour of the main telescope, and later a private peek at the smaller scope.

### June 2005

- · Arlyne Gillespie presented a talk on RASC's "Explore the Universe" certificate.
- Observing night June 10<sup>th</sup> 10 members
- Don Town, National Council Rep. talked about his trip to the annual RASC General Assembly in Kelowna, BC last month

### **July 2005**

- Greg Lisk presented a talk on "Eyepiece Filter Selection"
- Bon Echo weekend, July 8, 9, 10 annual club event since 1992

### August 2005

- · Starfest Aug 5-7, 10 members attended this year
- Greg Lisk presented some "Deep Sky Imager" astrophotos and photos from Starfest
- Star-B-Q 9 members attended the event held at Ron and Demetra Cook's home

### September 2005

- Carl MacDonald reviewed Cephus and key observing highlights in this region
- Greg Lisk presented tips and feature recognition for "Mars Observing"
- Dave Cotterell presented some of his recent astrophotography slides
- · Mall display for public and youth organizations
- Fall'n'Stars star party joint Belleville/Kingston event held Sept. 30 – Oct 2 at Vanderwater Boy Scout camp at Thomasburg, On. with approximately 30 attending

### November 2005

- Elections: Greg Lisk, pres.; remaining chairs as per list below
- Carl MacDonald reviewed Andromeda observing highlights
- Public Observing sessions held on Nov 9 at the Belleville YMCA, and at Zwick's Island Park on Nov 11

### December 2005

- Larry Hum presented "Jupiter's Great Red Spot" and how to locate surface features using on time-based models
- Dave Cotterell presented a talk on "Observing Double, Triple, and Quad stars"
- Christmas Dinner held at the Boathouse Restaurant in Belleville – 19 attending

Joanne Burns Secretary



Calgary Centre had another very active year with interesting presentations at general meetings and many public education events.

### **General Meetings**

General meetings were held on the third Thursday of the month and featured the following speakers and topics:

**January:** Alan Dyer "A Quest for Origins." Alan

described the making of this joint production of four major Canadian planetaria including the Calgary Science

Centre.

Keith Armstrong made a presentation on his Level 9 tour of NASA's Johnson

Space Centre in Houston.

**February:** Bill Peters, director of the Calgary Sci-

ence Centre, talked about the new Science Centre project and presented some design concepts being consid-

ered.

**March:** Annual Peter Sim lecture: Dr. Rene

Plume "Unlocking the Secrets of Star-

birth."

**April:** Dr. Alan Hildebrand "Near Earth Object

Surveillance Satellite project." NEOSSat is a microsatellite that will be positioned to search for asteroids that are candi-

dates for collision with Earth.

Don Hladiuk made a presentation on his and Alan Hildebrand's trip to the US in September 2004 to witness the re-entry of the Genesis Sample Return vehicle.

May: James White, of the Geological Survey

of Canada "A Simplified Approach to the Climate Change Controversy."

**September:** Alan Dyer presented pictures from his

observing trip to Australia and his cruise aboard the MV Paul Gauguin to view

the April 8 solar eclipse.

October: Members night: Roland Dechesne –

"historical perspective on the changes in our understanding of the structures of galaxies"; Jack Milliken – "the new Isabel Williamson lunar observing program"; Larry McNish – "new features on the Calgary Centre website"; Brian Fenerty –

"demonstrated a presentation that he runs on Friday nights at the observing

deck and other public events."

November: John Mirtle presented CCD astrophotos

taken at the Mt. Kobau star party in Au-

gust.

### Membership

At the end of the year the Centre had 302 members (18 Life, 243 Ordinary, and 41 Youth).

### **Public Education**

Calgary Centre continued to provide volunteers to run the telescopes on the observing deck at the TELUS World of Science on Friday nights. This year there was also a special two week MarsWatch program on the observing deck in late October and early November.

Our two annual public star parties held at Fish Creek Park within the city, one in March and the other in October, were very well attended again this year.

Several groups of Cubs, Brownies, Scouts and Grade Six students came out for tours of our Wilson Coulee Observatory and while some nights were very cold, most nights had skies clear enough to show them a few objects in the C-14 telescope.

Several members with telescopes visited the Scouts at Camp Gardiner in April to discuss astronomy.

We once again participated in two large public events, the Calgary Home Show and the Mayor's Environmental Expo, and set up our Light Pollution Abatement display. Many people took away copies of our new Responsible Lighting brochure.

Members of the Calgary Centre Light Pollution Committee visited Elkwater in Cypress Hills in July and presented information on the Cypress Hills Dark Sky Preserve and light pollution abatement. Residents attending the presentation were also given "responsible lighting" lightbulbs.

### Other Activities

The Observing Group held monthly meetings at the Wilson Coulee Observatory and there were many fine presentations and discussions. The weather did not cooperate on too many meeting nights this year but when the sky was clear great viewing was provided by several telescopes set up on the observing field and the C-14 telescope in the dome.

An informal observing program for new observers was started and met twice a month in somewhat darker parks within the city. The sessions helped people with equipment questions and more experienced members passed on observing tips and techniques. Next year the program will be named NOVA (New Observers to Visual Astronomy) and modeled after the very successful program developed by the Prince George Centre.

Two annual star party events, Star-B-Q in early July, and the Alberta Star Party in early September, were held at the Eccles Ranch Observatory in central Alberta.

The Telescopes-for-Lend program now has 12 telescopes available and there were about 20 rentals in 2005.

Many educational pages have been added to our website, including: FAQs on Astronomy; how to build a solar system model; stellar magnitudes; Right Ascension and Declination; and an Astronomy Quiz.

Calgary Centre will be hosting the 2007 General Assembly and planning is well underway. Both ALPO and AAVSO are also expected to hold meetings here in conjunction with the GA. We look forward to seeing you in Calgary in July 2007.

Jack Milliken
Secretary, Calgary Centre



### Royal Astronomical Society of Canada Charlottetown Centre

### 2005 Secretary's Report

The year 2005 was an eventful one for the Charlottetown Centre. It was a year of progress and highlights for our Centre.

Several of the more significant events included:

- \* A visit and presentation in April by national RASC president, Peter Jedicke who spoke so frankly and eloquently of his Hawaii experience and of national for RASC and astronomy in general.
- Our Astronomy Day display and raffle continues to attract public interest
- A presentation in June by Garth Arsenault on his experience in building his telescope from scratch
- \* A significant turnout for the Centre's presentation in August at the Greenwich National Park, during St Peter's Blueberry festival where we had approximately 150 guests show up to hear Dr. Paul Wiegart, from the Department of Physics and Astronomy, University of Western Ontario, speak of Meteorites: visitors from outer space
- \* A visit and presentation in October by Alan Whitman, of the Prince George and Okanogan Centres, on the *Lure of the Southern Hemisphere* which was well-received by all
- \* Our Public Viewing outreach sessions, conducted in conjunction with and with the cooperation of the UPEI Department of Physics, have been receiving increased attention, with one session drawing approximately 140 interested parties.

On the business front the Charlottetown Centre adopted a distinctive logo, passed its first by-laws, prepared a local brochure with the support of a local sponsor and made improvements to club organization and administration. Regular meetings were well-attended with

planned agenda items including monthly *What's Up* space/sky news, *Sky Overview* and several interesting video presentations.

Socially, our summer Bar-B-Que and our Christmas party were well attended and enjoyed by all.

The executive of the Charlottetown RASC Centre want to thank everyone who made 2005 a success. In particular appreciation is extended to the Program Committee of Gisele, Brian, Clair, Walter, Jon and Shawn for the excellent programming of our monthly meetings; to Roger, for his always informative What's Up presentations and unending dedication to the promotion of observing nights and events; to Clair for taking charge of promo items and photo-ops; to Professor Wonnacott for his Sky Overviews and his continuing dedication to the advancement of knowledge even with our novices; and to all the other members who helped out in any way. Without participation of our membership, our Centre would not have come so far, and we hope you will continue to take an active interest in making our Centre an enjoyable, informative and fun experience for everyone.



THE ROYAL ASTRONOMICAL SOCIETY OF CANADA/ 2005 ANNUAL REPORT \* LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA / RAPPORT ANNUEL 2005

terested father

&son





Edmonton) more disabled-person friendly and to outfit the Observatory with equipment

to ensure that the public will continue to enjoy a wide variety of observing experiences. Acquisitions include:

- \* 16" Dobsonian telescope
- 10" Meade LX200 telescope
- \* 8" Meade LX-200 telescope
- Coronado solar telescope
- \* Denkmeier Binocular Viewing System
- Large binoculars and mount

### **Annual Report for the Edmonton Centre (2005)**

In 2005, the Edmonton Centre made great strides in public education and outreach in astronomy. The Centre also dealt with 2 significant administrative issues.

Our biggest annual public education event continues to be Astronomy Days. This year, the event was held April 16-17 and was organized by Howard Gibbins, who did a tremendous job. Approximately 1500 people participated and the event went well except for so-so weather.

Paul Campbell and the Observatory Planning Committee continued in their quest to make the Centre's Observatory (at the Telus World of Science –

Throughout 2005, the efforts of John Cliff, Sherrilyn Jahrig, Warren Finlay and several other members of the Edmonton Centre continued toward the establishment of a Dark Sky Preserve (DSP) in north-central Alberta. The DSP Committee met with representatives of the Alberta Government, the Government of Canada, County officials, wildlife groups and local businesses. A formal proposal was submitted and has been tabled with the Alberta Ministry of Community Development. Initial feedback has been very positive and the Edmonton Centre is hopeful for a positive result early in 2006

As a spin-off benefit to the discussions between the Edmonton Centre and Alberta Parks personnel, new astronomy programs have been introduced as a standard offering for parks visitors.

The pilot program for this initiative, developed and delivered by Warren Finlay and Orla Aaquist, was met with much enthusiasm and success.

Another result stemming from this was the receipt of a Letter of Authority from Alberta Community Development allowing members of the RASC Edmonton Centre to use the Shaw Lake Day Use Area within Lakeland Provincial Park as a site to conduct astronomy. Lakeland Provincial Park has very dark skies (~21.41 mag./ arcsec).

Beaver County has offered the opportunity to lease land for a possible observatory at Black Nugget Lake, which also has very dark skies (~21.37 mag./arcsec). The Black Nugget Lake Observatory (BNLO) committee, headed by Dave Robinson, was established, site surveys were conducted and a draft budget was produced. The committee is continuing to meet with Beaver County to work out a jointly acceptable layout, division of financial costs and terms of lease.

The Edmonton Centre approved funding to permit holding the George Moore's Astronomy Workshop, planned for Apr 21-23, 2006 at the St. John's School of Alberta. The guest speaker will be Dr. Jaymie Matthews, mission scientist and principal investigator of the MOST mission (Microvariability and Oscillations of STars). There will also be a rocket launch by Adrian Liggins.

The Edmonton Centre Council kept busy on two important administrative items: re-establishing the Centre's charitable status and reformulating the Centre's by-laws. I am pleased to report that after over a year, the Edmonton Centre is once again a registered charity. And thanks to the diligent efforts of the By-Laws Committee, we now have a final draft of new by-laws to be considered by the membership in 2006.

### Guest speakers were as follows:

January 10<sup>th</sup>, 2005 (Members night):

- \* Franklin Loehde: The History of the Edmonton Centre, RASC The Exploding 1960's
- \* Paul Campbell: The AAVSO Sudden Ionospheric Disturbance program. (Note: Paul's participation in this program led to his unexpected observa

tion of a magnetar gamma ray burst, which was subsequently published in *Sky & Telescope*).

February 14<sup>th</sup>, 2005: Dr. Chris Herd: The Geology of Mars.

March 14<sup>th</sup>, 2005: Dr. Vahid Rezania: Rotating Magnetic Stars.

April 11th, 2005 (Starbust, Members night):

- \* Cheryl Salava: Waving Flag or Smoking Gun.
- \* Dave Cleary: Probing the Geodymano.
- \* David Roles: Update on Saturn.
- \* Denis Boucher: Satellite Tracking Program.
- \* Bob Jahrig: sang Everything We Need Is Here.
- Katrina Smith: Black Holes.

May 9<sup>th</sup>, 2005: Dr. Adrian Liggins: Model and High Power Rocketry.

June 13<sup>th</sup>, 2005 (Members night):

- \* Warren Finlay: Nearby Summer Star Parties.
- \* Mark Zalcik: Noctilucent clouds.
- \* John Cliff: The Dark Sky Preserve initiative.
- \* Menaka Lashitha Bandara: Modern Laplacian Theory for the formation of the solar system.

September 12<sup>th</sup>, 2005 (Members night):

- David Roles: Slideshow of clouds, sunsets, noctilucent clouds, Mars and Saturn.
- \* Dale Nosko: Slideshow based on the forward to the book Geography of the Heavens, published in 1848.
- \* Howard Gibbins: Tour of the updated RASC Edmonton website and the status of the Queen Elizabeth Planetarium.

October 17<sup>th</sup>, 2005: Andrew Lowe: Asteroid Discovery and Follow-up Using the Internet.

November 14<sup>th</sup>, 2005 (Members night):

- \* Pat Abbott: Astronomical Observations Without A Telescope.
- \* David Roles: Slideshow on Mars, Saturn, Pluto and its candidate new moons, the Large Binocular Telescope, 2005 solar eclipse, and the Keck interferometer.
- Alister Ling: His Nov 12 observations of SS Cygni, a cataclysmic erupting variable.
- \* Murray Paulson: Optical Testing, an Alternate Approach.
- Warren Finlay: Darkness Measurements at Edmonton RASC Observing Sites.

December 12<sup>th</sup>, 2005: Dr. Robert Hilts: Cassini – Huygens: The Chemistry of Titan Revealed

Submitted by Luca Vanzella Secretary – Edmonton RASC



# HAMILTON CENTRE

# Yearly Report for the Halifax Region of the Royal Astronomical Centre

### **Centre and Events:**

The year of 2005 was filled with a diverse range of speakers and raising attendance at the main meetings. Our membership has dropped a little from 211 to 184. This could be due to people not updating their memberships in time.

The society events ranged from the casually work parties at St. Croix, Astronomy Days, and Nova East. At our observatory, St. Croix, there have been an increasing number of observers, and key holders. April 16<sup>th</sup>, marked the Astronomy Day at the Kesken Goodman Library in Clayton Park, organized by Ron Mills. Over one thousand people of all ages passed through for to get their dose of astronomical outreach. Nova East was also a great success this year. It was one of the most attended, with John Dobson as the main speaker.

### Centre's Members:

Within the centre's members, Mary Lou Whitehorne received the Las Cumbres Amateur Outreach Award, for her outstanding effort in the outreach of astronomy education. Further, Dave Lane and Paul Gray, in a co-discovery, uncovered a supernova. It was later announced as Supernova 2005B on 1AU Circular 8462.

### Speakers for 2005:

January- Roy Bishop

February- Dr. Bill Stoegre: "The Laws of Nature and Divine Action"

March - Dr. Joe Hahn

April- Peter Jedicke (National RASC President)
May- Andrea Misner: "Thinking Outside The Text

Book.."

June- Blair Macdonald

September- Dave Lane and Mary Lou Whitehorne

October- Alan Whiteman November- Pat Kelly

December- Mary Lou Whitehorne: "Astronomy Educa-

tion Has It's Awards..Errr..Rewards"

The Centre held it's usual ten meetings on the first Thursday of the month (excluding July and August) at the Hamilton Steam Museum. We were fortunate this past year to have many excellent speakers from outside the Centre: Doug Welch from McMaster University; Peter Jedicke (Hawaii shirt and all); John Merchant from NYAA; Paul Mortfield of the NYAA; and Robert Godwin of Apogee Books. There were also entertaining presentations by our members Mark Kaye, "Homemade Telescopes and Observatories", and Harry Pulley, "Observing and Drawing Techniques". As always we enjoyed most at our meetings was homemade entertainment of members' fine astrophotos and shop talk.

Our annual dinner was a huge success according to all that attended. Fine food, fine camaraderie and an excellent guest speaker, John Nemy from the Vancouver Centre. We also managed to raise over \$700 at a silent auction.

The roof of our roll-off observatory was reshingled thanks to the generosity, both in money and sweat, of a those few members that seem to do everything. Colin bought the shingles, Kevin picked up a hammer and soon we had to tell people to get off the roof.. In 2006 we are planning to replace the 25 year old dome of the main Les Powis Observatory which houses our new Trillium Scope.

We have a new web site "hamiltonrasc.ca" thanks to our president, Les Nagy, which is more flexible and artistic than our previous site. It includes blogs, a newsletter download area and a calendar that we can update on the fly to keep everyone (members and visitors alike) informed of upcoming events.

Victor Grimble Secretary Hamilton Centre



Royal Astronomical Society of Canada - Kingston Centre

### 2005 Secretary's Report

We currently have 128 Members.

Regular Meetings were held on the second Friday of each month at 7:30 p.m. in Theatre D, Stirling Hall, Queen's University.

January 14: Dr. Sun Kwok "Cosmic Butterflies"

**February 11**: Members Night featuring short presentations by Kim Hay, Kevin Kell, and Ken Kingdon.

**March 11**: Melissa Ruiters "The Globular Cluster Systems of selected Virgo Galaxies: What do they tell us?"

**April 8**: Peter Jedicke. "Astronomy in Hawaii: Research, Outreach, Observing - and Politics"

**May 02**: Dr. David Levy "I'm Dreaming Of A Moon Shadow: My Adventures With Eclipses"

\*special meeting in Chernoff Hall Auditorium, Queen's U.

May 13: Laura Gagne "Sirius dating in Egypt"

Stephen Gagne "Reading the weather for

observers"

**June 10**: Members Night featuring short presenta

tions by John Hurley, Ken Kingdon, Kevin

Kell, Susan Gagnon, Kim Hay,

Leo Enright.

July 8: Richard Schmude "Photoelectric pho

tometry of Jupiter"

August 12: Annual "MarkFest" BBQ at Mark Kaye's.

September 9: Members Night featuring short presen-

tations by Ken Kingdon, Brian Hunter,

Doug Angle, Leslie Roberts.

October 14: Ken Kingdon "Mars"

November 11: Annual General Meeting

November 25: 2005 "Big-Bang-Quet" Annual Awards

Banquet

Dr. Bryce Bennett "Tracking Objects in Space: Orbit Determination from

Kepler to CASTOR"

December 9: Paul Mortfield "The Sun and Space

Weather ".

Along with Astronomy Day, in 2005 the Kingston Centre offered displays and public observing at two charity events; "The Sky is the Limit Festival" and the "Relay for Life".

Kingston Centre members also held several combined presentations and observing sessions at the Little Cataraqui Conservation Area and also at two Girl Scout camps. Members visited several area schools. In addition to a member who volunteered as a judge, an award and a prize were contributed to the area Science Fair.

Our monthly public observing sessions, held at the Queen's University Observatory, fulfilled the final obligations of a two-year Trillium Foundation grant. This partnership has been extremely successful, and we hope to continue this close relationship with the Queen's University Physics Department.

While "weather luck" helped to revitalize our private observing sessions, at various dark sky sites, the innovation of scheduling a "floating date" contributed to a satisfying observing year.

We had a gratifying response to the first nine-week session of our "Observational Astronomy for the Novice" course, which incorporated the RASC Prince George Centre's "NOVA" course material into our own RASC-KC mini-course.

Fall 'N' Stars 2005, hosted jointly with the RASC Belleville Centre, was a wonderful weekend of observing, presentations, and a chance to meet people from several RASC Centres.

Lastly, 2005 saw an exciting milestone. "The Royal Astronomical Society of Canada - Kingston Centre" has incorporated under the Ontario Incorporation Laws.

### 2006 Executive

President: Kim Hay
Vice-President: Arlyne Gillespie
Secretary: Steve Hart
Treasurer: Kevin Kell

National

Representative: John Hurley
Librarian: David Maguire
Newsletter Editor: Doug Angle

Respectfully submitted,

Steve Hart Secretary, RASC - Kingston Centre



Astronomy Day 2005- Isabel Turner Library Saturday April 16, 2005. Picture taken by Kevin Kell.



### KITCHENER - WATERLOO CENTRE

K-W Centre started 2005 off with our annual dinner at Golf's Steakhouse where we awarded members for their participation over the year. Jim Graham and Dave Swartz were thanked for all their work on our new 16" Meade that was installed into our Avr Observatory. George Peer has done an outstanding job of community outreach. He has formed a liaison with the public school system. He travels to schools and conducts star parties and gives instruction on using telescopes to the grade six students in conjunction with the introductory course that they now receive. Doug Bulgin organized a star party in July north of Wiarton. The sky was very dark but it will be forever known as Starfeast. The members that went enjoyed Doug's Parents hospitality and hope they are invited again this year. Over the years Paul Lehman has provided a welcome site north of Mount Forest on his farm where members can go and enjoy the dark sky for observing or for astrophotography and was given an award of appreciation. Our dinner was also the time awards were given to the winners of our astrophotography contest and we were treated to a video presentation of the submissions.

Our membership has been steady around 130. We continue to meet at Wilfred Laurier

University the second Friday of the month thanks to a long time member of our club, Professor Ray Koneig. Each month we endeavor to inform and provoke discussion with our members by having welcome guests speakers. We have a small but active Beginners Group that meet monthly in a community room at Zehrs. They give support to new members and basic hands on instruction for observing. Weather permitting they take field trips after the meeting to observe. Our Past President Brady Johnson has provided a permanent home for our library at his store K-W Telescope and is able to provide information to the general public about our club. We also store our lender scopes at his store which is conveniently located for our members.

Many thanks to all the speakers, members and volunteers whose dedication and hard work have made this past year successful. We look forward to more of the same in 2006.

2005 Secretary Brenda Purdy.



### LONDON CENTRE

London Centre has wrapped up another successful year, full of a variety of interesting and activities, ensuring a little of something for everyone. Thank you to the following people who gave presentations at our monthly meetings:

- London Centre members Chris Fleming and Ingrid Hutchinson reviewed the current events surrounding NASA's mission to Saturn and observations of Comet Macholtz.
- Jeremie Vaubaillon, an Astronomer currently doing his Post-Doc at UWO, gave an informative and entertaining talk about the incredible history of and some of the current activities of three observatories associated with the Paris Observatory.
- RASC National President and London Centre member Peter Jedicke presented his talk "Astronomy in Hawaii: Research, Outreach and Observing", a photographic tour of facilities, telescopes, the people, and the beaches of Hawaii.
- Robert Godwin of Apogee Books gave a short talk about the space publishing business and showed many of the publications for which he is justly proud. He also showed a fifteen minute audio and film sequence of the view from the Apollo 11 Eagle window during the moon landing sequence.
- Dave McCarter discussed the simple art of Star hopping to navigate your way across the sky to favourite deep sky objects. We also discussed what criteria experienced observers use to decide when to drive out to Fingal for a great night of observing.
- Robert Jedicke from Pan-STARRS, gave a talk about the plans for the Deep Impact space mission
- Shantanu Basu give a talk and showed computer animations regarding the process by which a cloud of gas and dust in the interstellar medium gravitationally collapses to a disk and forms a star and perhaps planets. Discussions were extensive!

William E. Baylis, Physics Dept., University of Windsor and Honorary President of the Windsor Centre spoke on "Einstein's 'Biggest Blunder' and the Big Bang" in honour of the centenary of Einstein's amazing year, 1905.

- Amateur astronomer Paul Mortfield discussed "CCD Imaging From Your Urban Backyard" and showed off amazing astronomical images while describing the equipment and processes required to create images of great beauty and scientific interest.
- Amateur astronomer and amazing potter Steve Irvine described the tall tale of Keppel Henge. He also showed the sun dial in which the observer is the genome. They have also created a small to-scale model of the solar system, and will shortly be placing a model of Proxima Centaurus at it's correct distance, on Vancouver Island. There is a lot of space in space!
- London Centre member Ingrid Hutchinson, who was fortunate enough to have a trip to Australia, shared some slides of her trip and discussed the history and current activities at Sydney Observatory.
- Steve Pellarin, from Windsor Centre, gave an illustrated talk on "Project Cassini to Saturn: A Summary." Steve showed a sample of the exciting images and shared the fantastic information scientists are getting from the sixth planet with the Cassini spacecraft.

On the evening of November 24 Astronomer, Author, and SkyNews Editor Terence Dickinson gave a special public talk at the Wolf Theatre, London Public Library. He reviewed why sky gazers become enchanted with the boundless beauty of the night sky, demonstrated the immense size of the solar system, the stellar neighbourhood, and ultimately the entire universe. Before the talk Terry signed each of the Backyard Astronomers Guide copies donated to the London Public Library in memory of Mark St. George.

At the end of the December meeting, Harold Tutt made a presentation of a donated eight inch Skywatcher telescope with carrying case and eyepieces to one of London Centre's youth members, Krista Jager. Needless to say, she was almost speechless for the rest of the evening!

The past year as also been another very busy year for London Centre's community outreach program, which is organized by Harald Tutt. The following groups hosted our outreach program:

- · Elgin Nature Club in St. Thomas
- Elgin Nature Club.
- Girl Guides at Camp Orenda
- North Middlesex District High School
- International Scout camp at Sylvan, west of Parkhill.
- Girl Guides who were celebrating 95 years of Guiding at Ska-Nah-Doht, Longwoods Conservation Area
- Ingersoll District Nature Club and the Ingersoll Guides
- St. George's Public School
- L.O.O.P (Local Outdoors Opportunity Partners)
   Perth Chapter, camp-out on a farm near Stratford.
- Exeterrestrial Science Camp at the Exeter High School
- The Public Library system in London and outlying areas who hosted Harald for a series of travelling shows
- On August 13 London Centre members David and Everett Clark, Dave McCarter, Harold Tutt and friend Harold, and Dave Nopper provided the Ninth Annual Pinery Provincial Park Star Show. Dave and Everett were able to show the first quarter moon through a break in the clouds, and the audience of about 450 enjoyed the slide show "The Mikly Way, A Tour". The rain began just as the astronomers completed packing up.
- Jeff Gallant's grade eight class at Byron Northview Public School.
- the Tillsonburg Pathfinders & Sr. Branches of Girl Guides
- The 2nd Lambeth Guides Camp at Kah-ne-do.

None of the above events would have been successful without the assistance of the following London Centre members:

Christie Arenburg, Steve Arenburg, John Bontje, Elias St. Brice, Angela Clark, Dave Clark, Everett Clark, Chris Flemming, Bill Gardner, Ingrid Hutchinson, Peter Jedicke, Dave McCarter, Melody MacKensie, Dave Nopper, Kelly Sibthorpe, Rick Saunders, Bogdan Toduse, Justin Tonner, Harold Tutt and Dustin Wyrot.

On April 7, early in the morning, Joe O'Neil, Chris Fleming, Peter Jedicke, Bob Duff, Harold Tutt, Don Trembley, Dave Rubinhagen, Melody MacKenzie and Dave McCarter turned out at John McKittricks Camera Store on Dundas St. to appear on CFPL-TV's New Day show. The theme was amateur telescope making, and Joe and Dave gave a short demonstration on glass grinding and what goes into a telescope. Melody showed her home made telescope, and Harold, Bob and Chris talked about observing, astronomy books and resources. Girl guide cookies were eaten and everyone had a good time.

London Centre celebrated International on April 30 London Centre members Dave McCarter, Harold Tutt, Bill Gardner, Bob Duff, Peter Jedicke. Chris Fleming, and John Rousom put on an Astronomy Mall Display at Cherry Hill Mall, outside McKittricks Astro-Video-Photo store. We answered lots of questions from interested people, showed off telescopes and how mirrors are ground to the correct curve. John R. took home a new big toy, reducing our telescope display by one. Expect another weeks worth of clouds.

Every Saturday evening from June 4 to August 27 London Centre members set up their telescopes on the front lawn and roof patio of the Hume Cronyn Observatory on the campus of the University of Western Ontario to help with the Summer Open House. Each evening fifty or more visitors enjoyed the illustrated talk given by UWO faculty or graduate student, talked stars and telescopes with our members, and when the skies were clear they were treated to many celestial objects, the most favourite being Jupiter and its moons.

On July 13, London Centre members Harold Tutt, Glen Spooner and Dave McCarter presented a slide show and tried to provide observing for 45 people at Rondeau Provincial Park. The remains of huricane Dennis filled the sky with clouds and haze, although we were able to view the moon and Jupiter from time to time. Then the mosquitoes, a particularly viscious species, made their presence known, and people thought better of staying out.

On Wednesday August 24, London Centre member Bill Gardner gave a presentation in the amphitheater at Killarney Provincial Park in Ontario. There were 175 people in the crowd. He first delivered a slide show presentation which introduced the audience to the night sky, as well as some of the history, stories and science of astronomy. After the presentation, the group moved down to the beach and setup Bill's telescope and two spotting scopes supplied by the Park. Telescopes viewed M27, M31, M57 and park guests were continued to have objects, constellations and of course Polaris shown to them. As a bonus, we were treated to an Auroral display.

On October 29 the Physics and Astronomy Department, including Dr. Margret Cambell/Brown and Dr. Peter Brown, Dave Clark, Peter Jedicke, Dave McCarter, Bob Duff, Chris Fleming, and Mike Costa provided a look through the Hume Cronyn Memorial telescope and Member Telescopes at Mars during it's close opposition. At any one time there were over fifty people in the dome waiting for a view, and unfortunately the combined heat of so many bodies combined with the cold outside air to destroy the seeing. However, telescopes set up outside had much better luck. In all about 450 people visited the event. Mars is still very much worth looking at, until at least mid December.

London Centre's Annual Banquet was held at *Michael's* in the Great Hall, UWO. The food and fellowship were excellent. After dinner we moved to the presentation room at the Cronyn Observatory for a fascinating talk by Astronomer Beth Ellen Clark, an expert in asteroids. Her most recent article is in the June '05 Sky&Telescope. She passed around a few large sample meteors and discussed how astronomers are trying to make sense of the various populations in the asteroid belt. After the talk we observed Jupiter in the large refractor.

The past year also saw the building of a warm room for our observers while they are out at our dark sky site of the Fingal Wildlife Management Area.

Bill Gardner Treasurer



Centre francophone de Montréal

Rapport annuel 2005

Préparé par M. François Chevrefils, Secrétaire

Le Conseil d'administration a tenu cinq réunions au cours de l'année. Les démarches, entreprises l'année précédente, ont continué en 2005 en vue d'améliorer les Règlements de la Société.

Depuis l'automne 2005, les conférences ont lieu au local de la Société. Une autre salle est utilisée lorsque le nombre de visiteurs est élevé. Cette mesure a permis de réduire les coûts de location de salles pour les conférences offertes par la Société.

Une nouvelle activité a pris son envol au cours de l'année : des ateliers d'astronomie offerts à des élèves dans les écoles. Deux membres de notre Société ont y participé activement : André Gendron et Hugues Lacombe.

En 2005 la « saison » des conférences au local a été prolongée. Ainsi la saison du printemps s'est poursuivie jusqu'à la fin de mai et le local est resté ouvert durant l'été pour la présentation du « Ciel du mois ». Le nombre de personnes qui ont assisté aux conférences s'est élevé à une quinzaine environ.

Vingt-cinq conférences ont été présentées en 2005. En voici des exemples :

### 1<sup>er</sup> mars :

Que cachent les régions internes de notre Galaxie? (François Wesemaël, Université de Montréal)

### 5 avril:

Évolution des naines blanches et l'âge de la galaxie (Patrick Dufour, Université de Montréal)

### 4 octobre :

Les étoiles massives (André-Nicolas Chené (Université de Montréal)

### 18 octobre:

Les objets exotiques de l'Univers (René Breton, Université McGill)

### 1<sup>er</sup> novembre :

Côté sombre de la turbulence dans l'univers astrophysique (Nathalie Toqué, Université de Montréal)

### 6 décembre :

Les étoiles naines blanches : comment et pourquoi les observer (Alexandros Gianninas

, Université de Montréal)

La Société a également organisé des soirées d'observation pour le public montréalais, au Parc-nature de l'îlede-la-Visitation, d'avril à septembre. La soirée du 27 août a eu lieu au Parc-nature-de-la-Pointe-aux-Prairies.

La plus importante de ces soirées a eu lieu le 16 avril alors qu'environ 100 personnes se sont présentées pour participer à la Journée internationale de l'astronomie.

Tout au long de l'année plusieurs membres se sont rendus au terrain de la Société à St-Valérien pour y faire de l'observation ou de l'astrophotographie.

Au cours de l'été s'est tenue la 25<sup>e</sup> édition du Concours annuel de fabricants de télescope d'amateurs (CAFTA). Pour souligner cette occasion spéciale, David Levy a été invité à titre de conférencier principal.

Par ailleurs Gilbert St-Onge et Lorraine Morin y ont présenté leurs travaux de recherche sur RY Tauri, et un groupe de quatre personnes (Michel Duval, André Gendron, Gilles Guignier et Gilbert St-Onge) y ont présenté les résultats de leur recherche sur l'effet de la goutte noire observé lors du transit de Vénus du 8 juin 2004.

Des articles sur ces sujets ont paru dans le <u>Journal</u> de la SRAC (août 2005 pour RY Tauri et octobre 2005 pour l'effet de la goutte noire).



Secretarial report 2005 RASC Moncton Centre

Ten meeting were held throughout the year, and the first meeting was very lively:

One of our members started the year 2005 with a bang : Supernova Discovery by

Paul Gray and Dave Lane (Halifax) confirmed by the IAU, announcing the discovery

Of SN 2005B! I have to admit that we were all very excited and are proud to be

Some of the first people to know about it. This very exciting discovery was followed in September 2005 by their second Supernova Discovery!!

Our website, managed by Gerry Allain, was translated in December by some of our members and should be live on-line by mid January 2006. It is quite the accomplishment being the only bilingual center in Canada.

Our membership continues to grow, and we are seeing some youth members in our Centre.

Education committee has a mandate seeking to identify specific areas where we can make an impact in the field of education.

Observing Committee: Two of our members received their NGC certificates:

Ted Dunphy and Charles Doucet, and a Messier certificate was awarded to Derek Lapointe

Astronomy week was well taken care of by our three cities :

St-John: mall displays, public observing every night, telescope collimation clinic.

Fredericton: Display at Farmers Market, light pollution project, observing

Moncton: display at Farmers Market and public observing, and sidewalk astronomy.

Our members held an observing weekend in Mactaquac Park, and were overwhelmed

By the interest shown by the public. It went so well, that another weekend is planned For 2006.

Our AGM held in November was very well attended, being a full day project :

Business meeting followed by five excellent speakers:

Mary Lou Whitehorne : The Big Dipper Goes to School - Skyways

Dr. John Spray: Planetary and Space Science Centre

Curt Nason: The Tunguska Event – A big bang in Siberia

Dr. Mark Laflamme: Mostly harmless, the trials and tribulations of an exobiologist from somewhere in the vicinity of Betelgeuse.

Solar observing, light pollution display, and many great prizes to be won during the day.

### RASC Moncton Centre meetings for the year 2005 :

**January 15**, Moncton: business meeting. What's up: Curt Nason and discussions on the Supernova Discovery by one of our members.

**February 19**: St-John: What's Up by Curt Nason; Observers Handbook – Saturn, by Shawn McHatten; All sky camera project

March 19 Moncton: business meeting. Talks: Perspectives of a first year observer by Mark Laflamme; Collimating clinic

**April 23** Moncton – visit by national president, Peter Jedicke, gave us a talk on Research, outreach and observing; Liara Covert: Planet Pluto and mission there.; Mark Laflamme: exo biology; All sky Camera, Shawn McHatten, What's up by Paul Gray.

**May 14,** Moncton: business meeting and talks: What's up by Curt Nason, Gerry Allain Solar System; Emma MacPhee: Observers Handbook on Messiers.

**June 11**, St-John: What's Up this summer by Curt Nason; The moon is not really made of cheese by Shawn McHatten; Obsever's Handbook Sunrise, Sunset and Twilight Curt Nason.

**September 17,** Moncton: business meeting and talks: Periodic table of elements by

Mark Laflamme; GA by Paul Gray, Starfest by Mark Laflamme, Paul Gray and Ted

Dunphy; recap of Nova East by Paul Gray; Information on their 2<sup>nd</sup> Supernova Discovery this year.

October 22, Fredericton – business session and talks: Guest speaker Alan Whitman - Southern Sky Splendours; What's up by Curt Nason, Eyepeice review; Constellation of the Month by Don Kelly and Ted Dunphy, Observing Algol by

Paul Gray; Occultation of Antares by Alan Whitman.

November 19, Moncton: AGM business and guest speakers, mentioned previously.

December 10, St-John: Constellation Camelopardalis by Curt Nason:

What's up by Paul Gray, Handbook talk: Happy New Years by Curt Nason; video on Life in Space.

Emma MacPhee, secretary RASC Moncton Centre



### **RASC Montreal Centre Report for 2005**

There were two major developments for the Montreal Centre in 2005, one of which may lead to a major development in 2006 and beyond.

The first was the Centre's move from the Isabel K. Williamson Observatory to the campus of John Abbott College in Ste. Anne de Bellevue. The Centre had called the I.K. Williamson Observatory home since 1954 and in that time, thousands of the famous and not-so-famous had passed through its doors, creating a rich history of astronomy here in Montreal.

Despite its idiosyncrasies, its temperamental furnace and perpetually leaky roof, the members of the Montreal Centre grew to love the Centre. The spirits of those who had gone before were felt by everyone who set foot in the meeting room. The situation at the Observatory was becoming increasingly untenable, however, and through 2003 and 2004, access to the Observatory became difficult and many meetings had to be moved to the Montreal Planetarium and elsewhere. Although there had been much talk of moving since the late 1990s, the time for action had come and the Centre moved swiftly to find a new home.

Thanks to the drive and determination of David Shuman, Andrew Fazekas and his wife Zoe, talks were begun with the administration at John Abbott College and by the spring of 2005 an agreement had been reached whereby a 250-seat amphitheatre was made available to the Centre for meetings as well as storage space for its documents, equipment and library. The big move came on a beautiful Saturday in the month of May and two weeks later our inaugural meeting, featuring Dr. Jaymie Matthews as our guest speaker, took place. We are still getting used to our new home, and much work remains to make the Centre's assets more easily accessible, but the administration at JAC, prinicipally Dean of Science Eric Schmedt, have been most accommodating. We look forward to many, many years in our new home.

The second major development for the Centre was the acquisition of a brand new, Meade LX200 14" Schmidt Cassegrain telescope; a donation made possible through the good graces of David and Wendee Levy and Meade Instrument Corporation. This telescope, which will replace the Centre's aging Celestron 14" SCT, will have multiple uses at the Centre, including the possibility of being made available to physics and astronomy students at John Abbott College, as well as schools in the Lester B. Pearson School Board. As of this writing, the telescope is in transit and we should be in possession of it shortly. The Centre wishes to thank David and Wendee Levy and Meade Instrument Corporation for this wonderful gift.

Of course, with the demise of the I.K. Williamson Observatory, the Centre must take steps to house the new telescope, which leads to our major project for 2006. The Centre has begun negotiations with the Morgan Arboretum Association to build a new observatory at this site, which is secure and should provide easy access for Centre members. The initial plan is to set up the telescope so that it can be used as both a visual instrument for

Public Nights as well as a remotely operated observatory, which will allow access to Centre members and perhaps the aforementioned school groups

Although the Centre appears to be willing to go it alone, if necessary, to see this project through, sources of additional funding will probably be sought to ease the financial burden to the Centre.

2005 also saw the appointment of a new editor for the Centre's newsletter, Skyward, which is entering its 58<sup>th</sup> year of publication. After four years at the helm, David Shuman and Kenneth Gee have stepped aside and Bettina Forget has taken on the role of editor. During their tenure, David and Kenneth turned Skyward into a lively, full-colour publication and now Bettina has taken it to new heights with an ultra-professional design and easy, immediate access for the members via downloadable PDF files. Thanks, Bettina, for taking on the editorship and best of luck with Skyward now and in the future.

These are exciting times for the Montreal Centre; things are really looking up!!

Mark Bratton Secretary RASC Montreal Centre



### **Niagara Centre Annual Report for 2005**

The Niagara Centre and its members have done their best throughout 2005 to continue our busy schedule of public star nights and events. Centre public events include monthly public star nights held at Fireman's Park, Niagara Falls, weather permitting, from September thru May each year; Chippawa Creek Conservation Area for June, July, August and Rockpoint Provincial Park in August. There was no star night hosted by a local winery this year in conjunction with Grape and Wine Festival.

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA/ 2005 ANNUAL REPORT \* LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA / RAPPORT ANNUEL 2005

For International Astronomy Day, we held a public solar observing day at St. Catharines Fairview Mall, in front of a Chapters & Starbucks; a solar observing and planetarium tour at AN Myer Secondary School inn Niagara Falls and an evening public star night at Fireman's Park Niagara Falls. We were blessed with clear skies and all

Niagara Falls. We were blessed with clear skies and al events were well attended. All in all it was a successful year of public events.

Below is a list of speakers and topics for our general meetings during 2005:

**January 20**: General Meeting, Slide and Video presentation by Stan Sammy titled: "Origins of the Universe."

**February 17**: General Meeting, Members slide show, No guest speaker.

**March 17**: General Meeting, Slide and Video presentation by Dr. John Black titled:

"Cosmology, Big Bank and String Theory, Making it Simple."

**April 16**: International Astronomy Day

**April 21**: General Meeting, Members slide show, No guest speaker

**April 23**: Annual Banquet held at Chatters Delphi Hall, Guest speaker: Mr. Jay Anderson.

Presentation titled: "Science and Adventure in the Eclipse Shadow"

**May 19**: General Meeting, Guest speaker: Steve Barnes presentation titled: "DLSR",

Member Vince Falvo presentation: "Solar Eclipse Tour Egypt 2006."

**June 18**: General Meeting Chatters Bar and Grill, Guest speaker and Niagara Centre Member: Robert Jedicke presentation: "Project Deep Impact"

**September 15**: General Meeting, Members Starfest Video slide show by Jim Holiko, Member Algonquin Park Star Party slide show by Phil Downey.

**October 20**: General Meeting, Guest speaker Ray Kahn presentation on new astronomy equipment, Member presentation on Solar Eclipse Tour Egypt 2006 by John Nemy, Member presentation on New Niagara Centre Web site by Jim Holiko.

November 17: General Meeting, Guest speaker: Robert

Godwin presentation on Mars

**December 03**: Executive Christmas Dinner at Café Amore

**December 16**: Members Night, short general meeting followed by a Members Xmas party at Chatters Bar and Grill

Les Welgan, Secretary Niagara Centre.



Okanagan Centre Year End Report 2005 Secretary: Dorothy Player

Our center had volunteered to host the 2005 General Assembly so 2005 started out with meetings and preparations for the G. A. in May.

**Public Outreach** – Astronomy was introduced to numourous school classes, church groups the girl guides and summer youth club classes.

**Side walk Astronomy** was held monthly in the parking lot of Chapters.

A big night for side walk astronomy, was setting up in the parking lot of the movie theater at the opening of the Harry Potter movie. Even thow the weather was very cold many people stopped by to have a look at the Moon, Saturn and Mars.

**International Astronomy Day** was not well attended this year due to the weather Overcast cold and windy.

### **Certificates Presented:**

Greg Dean Observing the Univerce
Grant Rice Introductory Observing

List

David Player 110 Messier Objects Colleen O'Hare Member of the Year

The list of presentations to our monthly meetings is as follows:

Jan. 2005 Guy Mackie

Tips on how to organize your observing

list.

Andrew Bennett On the Phoenix Rising

**Feb.** Dr. Jim Tisdale

How to organize your eye pieces Neil Campbell On remote observing with Jim Newon in his Arizona

Observatory

March Grant Rice

Internet Website Access

Alan Whitman The Southern Sky

April Richard Christie Spiral Traces.

May General Assembly

June Alan Whitman Total Solar Eclipses

Greg Dean Light Polution

Sept. Alan Whitman Occulation of Artares

Dr. Sean Doughery Blown in the Wind -Massive staaars High energy

particles

Oct. Dr. Jim Tisdale A review of the

Observerss Handbook 2005

Greg Dean Astrophotography

Nov. Colleen O'Hare Benefits & rewards of

**Public Outreach** 

Neil Campbell Deep Impact 2005

At the Keck Observatory

Dec. Dorothy Player The Hydra Constalation

Guy Mackey Not understanding Light.



### **SECRETARY'S REPORT - 2005**

2005 marks an exciting and successful year for the Ottawa Centre with several positive changes in Council and appointed positions. This changing over of 'new blood' is vital for the well being of the Centre with new and creative ideas and dynamics coming together.

The Ottawa Centre is proud to have one of the highest memberships in the country. Our membership remains stable with 386 regular members, 14 youth members and 42 lifetime members, for a total of 442. We also have the highest turnout at our monthly meetings, with attendance frequently exceeding 150. The Ottawa Centre is also known for having a high concentration of advanced amateur astronomers.

There has been an explosion of supernova discoveries made this year by Ottawa Centre members belonging to the Puckett Supernova Search international team. This year, Doug George co-discovered SN2005M in January (this supernova discovery triggered the Hubble Supernova Observing Program!). SN2005ax in March and SN2005gk in October. Lou Cox co-discovered SN 2005bh in April. Ajai Sehgal co-discovered SN 2005cy in July and SN 2005dy in September, both images were taken on Canadian soil in Osoyoos, B.C. Now, here's a family affair. Peter Ceravolo co-discovered SN 2005gl in October and SN2005mb in December, while his wife, Debra Ceravolo (Ottawa Centre President), co-discovered the last supernova SN2005na of the year worldwide on New Year's Eve and her daughter, Jenn Tigner, (junior member) co-discovered SN 2005de in August and 2005kx in November. Congratulations to all of you! All discoveries are co-discovered as Tim Puckett gets credit for taking the images and is the team leader.

Our popular Centre meetings are held on the first Friday of each month at the Canada Science and Technology Museum. The new Meeting Chair, Chuck O'Dale, brings an exciting change to the format with an invited guest speaker each month as well as short talks by members in the first half of the evening. Chuck begins each meeting with a presentation of impressive astrophotos submitted by Ottawa members including Albert Saikaley, Rick Wagner, Rolf Meier, Mike Zeidler, Doug Luoma and Mike Wirths to name just a few. The Ottawa Centre has seen interesting talks from Paul Harrison (Small Satellite Attitude Control), Yuri Amelin (Precise Dating of Meteorites), Dan Falk (Universe on a T-Shirt),

Maurice Lamantagne (Charlevoix Impact Structure), Michael Dence (Formation of Impact Craters), Simon Hanmer (Three Rocky Planets), Peter Jedicke, RASC National President, (Gemini Observatory), Alex Brett (Cold Dark Matter), Martine Simard-Normandin (My Father-RASC National President), Neil Rowlands (James Webb Space Telescope), Richard Ernst (Geology of Venus) and David Shiga (Two Dark Matter Mysteries).

The highlight meeting of each year is the Annual Dinner. This year, we were privileged to hear Dr. David Sinclair, describe his work with the Sudbury Neutrino Observatory. Guests again left with a bounty of door prizes, thanks in particular to donations by Focus Scientific, Diffraction Limited, Imaginova, Sky Publishing, Ron St. Martin and the Ottawa Centre

Another highlight of 2005 is the ongoing organization of the 2006 GA in Ottawa next May. The General Assembly will take place on Victoria Day weekend at Carleton University and promises to be great. With a strong core group of volunteers, much has been done and things are falling into place. The speaker program promises to be the GA 2006's most remarkable feature with no less than 18 prominent speakers and including a discussion forum on the future of amateur and

A Centennial logo has been designed and t-shirts, golf shirts, mugs and pins are being investigated for promotional items.

Astronomy Day this year was in collaboration with the Canada Museum of Science and Technology and the celebration of the 100<sup>th</sup> anniversary of the Dominion Observatory and the 15 inch refractor which was used by Ottawa members nearly 100 years ago. The telescope is now housed on the grounds of the museum in the Helen Sawyer Hogg Observatory.

The Centre's Fred Lossing Observatory, managed by Al Seaman, continues to be well used by members, with a total of 30 "keyholders", who have full access to observatory equipment. In addition, numerous other members use FLO as a dark site to set up their own equipment. Aside from the usual routine maintenance, this year we completed a major site cleanup with the disposal of two surplus, and deteriorating, observatory domes, a pair of large radio telescope antennas, and a damaged storage shed. The RA drive on the 16 inch telescope was also given a complete overhaul after many years of service.

The SmartScope project is beginning to see the light. New project leader Doug George is ensuring that all the integrated systems are working well before taking it to the next phase of



Here is a picture of a typical meeting of the Ottawa Centre at the Canadian Museum of Science and Technology with about 150 in attendance). The Chair is Chuck O'Dale (We have a draw for door prizes at every meeting.) Picture by Robert Dick.

professional astronomy. Day tours have been scheduled for spouses and companions to the National Art Gallery, a bus tour of Ottawa with lots to see including the famous tulip festival in full swing, a trip to the Museum of Civilization and a viewing of the IMAX film, Magnificent Desolation-Walking on the Moon. Also planned is a tour of the David Florida Lab Satellite testing facility along with the Ottawa Centre's SMARTscope. This GA will be a special opportunity for the Ottawa Centre to celebrate its 100<sup>th</sup> anniversary with members from across the country.

making the remote observatory accessible to the members and ultimately to the public. The Ottawa Centre is looking forward to showing off the SMARTscope with tours during the GA 2006.

The Centre's Ted Bean Telescope Loan Library now has a new 10 inch Colter dobsonian telescope donated by Ron Clough of Kanata. A very nice addition for members use.

In the awards department, member Paul Sheppard Jr. received the Messier Certificate, Rick Wagner won the Observer of the Year Award presented at the annual dinner, and the Astronotes article of the year award goes to (it's a surprise!)

Finally, it is with sadness to announce the passing of two members of the Ottawa Centre. W. F. Campbell, a life member passed away on July 01, 2005, and Robin Molson, a member of the RASC since 1970 who had served on the Ottawa Centre Council as Councillor and Secretary died on August 26<sup>th</sup>, 2005. Robin also took care of circulation of the Centre's newsletter Astronotes for 22 years up until his death.

Chris Teron, Secretary RASC Ottawa Centre



### PRINCE GEORGE CENTRE 2005 ANNUAL REPORT

We started 2005 by offering a course entitled 'New Observers to Visual Astronomy' (NOVA) to our members and the public. The course, held biweekly for 14 weeks was attended by 19 people, of which 13 were new members. The enthusiasm of the new members has certainly infected those of us who have been in the club for a while. NOVA continued its success with a second course that started in September.

The Prince George Centre participated in Astronomy Day 2005. Open from 2pm until 11pm, the observatory was visited by about 110 people. Some of the events conducted were solar viewing, tours of the observatory, videos, and a telescope workshop where people could bring their scopes and be shown how to set up and use them. Tables were set up with different displays. One table had materials and instructions on how to create the phases of the moon.

Another held a celestial sphere globe and a pair of magnifying lenses to show the basic geometry of a refracting telescope.

Homemade spectrometers were available for people to see different wavelengths of visible light, depending on the light source. After the evening lecture and video focusing on the planets of the solar system, there was ample opportunity to view the moon, Saturn, and Jupiter through several telescopes set up on the viewing deck.

National RASC president Peter and his wife, Dianne, visited Prince George just prior to the AGM. Early in 2005 they had spent 3 weeks in the Hawaiian Islands, where Peter was a guest of the Institute for Astronomy. Peter related to us their experiences and talked about why Hawaii is the centre of the astronomical world today.

We had a successful Messier Marathon with new enthusiasm instilled from the NOVA course and new members. Doug Wayland got in 99 messier objects this night.

At our season wrap up party in early June three members were awarded the Explore the Universe Certificate. Glen Harris, Jim Arnold and Hugh Kennedy all completed the certificate this spring.

The RASC Prince George Centre has implemented a meteor detection project using information obtained from the Sky Scan Science Awareness Project and a program called Radio-SkyPipe. Two FM automobile radios tuned to 98.7 MHz, a Yagi antenna, and a Quadrifilar Helicoidal antenna, enable us to collect data and present it on our web site in graph form.

Our new viewing season got off to a good start.I in August we had a few weekends of public Open houses. One night in particular was spectacular with a lot of the public showing up for the Perseid meteor shower. We has speakers set up outside to monitor the meteor activity with Radio Sky Pipe. This led into the fall season and weekly viewing sessions for the public and members for Mars Public nights. Lots of members of the public attended. NOVA #2 started in September also. We had 22 new people sign up for the course which is run by Brian Battersby. This course has proven to be quite popular. In early September, guest speaker Alan Whitman entertained us with a presentation entitled 'Lure of the deep Southern sky'.

In November, Eric Jensen from the University of Northern B.C. gave a lecture entitled 'The search for life in our Solar System'. We held our windup Christmas potluck dinner on December 7. This event is always well attended, with the Centre members spending the evening socializing over a great selection of food.



Photo of the Prince George Centre observatory taken the night of 2005, Nov 16 under the light of a full moon. This was a Girl Guides tour, with members of the PG centre giving classroom presentations, showing views through various telescopes and using the green laser to point out objects in the night sky.

Details of the photograph: Canon F1 35mm camera, 28mm lens at f4 2 minute exposure on Kodak Gold 200 print film

Taken by Doug Wayland, member RASC, Prince George Centre

On December 13, 2005 we hosted our last public night of the year viewing the Geminid Meteor showers. We had an excellent public turnout for this event even though the weather was very cold. Over 60 members of the public turned out for the viewing with lots of excitement and questions of when we would reopen for the public.

Hugh Kennedy Secretary, Prince George Centre



Cleaning of the 24 inch mirror work day.



#### CENTRE DE QUÉBEC

http//:www.sracquebec.ca info@sracquebec.ca

Rapport annuel 2005 Préparé par : Daniel Tardif

Secrétaire Janvier 2006

#### **Activités**

Encore une fois cette année, le Centre de Québec a été impliqué dans plusieurs activités. Le Centre a organisé dix conférences, soit les premiers mercredis des mois de septembre à juin. Les sujets étaient tous variés et très intéressants. En voici la liste: Planètes extrasolaires, l'astrobiologie et la vie extra-terrestre, la photographie 3D, l'exploration du système solaire, les effets biologiques sur l'humain lors de voyages spatiaux, les récits de Voyager, le projet SETI, le projet Spitzer, l'histoire de l'astronomie au Québec et récits d'un astronome amateur lors d'un voyage au Chili.

Le Centre a aussi organisé une dizaine de soirées d'observation durant l'année.

À l'occasion de la journée internationale de l'astronomie du 16 avril, le Centre a organisé une activité consacrée au public. Lors de cette journée, il y a eu des miniscauseries, observation du Soleil et observation du ciel le soir.

Le Centre a organisé pour ses membres le traditionnel Party Hot-dog étoilé qui a eu lieu le 30 juillet.

Le centre de Québec a participé à une activité nommée « Envolée de monarques », qui a eu lieu le 4 septembre. Cette activité était adressée au public.

Finalement, une soirée dédiée à la planète Mars a été organisée pour le public le 30 octobre.

#### **QUEBEC LISTE DE L'EXÉCUTIF 2005-2006**

Voici la composition de l'exécutif pour l'année 2005-2006 :

Président : Pierre-Paul Leblanc
Vice-Président : Daniel Allaire
Secrétaire : Daniel Tardif
Trésorier : Pierre-Paul Leblanc
Représentant national : Pierre Desrosiers



Picture take by Pierre-Paul Leblanc, the President of RCAS Québec .

This was the evening of the lunar eclipse of the October 27th 2004. We were in the parking lot of the '' Domaine de Maizerets '' where we have our monthly meeting.

For the occasion at least 20 members came with there scope and we have received about 30 visitors.



#### 2005 RASC - Regina Centre

Club members of the Regina Centre enjoyed another active and productive year of observing and educating in 2005. Activities throughout the year included personal observing, public outreach and education, organizing and attending star parties, combating the negative effects of light pollution, and maintaining, developing, and enjoying the club's dark-sky observing site in Davin.

Throughout the year club members found time to offer viewing nights and presentations to an appreciative public. Our telescopes were setup under the stars for public observing sessions at the Saskatchewan Science Centre in Regina and at several libraries in the city and surrounding communities, including Moose Jaw, Wolseley and Rockglen. Under direction of Ron Haughey and a few other dedicated volunteers, the Saskatchewan Millennium Telescope, located in the Kalium Observatory in Regina, continued to provide scheduled public viewing on most Friday nights. During daylight hours on Canada Day and Pile O'Bones Sunday, volunteers from the club offered the large crowds an opportunity to view the Sun through several telescopes properly fitted with solar filters to ensure fine views and safety.

In addition to public observing sessions, club members prepared informative and entertaining presentations for various groups and clubs. To celebrate International

Astronomy Day, several club members set up an exhibit at the Southland Mall in Regina, which proved to be highly popular as many people stopped by to ask questions and chat. Following on this success, the club offered a similar event at the Victoria Square Mall and enjoyed another positive response.

Members of the Regina Centre enjoyed numerous nights of observing at our dark-sky site located 30 minutes outside Regina in the small community of Davin. Unfortunately, efforts to "run" the Messier Marathon were clouded-out this year.

2005 saw the 9<sup>th</sup> annual Saskatchewan Summer Star Party held in the Cypress Hills. As always, this event was a great success and was thoroughly enjoyed by all who participated. Members of the Regina and Saskatoon Centres work tirelessly to organize and host this superb event. Over the course of two evenings more than 400 general public visitors observed through the club's scopes.

Following last year's success of having the Cypress Hills designated a Dark-Sky Preserve, members of the Regina Centre continued their efforts in combating light pollution and raising awareness of the problem among the public. Particular gratitude must be expressed to Vance Petriew for his efforts on this issue.

As the year drew to a close, club members gathered for a Christmas party during which we shared good memories of the past year and prepared for the next.

Jason Cosford Secretary RASC – Regina Centre



For the St. John's Centre, the highlight of our year was the combination of public events we participated in, or organised. This seemed to be a busier than usual year in respect to public events. We started with several attempts at "Snow Shoe Astronomy," with the help of the Recreation Department of the city of St. John's. The idea was to combine some hiking with some astronomy education.

In response to a challenge from Bruce McCurdy, we organised an Astronomy Day event at the Signal Hill National Historic Site. Although pretty chilly, we had a good turn out for our first such event, which included solar observing and night-time observing.

Our annual star party at Butterpot Provincial Park, Star-B-Que, had two clear nights. Approximately 150-200 people visited over these two nights (its hard

to count in the dark!). There was also local TV coverage of this event.

On September 15 we organised an observing event for the Natural History Society at MUN Botanical Gardens. On the the following day we had an event to coincide with "City Days" in Mount Pearl, organised with Max Harvey of the Admiralty House Museum and Archives in Mount Pearl. Unfortunately, the skies were not clear, but indoor activities were prepared, and an educational talk presented by Max. Some prizes were given away (mostly to the school-age set), including several sets of small binoculars.

Here is a summary of our meeting year:

January Christmas Show and Tell. Bring Your New

Telescope Workshop.

February Satellite Software, Hubble Video, Book

Review by various speakers.

March Telescope Making Talk. Speakers: Garry

Dymond, David Caruk.

**April** Peter Jedicke on Astronomy in Hawaii.

May Nebula and Other Things that Glow in the

Night. Speaker: Chris Stevenson.

**June** "Was the Cambrian (Ediacaran) Faunal

Diversification Triggered by a 90-degree

Shift of Earth's Rotation Axis?"

Speaker: Dr. Joseph Hodych, Dept. of

Earth Sciences, MUN.

September Garry and David's Excellent Trip to Nova

East. Speakers: Garry Dymond,

David Caruk.

October Mars: Past, Present, and Future.

Speaker: Garry Dymond

November In Situ Resource Use for Sustained

Planetary Exploration.

Speaker: Dr. Woodworth-Lynas of

PETRA corporation.

**December** Annual Social. Brief planetarium show

and talk by Garry Dymond on the Star

of Bethlehem.

Note: the acronym "MUN" refers to "Memorial University

Summaries of all these talks can be found on our website at http://www.sji.ca/rasc/. Amongst our educational activities this year, Garry Dymond has continued his tireless work with our planetarium program. Our website now has a page outlining the planetarium programs at the Marine Institute. for the public at the Marine Institute. To help with the planetarium we purchased an LCD projector. In addition, members have appeared on the radio and helped at public events such as our annual Star-B-Que. We have also begun work on using the NOVA program of the Prince George Centre. At the very end of the year we purchased a Coronado PST, which we expect to become a popular attraction at public events.

Good luck and clear skies!

David Bourgeois Secretary, St. John's Centre

of Newfoundland".

Photo by Randy Dodge



For more information on Astronomy Day 2005 on Signal Hill in St.John's , Newfoundland

Visit

http://www.sji.ca/rasc/SpecialEvents/AstroDay-2005.html



THUNDER BAY

No Report Submitted.



Annual Secretary's Report -- Saskatoon Centre

2005 has been a very busy time for the Saskatoon Centre. Our membership remains fairly stable with a solid core of people who continue to run the centre with enthusiasm. Our Astronomy Day display this April was well supported by volunteers and moderately well attended by the public. The Saskatchewan Summer Star Party was a complete success with two hundred and forty registrants who were treated to clear dark skies on every night of the event. The open house at the Sleaford Observatory in October was poorly attended on both evenings by the public as a consequence of the inclement weather however the volunteers took full advantage of all the goodies and coffee that was available. In November a well organized booth was set up at the Prairie Land Exhibition for the Saskatoon Hobby show. There was again a good turn out of volunteers to help with the display but only moderate interest and attendance by the public. Good fundraising efforts during 2005 has helped to bolster the centre finances. Dark sky issues continue to be promoted by centre members. Some interest by the city of Saskatoon has been shown in this issue and a new neighborhood has been provided with environmentally friendly full cut off lighting as a test case. We look forward to another exciting year in 2006 with great anticipation.

Al Hartridge.

The year 2005 was a good year for our Centre. Even though the average membership in the Thunder Bay Centre remained unchanged this year astronomical interests remained high.

Many of the presentations at the general meetings were conducted by Centre members. With their varied experiences and wide range of expertise, there was always interesting subjects to cover. Topics presented included: Polar and Drift Alignments (Randy McAllister), Seeing and Transparency (Ted Bronson), Filters on Deep Sky Objects (Doug Stuart), Cameras for Astrophotography (Randy McAllister), What is Lunokhod (John Bakkelund), Mars Observing Techniques (Doug Stuart), Repairs and Operation of a Beginner's Telescope (Ted Bronson) and Basic Imaging Techniques (Randy McAllister). Other presentations at the meeting were: "Stellar Proper Motions", "Terrestrial/Celestial Coordinate Systems" and "How are Extra-Solar Planets Found" (Ted Bronson).

The Centre hosted three guest speakers this year. Climatologist Graham Sanders and optometrist Kerstin Muth presented the topic "The Optics and Meteorology of Atmospheric Phenomena". Astronomy professor Wolfe Wall's presentation was "Stellar Evolution and Characteristics".

The Basic Backyard Astronomy course was conducted again this year at Confederation College and received an excellent turnout. This 8 week course is geared for the beginner and covers all aspects of astronomy and observing equipment at a general level. Familiarization with the night skies are included in the field exercises.

The Thunder Bay Centre hosted two major Stargazing Weekends at Provincial Parks in 2005. These events were held at:

- (1) Kakabeka Falls Provincial Park (July 30) A power point presentation on general astronomy was attended by about 50 campers and other interested stargazers from the area. Unfortunately the skies were mostly cloudy preventing us from doing the sky tour that night.
- (2) Quetico Provincial Park (Aug. 12 Aug 13) A presentation at the amphitheatre on the Perseid meteor shower was done by Dave Gallant. After the presentation many of the campers proceeded to the lakeshore to observe the meteors under a perfectly-

clear and dark sky. While not as many meteors were observed as expected the northern lights put on a spectacular show for a couple of hours that evening. For the 19<sup>th</sup> Annual Quetico Weekend (Aug. 13) I did a power point presentation on general astronomy to about 50 campers and local interested stargazers. After the presentation the Quetico staff turned the lights off at the parking lot revealing the true dark skies of Quetico. The sky tour was interrupted by periodic cloudy conditions but most of the constellations could be seen at one time or another.

Astronomy Day was held on April 16 with a Thunder Bay Centre exhibit at "Chapters" book store. Centre members had telescopes and equipment on display along with literature and photographs. There were numerous questions concerning our Centre and astronomy in general from the public. A public observing session followed later that evening.

Centre members organized astronomy presentations and observing sessions for numerous schools and community groups. The public Mars observing session at Hillcrest Park on November 11 was well attended.

The final event of the year was the annual Centre Christmas party at the Bronson residence on December 11. Stories of the past year's experiences were exchanged. A toast was made to our prosperous Centre and its good year in 2005 and to favourable observing sessions in 2006.

**Ted Bronson**Secretary, Thunder Bay Centre



#### Annual Report of the Secretary for 2004-2005

The Toronto Centre maintained a busy schedule of public and membership events this year.

The Public Education Committee enjoyed a very successful year. Many people visited the Toronto Centre's booth at the Hobby Show, and our members continued the tradition of bringing their telescopes to the David Dunlap Observatory's public nights during the summer. Although there were only three school presentations this

year, the Committee presented badge programmes for one Pathfinders, 27 Girl Guide, 15 Brownie, 2 Sparks and 12 Wolf Cub and Scout groups and spoke to 3 student groups. Programme presentations were delivered to two Guide Area Day events with 180 Guiding leaders attending each one, and there were 6 community events in the GTA as well as 7 library presentations. In August, an astronomy presentation and star party were held at the CAO for the L.E. Shore Memorial Library of Thornbury. There were 4 star parties at the Ontario Science Centre marking International Astronomy Day, the total lunar eclipse of 27 October 2004, the Apollo 11 landing, and the second anniversary of the August Blackout. Congratulations and thanks are due Leslie Harvey and the many volunteers who delivered these programmes.

Ivan Semeniuk assembled a wide ranging series of lecture meetings. They were:

- 8 Sept. 2004: Dr. Norbert Bartel, York University "Putting Einstein to the Test with Gravity Probe B"
- 6 Oct. 2004: Dr. Peter Brown, University of Western Ontario "The Canadian Meteor Orbit Radar
- 3 Nov. 2004: Dr. Yanquin Wu, University of Toronto "Does Jupiter Have a Core? (And Why is it Worth Money to Find Out?)"
- 1 Dec. 2004: Dr. Michael Bietenholz, York University "What Happens After a Star Dies?"
- 5 Jan. 2005: Dr. John Caldwell, York University
   "Titan and Other Mysteries"
- 9 Feb. 2005: Matthew Melis, NASA Gleen Research Center "Return to Flight"
- 2 Mar. 2005: Dr. Ray Jayawardhana, University of Toronto "Exploring the Origins of Planetary Systems"
- 6 Apr. 2005: Dr. Brian Golding, McMaster University "Exploring the Molecular Basis of Life and Insights into Life's Origin"
- 4 May 2005: Michael Hiltz, MacDonald Dettwiler
   & Associates "Canadarm's Role in Astronomy and Shuttle Return to Flight"

This year's joint meeting with the Royal Canadian Institute on 24 October 2004 was addressed by Dr. Roberto Abraham, who spoke on "The Origin and Evolution of Galaxies".

Members' Night programmes organized by Paul Markov included presentations on a variety of observing equipment and aids, astronomical sites in Arizona, the total lunar eclipse of 27 October 2004, satellite and asteroid imaging, the Royal Greenwich Observatory, the papers of RASC President Dr. Vibert-Douglas, the

Lunar Observing Certificate, Building Backyard Observatories, Astronomical Data Tables, digital imaging, the Hands on the Sun conference, the David Dunlap Observatory, CY Aquarii, asteroid occultations, the General Assembly, telescope basics, and the transit of Venus.

Denis Grey and Leslie Harvey are to be congratulated on the continuing high quality of *Scope*. The newsletter has been published on time and on budget, with excellent coverage of Centre events and well-written articles supplied by many members. About 180 members subscribe to *eScope* which is available as a password protected PDF file.

The Toronto Centre's internet presence was managed by Geoff Gilmour-Taylor Andy Schuh and Rajesh Shukla, who operated the website and listserve. A newly designed website went online in April. Over 270 members participate in the listserve and Yahoo group.

Membership in the Toronto Centre stood at 743 regular, 24 youth and 85 life, with 147 associates, for a total of 999 members in 2005. It is with regret that we record the death on 15 August 2005 year of Frank G. Smith, who was an enthusiastic participant at star parties and Toronto Centre educational events.

The CAO was well used this year, with volunteer supervisors on site every clear weekend to open the facility. Fifteen members attended a very successful Digital Imaging Workshop organized by Dietmar Kupke and Paul Mortfield on the weekend of 6 May. A Stargazing for Beginners workshop was also held. Much work was completed in the Tony Horvatin Observatory, which was expected to be put into use in the autumn. The gravel base for a 10 by 50 foot observing pad with data and electricity hookups was installed between the THO and the Geoff Brown Observatory. In co-operation with the Meteor Physics Group at the University of Western Ontario, an all-sky camera was installed on the roof of the residence building with an hourly download to the Centre website. In July, the Centre hosted the Probus Group of Pretty River for a tour and telescope demonstration at the CAO.

Forty members and guests, including 18 members of the Beaver Valley Club of the Bruce Trail Association, attended the Annual Open House and Awards Presentation at the CAO in May. This year's award recipients were Denis Grey, the Bert Winearls Award; Leslie Harvey, the Andrew Elvins Award; Paul Markov, the Bertram J. Topham Award; Tony Horvatin, the Jesse Ketchum Award; and Phil Mozel, the Ostrander-Ramsay

Award for Astronomical Writing. Citations were published in the June/July 2005 issue of *Scope*.

We congratulate Dr. Robert Garrison and Randy Attwood, both long-time members of the Toronto Centre, and Past Presidents of the RASC, who received the Service Award this year.

Clear skies greeted the 119 members who attended the 8<sup>th</sup> Annual Algonquin Adventure in September. Thanks are due Bob and Lillian Chapman for organizing this event, which was sold out once again.

John Bohdanowicz administers the telescope loan programme which has added a rich-field refractor to its inventory. Charles Darrow reorganized and updated the Centre's property database which facilitates tracking of our assets at the CAO and those used in our many activities.

This year's recipient of the Gold Medal of the Royal Astronomical Society of Canada, Toronto Centre is Erin Mentuch of Toronto, who is studying for a Ph.D. at the University of Toronto. The recipient of this year's astronomy prize at the Toronto Science Fair is Karthik Ramanathan of Marc Garneau Collegiate for his project "Dark matter: Missing mass investigation". Recipients of the our award at the First Annual University of Toronto Space Design Contest were Katherine Chan, Jane Chui, Bernice Tsoi, Bobo Wong and Janet Wong of Loretto Abbey for their multipurpose structure "Synterra".

All of the Centre's achievements would not be possible without countless hours of volunteer work on the part of the membership. The Centre acknowledges the contributions of Geoff Brown, Geoff Gilmour-Taylor, Geoff Gaherty, Leslie Harvey, Dietmar and Millie Kupke, Jim Low, Denis Grey, Paul Markov, Ostap Mojsiak, Frank Smith, Dave Sage, Lucy Winnicki, Rajesh and Diane Shukla, Andy Schuh, John Bohdanowicz and many others. Special thanks are due Bob and Lillian Chapman for their work on the Annual Algonquin Adventure and promotional items, and to Andy Schuh and Guy Nason for their work with the Observational Activities Committee.

In closing, I wish to recognize Honorary President Dr. Roberto Abraham, and 2<sup>nd</sup> Vice President Ivan Semeniuk, who are retiring from their positions as of this Annual Meeting. We also thank Councillor Lucy Winnicki, who stepped down during the year. Their contributions to the business of the Toronto Centre are much appreciated. Thanks are due Carruthers, Shaw

and Partners Architects and RBC Private Counsel Inc. for the use of their facilities for Council meetings, and to Parks Ontario for the use of the parking lot at Forks of the Credit Provincial Park for Deep Sky Observing West sessions. I also wish to thank the Ontario Science Centre for its continued hospitality in providing the facilities and audiovisual support for our meetings and public events. On behalf of the Council, I thank all members for your continued trust and support of our work.

B. Ralph Chou, Secretary



Secretary's Report Vancouver Center December 13, 2005

In 2005 the Vancouver Center continued to offer a high quality of speakers that addressed topics of interest to appeal to all levels of expertise in the membership. We wish again to thank Barry Shanko for his hard work and efforts.

In January Bill Ronald and Dan Collier taught us how to observe Occultations and that timing and location were essential elements of the process.

David Halliday V.P. of AMEC Dynamic Structures, reminded us of the truly World Class expertise in telescope construction that exists in our own back yard with exciting new projects on the drawing board.

Dr Douglas Scott a theoretical cosmologist at UBC asked us 'what is the entire universe made of? He confirmed all our suspicions that its not only Conservatives, Liberals and NDPers.

In April, Larry Reeves allowed us to fantasize about a possible Canadian Mission to Mars, and the feasibility of such a mission. (I spoke personally to Mr. Paul Martin today and he guarantees that funding will of course be available if they win the election)

lan McLennon spoke about 'New Planetariums in the World" and the implications for Vancouver.

Dr Jeremy Heyl, Physics and Astronomy at UBC gave us an interesting insight into "The Secret Life of Mag netars"

In August Brian Morse gave a talk on web-camming and attempted to show that a great deal of fun and some rewarding results can be obtained, with simple equipment and very little expertise.

Dr Katherine Heymans UBC Astronomy, showed us how detailed analysis of gravitational lensing could be used to detect dark matter and possibly measure the properties of dark energy.

In November, Dr Rick Greenberg of University of Arizona showed us an amazing series of close-up pictures of Europa with all the latest information and once again raised the distinct possibility of finding life on the Gallilien Moon of Jupiter. A dozen people, attended a dinner held for Dr Greenberg at the Granville Island Hotel.

During the year, the Vancouver Center hosted and attended several other observing events including Messier Marathons, Astronomy Day, Mt Kobau Star Party, Sechelt Astronomy Club Opening Day, Perseid Meteor Shower at Aldergrove, Sidewalk Astronomy and Mars Day. I would also like to thank Pomponia Martinez for her tireless efforts in providing us all with refreshments and delicious cookies throughout the year.

Chris Graham, presented the Center with an interesting proposal for time sharing on a robotic telescope in New Mexico. The proposal was well received by the Center and Committees have been formed to deal with the various tasks involved, including telescope operation, digital imaging and all aspects of the computer management. Regular meetings of the volunteers have already been held at the GMSO and the Space Center has agreed to allow us to use space there to set up the Control Center. Special thanks again to Norman Song and Pomponia for preparing the documentation that made the project a reality. Chris Graham has set up a chat group on Yahoo for volunteers to communicate.

On a more personal note I would like to thank Ron Jerome and the rest of the committee for their patience in helping me learn the processes involved in being the Center Secretary.

Thank You.

Brian Morse Secretary.



# Royal Astronomical Society of Canada Victoria Centre Annual Report Gorge Vale Golf Club November 20, 2005

The Victoria Centre and its members have enjoyed a busy, successful 2005.

#### **Special Events This Year**

Victoria Centre members attended the **General Assembly** held in Kelowna, BC on May 20 - 23. They enjoyed lectures and meetings and participated in tours and contests. Members also attended the **Tenth Annual Island Star Party**, July 1-3, held at the Victoria Fish and Game Association off the Malahat. The event was organized by Frank Ogonoski, and hosted by the Cowichan Valley StarFinders and included lectures, nature walks, door prizes and the 360o view. The 5th Annual **RASCAL Star Party** was held on Sept. 2 - 3 also at the Victoria Fish and Game Association. The event was organized by Scott Mair, Bruno Quenneville, and Rich Willis, and was a great success!

Members from other astronomy groups some as far away as Oregon all enjoyed the lectures, socializing, buying sprees, door prizes and of course the view. A **Perseid Meteor Shower** event this August was hosted at Jane's Farm and was well attended by Victoria Centre members. On average, 1 meteor per 5 minutes was observed. Observing **Mars** in October and November around its closest approach proved difficult due to the cloudy, humid Victoria skies and Mars dust storms. Those with patience and persistence were rewarded for their efforts with some excellent views of the red planet.

# The Victoria Centre Held Regularly Scheduled Events That Included:

Regular Meetings every second Wednesday of the month except July, August and November at 7:30 p.m. at the University of Victoria. Bruno Quenneville organized a very interesting series of speakers who informed members on a wide variety of topics. Astronomy Cafe hosted by Bruno Quenneville was an informal get to-

gether every Monday night. The New Observers Ob serving Group hosted by Sid Sidhu ran every fourth Friday of the month at 8:00 p.m. under the dark skies of the Highlands. Astro Imaging was hosted by Bill Almond on the third Wednesday night of the month except for June, July and August at the Almond Observatory (AKA, the nut house!). Some of the images produced by members during these evening sessions are available on the RASC Victoria website. Our Active Observers have enjoyed many viewing opportunities this year and a few members have been actively seeking new observing sites in and around Victoria. Their hard work has paid off as the RASC Victoria Centre and the National Research Council (NRC) are pleased to announce a Licence to Use Land Agreement which provides members of the Victoria Centre expanded access to NRC property on Observatory Hill, including access during times which are outside the normal operating hours of the Centre of the Universe Interpretation Centre. Members in good standing of RASC Victoria Centre who consider themselves an "active observer" qualify for observing from this excellent site. Observatory Hill is located within a 15 minute drive from most suburban areas of Greater Victoria, and yet offers magnitude 4.0 to 4.5 skies under favorable conditions. Victoria Centre Council is excited by the expanded observing opportunities this Agreement provides for members, and looks forward to further enhancing our long-standing working relationship with the National Research Council and the Centre of the Universe.

# The Victoria Center Hosts Numerous Outreach Programs

The School Telescopes Program provides an opportunity for school age children to look through a telescope and enjoy the wonders of the night sky by providing access to telescopes, classroom presentations and night sky viewing sessions. The program continues with great success under the leadership of Sid Sidhu with the assistance of the Centre's dedicated volunteers and students from Pearson College. This year the center purchased a Solar Max telescope, a welcome addition that has helped the program reach 800 children in 25 schools. Public Observing at the Centre of the Universe included Saturday Star Parties from April through October, Stargazer Sundays in July and August, Holiday Star parties and special events such as Astronomy day and Mars Madness. Dedicated Victoria Centre volunteers joined the staff

and shared their telescopes and knowledge of the stars.

At **Lester B. Pearson College** of the Pacific, Bill Weir maintains the long established link between the Victoria

Centre and the schools astronomy program. The program focuses on viewing skills, the uses of astronomical telescopes, imaging and learning about the night sky. All RASC members are welcome at any time to use the schools observatory facilities. By taking to the sidewalks around Victoria, the Sidewalk Astronomy program, with Blaire Pellatt and RASC Victoria members, brings the opportunity for celestial observing to the public. Astronomy Day in Victoria was celebrated at The Royal BC Museum on April 16 with daytime activities including telescope making, an astrophotography workshop, a solar system scale model, star lab planetarium, ask an astronomer booth, solar observing, children's activities including story telling by the Wizard of the Stars, and multimedia and static presentations. In the evening, the public was invited to the Dominion Astrophysical Observatory Centre of the Universe Interpretation Centre for night sky viewing, 1,500 people attended this year's event which was organized by Sid Sidhu and ran smoothly due in large part to Sid's efforts and the 70 new and returning members who volunteered their time and equipment. On several occasions this past year, the Victoria Centre President Scott Mair was a guest on local Radio stations bringing astronomy and the night sky to the public.

#### **Committees**

Light Pollution Abatement Committee. The Victoria Centre was contacted by a representative from the H. R. MacMillan Space Centre in Vancouver who was looking for interest in participating through an initiative to bring the issue of light pollution to the media in Vancouver and Victoria.

**Membership Committee.** 191 members were registered as of the end of September 2005. 128 of these members have taken advantage of the Skynews email notification list and now receive an electronic version of their newsletter.

The RASC Victoria Centre **Library** is run and maintained by Sid Sidhu, and is available for the benefit of Centre members. A program was initiated this year to review and assess the level of interest and relevance to the

Centre's readers of some of the older books in the collection.

Many new books have been graciously donated this

year by Centre members and our readers have been asked to give a brief review of the new books at the general meetings.

#### Equipment. The centre

is proud to add a Data Projector, Astrovid Camera and two telescopes to the collection. A new Solar Max telescope, mentioned earlier, and a Truss Dob telescope rebuilt by reusing an existing 20 inch mirror. Members in good standing may borrow the tele

scopes owned by the Centre, but it has been noticed that those who borrow are often seen volunteering for the school programs as well!

#### **Awards**

Sandy Barta.

Several awards were presented at the Annual Christmas Dinner and General Meeting held in November.

The Newton-Ball Award was named for Jack Newton and George Ball for their outstanding service to the Centre. The award recognizes a member for his or her personal dedication to activities past or present that have benefited all members of the Victoria Centre. The Ernie Pfannenschmidt Annual Award for Amateur Telescope Making was presented to Guy Walton for his contributions in rebuilding the Truss Dob. This year the Newton Ball Award was presented to

The RASC Victoria Centre **Award for Astrophotogra- phy** was introduced last year. This year certificates were presented to Joe Carr for Planetary Imaging, to David Lee for Wide Field Imaging, to John McDonald for Wide Field Deep Space, to Don and Elizabeth van Akker for Deep Space Imaging and to Bill Weir for Astronomical observations and sketching.

The **UVic Astronomy Student Award** originally a book award is now gift certificate for a University of Victoria student. The award went to Christopher Avis.

Certificates of Appreciation for Victoria Centre members who volunteered for the many events, committees and programs that made this year a success. This year certificates were presented to: Jacklyn Porter, Kevin Ferris and Jim Hesser for their continuing support of the RASC Observers and the development of the License to Use Land Agreement; to mark Wheen for his support at the Pearson College observing site; to Frank Ogonoski for his continued support at the RASCAL's Star Party; and to Sid Sidhu for maintaining the Centre's Telescope Equipment Program and managing our BC Gaming

Funds applications.

Meeting Schedule for 2005

**Jan 12:** Hunting for Moons - solar system irregulars - Dr. JJ Kavelaars, Herzberg Institute of Astrophysics, DAO

**Feb. 9:** Planetary Nebulae - Gail Conway, Malaspina College

**Mar 9:** Cassini at Saturn - by Constantine Thomas, Planetary Scientist, IOS

**Apr 13:** Super-massive Black Holes & Galaxies - by Laura Ferrarese, HIA-HST

**May 11:** Looking at the Dark Side of the Universe - by Henk Hoekstra, UVic Astronomy.

Jun. 8: Members Night

**Sept. 14:** Debris Disks around Main Sequence Stars - Dr. Brenda Matthews, NRC-HIA

**Oct. 12:** Imaging Cosmic Origins: ALMA - Oct. 12, 2005 - Dr. James Di Francesco, NRC-HIA

Nov. 19: Annual General meeting

**Dec 14:** Audio-Video Presentation on Mars - Pal Virag, RASC Victoria Centre.

**Li-Ann Skibo** Secretary

**RASC Victoria Centre** 



#### **WINDSOR CENTRE 2005**

For the Windsor Centre 2005 was another very good year. Despite the snow on April 24, we still put on a public display in connection with Earth Day at Ojibway Park. On November 12, Dan Taylor hosted a Mars Mania party at his home in Essex County, where the members who attended were still able to observe the red planet despite the clouds. Dan had hosted an observing session to view Mars near the time of its previous opposition in 2003.

Randy Groundwater and Rod Clark, for a number of years, have regularly written good quality astronomy articles for the *Windsor Star* and the *Tecumseh Tribune*, respectivetly, and continue to do so. A fine "Thank you" goes to Steve Mastellotto for his continuing work as President of our Centre.

Genuine appreciation is expressed to the members who spoke at the membership meetings, people who gave educational presentations to the public, and also to various individuals who continued to work to make improvements to the Hallam Observatory. The Windsor Centre held nine membership meetings, two council meetings, two socials, one observing social, and one public display.

Membership meetings were as follows:

January 18: Dave Panton "Building a Foucault Pen-

dulum" and Steve Pellarin "Starfest"

February 15: Dr. Pierre Boulos, Dept. of Computer

Science, University of Windsor "The 100<sup>th</sup> Anniversary of Albert Einstein's

'Miracle Year' "

March 15: Juliana Grigorescu "The Magic of Col-

our in Spectroscopy"

April 19: Dr. William Baylis, Department of Phys-

ics, University of Windsor "Albert Einstein and His Remarkable Work"

May 17: Dan Taylor "What Light Pollution Has

Done to You and What You Can Do to

It"

**June 21**: Randy Groundwater "Observing the

Moon"

September 20: Steve Pellarin "The Cassini Mission to

Saturn"

October 18: Paul Preney "Stellarium"

November 15: Steve Pellarin 'The Cassini Mission to

Saturn Continued"

C. Joady Ulrich Secretary

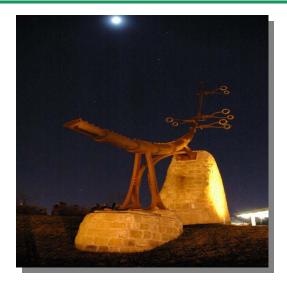


#### Summary of Club Activities in 2005

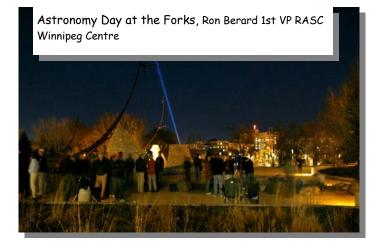
The Winnipeg Centre enjoyed another successful year with a stable membership, wide-ranging meeting topics, several star-parties, and a number of public outings. In May the Centre participated in Pi Kinewabum Anonguk (Come, Look at the Stars!) at the invitation of the Rolling River First Nation. The meeting featured speakers from the University of Manitoba, rocket launches, "First Nation Astronomy", star parties with RASC telescopes, drum dances and a traditional supper. RASC participation was organized by Ron Berard. Winnipeg Centre President Lindsay Price took along the Starlab Mobile Planetarium owned by the Manitoba Museum of Man and Nature.

In fall, the Spruce Woods Star Party, organized in cooperation with the WestMan Astronomy Club, was a great success, with very good skies for a part of the weekend. Centre members also put on a good show at the South Saskatchewan Star Party. A small representation was made at StarFest, but Manitoba members seldom travel eastward into cloudier climates to attend local star parties. There was excellent attendance at the Sixth Arizona deep sky expedition in the spring, with side trips to the various physical attractions between Winnipeg and Tucson. Two members managed to make it a non-stop trip – 42 hours on the road. Closer to home, the popular observing sites known as "The Pit" and "Dukes of Hazard Road" managed to get considerable use. On occasion club members journeyed to the Pembina Hills, 80 minutes away, to enjoy a high altitude – 450 m above sea level – view of the night sky. The Centre picnic in June at the observatory was rained out and so an alternative venue in the city was selected at the last moment. The Christmas Party, held in mid-January, was also a popular hit, especially with the Santa band on the mantelpiece. In October the Centre hosted what is gradually turning into an annual event - the Bird's Hill

Public Star Party. The skies were excellent and the turnout was impressive as several hundred people gathered north of Winnipeg to take in the autumn skies.



Siting armatures for naked eye astronomy. They are a feature of the Oodena circle where we hold many of our public observing events -Picture taken by Ron Berard 1st VP RASC Winnipeg Centre



Astronomy Day was well-attended public event again this year, with the Centre assembling at one of the city's largest malls. In between the bargains at Zellers, shoppers were able to sneak a peek at the virtually spotless Sun. For those more determined, a night-time observing session was provided. There were two public outings at the Forks – Winnipeg's most popular tourist location – where the brilliance of city lights challenged the glow of Mars. The Planetarium at the Museum of Man and Nature was a co-sponsor of MarsWatch in the fall.

The Winnipeg Centre's Glenlea Observatory managed to survive another year without submitting to the waters of the Red River. It has not been flooded since 1997. There are faint hopes that we may yet see a dike built around the site. High-speed internet has arrived however and members hope to take advantage of this in 2006. The Centre's supply of loaner telescopes has crept upward to 14 instruments thanks to a few generous donations. Members may borrow the 'scopes without charge.

Respectfully submitted

Jay Anderson Secretary Winnipeg Centre, RASC



Picture by Ron Berard of Observing at the Winnipeg Observatory



Astronomy Day at the Forks in Winnipeg, Gail Wise On hand to help out- picture by Ron Berard

# CENTRETREASURERS'REPORTSFORFISCALYEAR - 2005

		Belleville	Calgary	Charlottetown	Edmonton	Halifax	Hamilton	Kingston	Kitchener- Waterloo
REVENUE	Ε								
Membershi	p Membership fees- regular	928	5,457	400	2,771	3,145	1,568	2,400	2,598
	Membership fees - youth		265	26			100		
	Membership fees - basic surcharg	e	35				1,008	575	1,210
	Membership fees - special surchar	ge/Associates					30	15	
	Life membership grants		360		220	500	60	180	100
Donations/I	Fundraising Donations			75		735	242	269	85
	Fundraising/Sponsorships/Grants		791	397			918	9,465	389
Educational			479				85	2,245	
	Dividends		278		11	46		582	
Publication						0.40			
	Sale of Observer's Handbooks	100	1260	220	220	849	15	90	52
	Sale of Observer's Calendars	180	1260	220	230	1151	165	1,090	52
	Sale of Beginner's Observing Guid	ies				384	20	40	
C1i4i-	Other Publication Sales				52	60	20	16	
Subscriptio	ns Astronomy/Sky & Telescope ma	gazine			52			209	
Decelor-4 C 1	Other		600	(2		0.4	10	71	
rroduct Sal	es RASC promo items	10	680	63		84	10	71	
A divortisis -	Other items	10		120		285			
Advertising General As		ncluding trave	l grants	130					
Events	Star Parties	698	_			4059		1 020	
LVEIRS	Annual Dinner	098	3,148 1,705			4039	1,578	1,830 1,085	
Obcorvator	y site or equipment rentals/loans		716		500	336	1,376	2,025	
Miscellaneo			3,810		380	330	2,066	2,023	
TOTAL R	EVENUE	1,816	21,458	1,311	4,164	11298	8,201	20,162	6,459
		Belleville	Calgary	Charlottetown	Edmonton	Halifax	Hamilton	Kingston	Kitchener- Waterloo
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	s Newsletter		4,039		4,216	1069	122		
i uoncanon	Observer's Handbook		536		4,210	696	15		
	BOG		330						
	()hcerver's ('alendar	135	3 380	271	1 130	334	170	444	
	Observer's Calendar Other Publications	135	3,380	271	1,130	334 1085		444 1,088	
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Events	Other Publications Meetings Star Parties	50 92	1,225			334 1085 51	170 32	444 1,088 32 1,607	477
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Office Adm General Ex Educational Insurance Awards and Observatory Depreciation Miscellance	Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events penses RASC promo items Other items General Assembly and Council Me Speaker Travel Assistance and Supplies inistration penses and Audit I Activities I Donations y and Site Expenses on DUS  EXPENDITURES	50 92 210 770 53 seetings 150 5 5 133	1,225 2,428 2,827 150 755 1,594 2,452 177 1,760 6,250 27,573	64 546 211 450 200	207 66 294 278 500 10,184 708 3,153 531 10,183	334 1085 51 337 5605 44 13 155 25 114 1316 192 760	170 32 160 1,229 79 281 12,876 106 1,473 2,965 18	1,607 1,387 63 151 434 272 351 10,857 660 1,439	31 549 1,234 2,291
Product Exp Advertising Travel Equipment Office Adm General Exp Educational Insurance Awards and Observatory Depreciation Miscellance	Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events penses RASC promo items Other items General Assembly and Council Me Speaker Travel Assistance and Supplies inistration penses and Audit I Activities I Donations y and Site Expenses in Dus  EXPENDITURES OR (DEFICIT) ON OPERATIONS (A)	50 92 210 770 53 seetings 150 5 5 133	1,225 2,428 2,827 150 755 1,594 2,452 177 1,760 6,250 27,573	64 546 211 450	207 66 294 278 500 10,184 708 3,153 531 10,183	334 1085 51 337 5605 44 13 155 25 114 1316 192 760	170 32 160 1,229 79 281 12,876 106 1,473 2,965	1,088 32 1,607 1,387 63 151 434 272 351 10,857 660 1,439	31 549 1,234 2,291 4,168
Product Exp Advertising Travel Equipment Office Adm General Exp Educational Insurance Awards and Observatory Depreciation Miscellance	Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events penses RASC promo items Other items (Seneral Assembly and Council Messpeaker Travel Assistance and Supplies inistration penses and Audit I Activities Il Donations y and Site Expenses on DUS  EXPENDITURES OR (DEFICIT) ON OPERATIONS (A) Liquid Assets	50 92 210 770 53 seetings 150 5 5 133	1,225 2,428 2,827 150 755 1,594 2,452 177 1,760 6,250 27,573	64 546 211 450 200	207 66 294 278 500 10,184 708 3,153 531 10,183	334 1085 51 337 5605 44 13 155 25 114 1316 192 760 11,796	170 32 160 1,229 79 281 12,876 106 1,473 2,965 18	1,607 1,387 63 151 434 272 351 10,857 660 1,439	2,291 4,168 7,600
Product Exp Advertising Travel Equipment Office Adm General Ex Educational Insurance Awards and Observatory Depreciation Miscellance	Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events penses RASC promo items Other items General Assembly and Council Me Speaker Travel Assistance and Supplies inistration penses and Audit I Activities I Donations y and Site Expenses in Dus  EXPENDITURES OR (DEFICIT) ON OPERATIONS (A)	50 92 210 770 53 seetings 150 5 5 133	1,225 2,428 2,827 150 755 1,594 2,452 177 1,760 6,250 27,573	64 546 211 450 200	207 66 294 278 500 10,184 708 3,153 531 10,183	334 1085 51 337 5605 44 13 155 25 114 1316 192 760	170 32 160 1,229 79 281 12,876 106 1,473 2,965 18	1,088 32 1,607 1,387 63 151 434 272 351 10,857 660 1,439	31 549 1,234 2,291 4,168

# CENTRETREASURERS'REPORTSFORFISCALYEAR - 2005

	London	Moncton	C. F. D Montréa		Niagara	Okanagan	Ottawa	Prince George	Quebec
REVENUE									
Membership Membership fees - re Membership fees - youth	egular 2,431	1543	2877	1,889	2314 52	1,777 14	7,247	1,608	1,016 16
Membership fees - basic surcharg				1,397	402 179	280			971
Membership fees - special surchar Life membership grants	ige/Associates	20		240	60	40	820		100
Donations/Fundraising Donations	100		565	72	992	25	745	1,029	
Fundraising/Sponsorships/Grants Educational/Activities	371	744			348			23,500 783	
Interest and Dividends	133			890	112	2	254	1	
Publication Sales Sale of Observer's Ha	andbooks	40			17				
Sale of Observer's Calendars Sale of Beginner's Observing Gui	dos	735		235	482 58	508 30	1,840	432	261
Other Publication Sales	835	75			27	30			
Subscriptions Astronomy/Sky & Telesco	pe magazine			1187					
Other Product Sales RASC promo items		323			234			982	
Other items		56 56	351		150	321			
Advertising			270						
General Assembly General Assembly - i Events Star Parties	including trav	el grants				1632			
Annual Dinner	900	200			2820		2,250		
Observatory site or equipment rentals/loans	241			150	210	280	857		
Miscellaneous			56	280	257	42,795	300	1,145	26
TOTAL REVENUE	5,011	3,736	4,119	5,153	9,901	47,704	14,313	29,480	2,390
_	London	Moncton	C. F. De Montréal	Montreal	Niagara	Okanagan	Ottawa	Prince George	Quebec
Library Publications Newsletter Observer's Handbook	322	348	206 421	636	17 225	23	3,499	218	
BOG				130					
Observer's Calendar Other Publications		633 45		540	391 153	316	1,582	76	244 102
Events Meetings	241	43			248		255		16
Star Parties		• • • •			****				129
Annual Dinner Astronomy Day	900	293			2366		2,302 79	165	
Other Events				932			,,		
Product Expenses RASC promo items		552	47		353			70	
Other items Advertising		20	47					70	
Travel General Assembly and Council M Speaker Travel Assistance	leetings	240 65				168 55	514		165
Equipment and Supplies		39		1,546	64	1115	314	3,586	103
						392	1,186	160	799
Office Administration		139	2430	273	237		1,100		
Office Administration General Expenses and Audit		45	2430	273	237 15	135	1,100	2,020	
Office Administration			2430 706	273					
Office Administration General Expenses and Audit Educational Activities Insurance Awards and Donations		45	706	273	15	135	3,319	1,738	
Office Administration General Expenses and Audit Educational Activities Insurance Awards and Donations Observatory and Site Expenses	4,010	45 99 343	706 172	273		135	3,319 1,833		460
Office Administration General Expenses and Audit Educational Activities Insurance Awards and Donations	4,010	45 99	706	273	15	135	3,319	1,738	460 85
Office Administration General Expenses and Audit Educational Activities Insurance Awards and Donations Observatory and Site Expenses Depreciation	4,010 5,473	45 99 343 888	706 172 5,253	9,689	15	135 39	3,319 1,833 10,514	1,738 1,213	
Office Administration General Expenses and Audit Educational Activities Insurance Awards and Donations Observatory and Site Expenses Depreciation Miscellaneous	5,473	45 99 343 888 35	706 172 5,253 379 4,870		15 1147 1,751	135 39 40,709	3,319 1,833 10,514 111	1,738 1,213 527	85
Office Administration General Expenses and Audit Educational Activities Insurance Awards and Donations Observatory and Site Expenses Depreciation Miscellaneous  TOTAL EXPENDITURES	5,473	45 99 343 888 35 2,896	706 172 5,253 379 4,870 -751 3,837	9,689 -4,536 69,308	1147 1,751 6,967	135 39 40,709 42,952	3,319 1,833 10,514 111 25,194	1,738 1,213 527 9,773	2,000

Note: Capital assets were not available for some Centres

# CENTRETREASURERS'REPORTSFORFISCALYEAR - 2005

		Regina	St. Joh	n's Sarı	nia Saskatoo	Thunder B	ay Toronto	Vancouver	Victoria	Windsor	Winnipeg
REVENUI	E										
Membersh	ip Membership fees - regular	846	8	85 67	1 2,042	724	14,805	4796	4039	1672	2,752
	Membership fees - youth	25			,		239	157			
	Membership fees - basic surcharge							911			73
	Membership fees - special surchar		iates 1	90			645				
	Life membership grants	80				20	1700	340		60	60
Donations/	Fundraising Donations	1434		50	51	110	6,903	5200		437	340
	Fundraising/Sponsorships/Grants	4802			2,180		14699	1160	5500		
	al/Activities		5	70	434		2420	4.50	80	910	
	d Dividends	1.5			225		2027	158		4	42
Publication	n Sales Sale of Observer's Handbook			111	0 1010	220	39	145	105	15	1.250
	Sale of Observer's Calendars	58	4	15 6	0 1,049	330	3368	867	195	502	1,350
	Sale of Beginner's Observing Guid	ies		10		60		130	218	48	
C 1	Other Publication Sales			18			1246	21	15	80	
Subscriptio	ons Astronomy/Sky & Telescope n Other	nagazine					1346	21			
Product Sa	ales RASC promo items	409					6168	250	15		
	Other items							44	16	1135	
Advertisin											
General As	ssembly General Assembly - includ	ling trave	l grants								
Events	Star Parties	260			10,709				790		
Ol '	Annual Dinner	360					2.000	400	1404	1000	
Observator Miscellane	ry site or equipment rentals/loans eous			3			3680	400 91		1220 403	
TOTAL R	EVENUE	8,190	2,242	731	16,690	1,244	58,039	14,670	12,423	6,486	4,617
							-				
		Regina	St. John's	Sarnia	Saskatoon	Thunder Bay	Toronto	Vancouver	Victoria	Windsor	Winnipe
	TURES	162				280		275	272	157	
Library		162				289	4202	275	273	157	1 209
Library	ns Newsletter		120			289 352	4303	878	273 712	157	1,30
Library	ns Newsletter Observer's Handbook	162 15	130			352	4303	878 150	712	157	1,30
Library	ns Newsletter Observer's Handbook BOG	15		100	997	352 67		878 150 152			
Library	ns Newsletter Observer's Handbook BOG Observer's Calendar	15 162	220	109	887	352	4303 1605	878 150	712 334	157 523	
Library Publication	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications	15 162 19			887	352 67 508	1605	878 150 152 710	712 334 80	523	904
Library Publication	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings	15 162	220 18	109 50		352 67		878 150 152	712 334 80 17		904
Library Publication	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties	15 162 19 77	220		887 9,915	352 67 508	1605	878 150 152 710	712 334 80 17 777	523 986	904
Library Publication	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner	15 162 19	220 18			352 67 508 60	1605	878 150 152 710 482	712 334 80 17 777 2007	523 986 306	904
Library Publication	observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day	15 162 19 77 568	220 18 157	50		352 67 508	1605	878 150 152 710	712 334 80 17 777	523 986	904
Library Publication Events	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events	15 162 19 77 568 117	220 18			352 67 508 60	1605 4287	878 150 152 710 482	712 334 80 17 777 2007 716	523 986 306	904
Library Publication Events	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items	15 162 19 77 568 117 408	220 18 157	50		352 67 508 60	1605	878 150 152 710 482 436 260	712 334 80 17 777 2007 716 24	523 986 306	904
Library Publication Events Product Ex	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items	15 162 19 77 568 117	220 18 157	50		352 67 508 60	1605 4287	878 150 152 710 482	712 334 80 17 777 2007 716	523 986 306	904
Library Publication Events Product Ex Advertisin	observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events openses RASC promo items Other items g	15 162 19 77 568 117 408 2424	220 18 157	50		352 67 508 60	1605 4287	878 150 152 710 482 436 260 35	712 334 80 17 777 2007 716 24	523 986 306	904
Library Publication Events Product Ex	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items General Assembly and Council M	15 162 19 77 568 117 408 2424 eetings	220 18 157 187	50 32		352 67 508 60	1605 4287	878 150 152 710 482 436 260	712 334 80 17 777 2007 716 24 182	523 986 306	904
Library Publication Events Product Ex Advertisin	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items g General Assembly and Council M Speaker Travel Assistance	15 162 19 77 568 117 408 2424 eetings 115	220 18 157 187	50		352 67 508 60	1605 4287	878 150 152 710 482 436 260 35	712 334 80 17 777 2007 716 24 182	523 986 306	904
Library Publication Events Product Ex Advertisin Fravel Equipment	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events epenses RASC promo items Other items g General Assembly and Council M Speaker Travel Assistance t and Supplies	15 162 19 77 568 117 408 2424 eetings 115 956	220 18 157 187	50 32 55	9,915	352 67 508 60 120	1605 4287 5490	878 150 152 710 482 436 260 35	712 334 80 17 777 2007 716 24 182	523 986 306 50	902 260
Library Publication Events  Product Ex Advertisin Fravel Equipment Office Adr	observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items  General Assembly and Council M Speaker Travel Assistance t and Supplies ministration	15 162 19 77 568 117 408 2424 eetings 115 956 1068	220 18 157 187	50 32		352 67 508 60 120	1605 4287	878 150 152 710 482 436 260 35 939	712 334 80 17 777 2007 716 24 182 100 5738	523 986 306 50	902 260 3,47 105
Library Publication Events  Product Ex Advertisin Fravel Equipment Office Adr General Ex	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items  General Assembly and Council M Speaker Travel Assistance t and Supplies ministration spenses and Audit	15 162 19 77 568 117 408 2424 eetings 115 956	220 18 157 187	50 32 55	9,915	352 67 508 60 120	1605 4287 5490	878 150 152 710 482 436 260 35	712 334 80 17 777 2007 716 24 182 100 5738 1162	523 986 306 50	902 260 3,47 105
Library Publication Events  Product Ex Advertisin Travel  Equipment Office Adr General Ex Educations	observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items  General Assembly and Council M Speaker Travel Assistance t and Supplies ministration	15 162 19 77 568 117 408 2424 eetings 115 956 1068 132	220 18 157 187	50 32 55	9,915	352 67 508 60 120	1605 4287 5490	878 150 152 710 482 436 260 35 939	712 334 80 17 777 2007 716 24 182 100 5738	523 986 306 50 295 213	90 <sup>2</sup> 260 3,47 100 13
Library Publication Product Ex Advertisin Fravel Equipment Office Adr General Ex Educations Insurance	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items  General Assembly and Council M Speaker Travel Assistance t and Supplies ministration spenses and Audit al Activities	15 162 19 77 568 117 408 2424 eetings 115 956 1068 132 436	220 18 157 187 140 1,090	50 32 55	9,915	352 67 508 60 120 54 10 535	1605 4287 5490	878 150 152 710 482 436 260 35 939	712 334 80 17 777 2007 716 24 182 100 5738 1162 76	523 986 306 50	90 <sup>2</sup> 260 3,47: 105 13
Library Publication Product Ex Advertisin Fravel Equipment Office Adr General Ex Educationa Insurance Awards an	ns Newsletter Observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items  General Assembly and Council M Speaker Travel Assistance t and Supplies ministration spenses and Audit al Activities d Donations	15 162 19 77 568 117 408 2424 eetings 115 956 1068 132 436 48	220 18 157 187	50 32 55	9,915 227 632	352 67 508 60 120	1605 4287 5490 5384	878 150 152 710 482 436 260 35 939 114 1975	712 334 80 17 777 2007 716 24 182 100 5738 1162	523 986 306 50 295 213 1393	90 <sup>2</sup> 260 3,47 100 12 930
Events  Product Ex Advertisin Fravel  Equipment Office Adr General Ex Educations nsurance Awards an Observator	observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items General Assembly and Council M Speaker Travel Assistance t and Supplies ministration spenses and Audit al Activities d Donations ry and Site Expenses	15 162 19 77 568 117 408 2424 eetings 115 956 1068 132 436	220 18 157 187 140 1,090	50 32 55	9,915 227 632 1,870	352 67 508 60 120 54 10 535	1605 4287 5490 5384	878 150 152 710 482 436 260 35 939 114 1975	712 334 80 17 777 2007 716 24 182 100 5738 1162 76	523 986 306 50 295 213	90 <sup>2</sup> 260 3,47 100 12 930
Library Publication Product Ex Advertisin Fravel Equipment Office Adr General Ex Educationa Insurance Auvards an Observation Depreciation	observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items General Assembly and Council M Speaker Travel Assistance t and Supplies ministration spenses and Audit al Activities d Donations ry and Site Expenses on	15 162 19 77 568 117 408 2424 eetings 115 956 1068 132 436 48	220 18 157 187 140 1,090	50 32 55	9,915 227 632	352 67 508 60 120 54 10 535	1605 4287 5490 5384	878 150 152 710 482 436 260 35 939 114 1975	712 334 80 17 777 2007 716 24 182 100 5738 1162 76	523 986 306 50 295 213 1393	90 <sup>2</sup> 260 3,477 105 12 933 250
Library Publication Product Ex Advertisin Fravel Equipment Office Adr General Ex Educationa Insurance Awards an Observator Depreciati Miscellane	observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items General Assembly and Council M Speaker Travel Assistance t and Supplies ministration spenses and Audit al Activities d Donations ry and Site Expenses on	15 162 19 77 568 117 408 2424 eetings 115 956 1068 132 436 48 1183	220 18 157 187 140 1,090	50 32 55	9,915 227 632 1,870 512	54 10 535 51 50	1605 4287 5490 5384	878 150 152 710 482 436 260 35 939 114 1975	712 334 80 17 777 2007 716 24 182 100 5738 1162 76	523 986 306 50 295 213 1393 978	902 260 3,47: 105 13 930 250
Events  Product Ex Advertisin, Travel  Equipment Office Adr General Ex Educations Insurance Awards an Observator Depreciation Miscellane TOTAL E	observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items  General Assembly and Council M Speaker Travel Assistance and Supplies ministration spenses and Audit al Activities d Donations ry and Site Expenses on cous	15 162 19 77 568 117 408 2424 eetings 115 956 1068 132 436 48 1183 13	220 18 157 187 140 1,090 250 76	50 32 55 3	9,915 227 632 1,870 512 294	54 10 535 51 50	1605 4287 5490 5384 16192 14685	878 150 152 710 482 436 260 35 939 114 1975	712 334 80 17 777 2007 716 24 182 100 5738 1162 76 816	523 986 306 50 295 213 1393 978 50	904 260 3,472 105 13 930 250 144 7,386
Library Publication Publication Events  Product Ex Advertisin, Travel Equipment Office Adr General Ex Educationa Insurance Awards an Observator Depreciation Miscellane TOTAL E	observer's Handbook BOG Observer's Calendar Other Publications Meetings Star Parties Annual Dinner Astronomy Day Other Events spenses RASC promo items Other items General Assembly and Council M Speaker Travel Assistance and Supplies ministration spenses and Audit al Activities d Donations ry and Site Expenses on cous  CXPENDITURES  OR (DEFICIT) ON OPERATIONS (A)	15 162 19 77 568 117 408 2424 eetings 115 956 1068 132 436 48 1183 13	220 18 157 187 140 1,090 250 76	50 32 55 3	9,915 227 632 1,870 512 294 14,882	352 67 508 60 120 54 10 535 51 50 1,551	1605 4287 5490 5384 16192 14685	878 150 152 710 482 436 260 35 939 114 1975 5602 1000 8	712 334 80 17 777 2007 716 24 182 100 5738 1162 76 816	523 986 306 50 295 213 1393 978 50 4,738	1,308 904 260 3,47; 105 13 930 250 144 7,386 -2,769

Note: Capital assets were not available for some Centres

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c/o Greg Lisk 11 Robert Dr

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Victor Grimble
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Les Nagy
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**Committee Chairs** 

Astronomy Day: Hank Bartlett
Banquet (Social): Diane Torney
Education: Brian Stengele

KAON (Public Observing): Kevin Kell

Little Cataraqui

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Glen Pidsadnick Stan Sammy Joyce Sims

Web Master: Jim Holiko

Kuhn

Editor: Deloris Welgan
Publisher: Deloris Welgan
Librarian: Darlene Slogget
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Paul Harrison

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Public Outreach:
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Doug George

Gary Boyle

Alain Beaudoin

Art and Anne Fraser

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Telescope maintenance

ProD Day:

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Members at Large:

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Computers, building Glen Harris

communication wiring

Janitorial Maintenance Charles Smith
Building Maintenance Jim Arnold
Web Master and Brian Battersby

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Jim Toews Doug Wayland John Ascah

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www.sji.ca/ra rasc@sji.ca

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Li-Ann Skibo
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Members at Large:

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

Rapport annuel 2005 Annual Report

#### **2005 Award Winners**

Service Award J. Randy Attwood (Toronto),

Dr. Robert Garrison (Toronto)

Chant Medal (not awarded)
Ken Chilton Prize Attila Danko (Ottawa)

The Plaskett Medal Christian Marois (Université de Montréal)

Simon Newcomb Award (not awarded)

#### **Messier Certificate**

Chris Anderson (Regina)
David Player (Okanagan)
Dean Huxley (Calgary)
Denis Grey (Toronto)
Derek J. Lapointe (Moncton)
Edward Hitchcock (Toronto)
Graham Budd (Edmonton)
Jack Milliken (Calgary)

John J. Brooks (Kingston) Lynn Chetwynd (Toronto) Michael McAllister (Toronto) Paul R. Sheppard (Ottawa) Randy Attwood (Toronto) Robert Johnson (Saskatoon) Stephen Keefer (Toronto) Steven Swiryn (Unattached)

#### **NGC Certificate**

Alden Foraie (Regina) Brian White (Hamilton) Charles Doucet (Moncton) James Jackson (Vancouver) Michael Hanes (London) Norm Leier (Regina) Ray Drouillard (Windsor) Richard Weatherston (Sarnia) Robert Burbank (Toronto) Sherry Campbell (Edmonton) Ted Dunphy (Moncton)

#### **Explore the Universe Certificate**

Brian Hollander (Kitchener-Waterloo)
Carl Roussell (Hamilton)
David Roeder (Kingston)
Glen Harris (Prince George)
Greg Dean (Okanagan)
Hugh Kennedy (Prince George)
Jeremy Booth (Corbel, ON)
Jim Arnold (Prince George)
Jnani Cevvel (Edmonton)
Keith Johnstone (Calgary)
Maryanne Weiler (Kitchener-Waterloo)
Stéphane Meloche (Sherbrooke, QC)
Terry Leeder (Toronto)

Below is a list of former winners of the Chant Medal, Ken Chilton Prize, Plaskett Medal, Service Award, and Simon Newcomb Award.

For names before 1990, please refer to "Looking Up – A History of the RASC" by Peter Broughton.

#### **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. The 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 carried



out in astronomy and closely allied fields of original investigation.

1993 Mary Lou Whitehorne (Halifax)

1995 Paul Boltwood (Ottawa)

1996 David Lane (Halifax)

1998 Bertus (Bert) Rhebergen (Hamilton)

2001 Richard Huziak (Saskatoon) 2002 Dr. Roy Bishop (Halifax)

#### **Ken Chilton Prize**

The Chilton Prize was established in 1977 by the National Council of the Society in remembrance of Ken 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 recently.



1990 Doug George (Ottawa)

1995 Paul Gray (Halifax), David Lane (Halifax)

1996 Raymond Thompson (Toronto)

1997 Heather T. Cameron (Halifax)

2001 Michael Boschat (Halifax)

2002 Vance Petriew (Regina)

2003 Doug George (Ottawa), Peter Ceravolo (Ottawa),

Paul Boltwood (Ottawa), Jon Buchanan (Ottawa), Glenn

LeDrew (Ottawa)

2005 Attila Danko (Ottawa)

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

Rapport annuel 2005 Annual Report

#### **The Plaskett Medal**

The Royal Astronomical Society of Canada and the Canadian Astronomical Society together present an award in recognition of the pivotal role played by John Stanley Plaskett in the establishment of astrophysical research in Canada. The award is made to the graduate from a Canadian university who is judged to have submitted the most outstanding doctoral thesis in astronomy and astrophysics in the preceding two calendar years. An award need not be made every year.



1991 Paul Charbonneau (Montréal) 1992 Eric Poisson (Alberta)

1993 Pierre Brassard (Montréal)

1994 Grant Hill (Montreal)

1995 Michael Richer (York)

1996 Gordon Squires (Toronto) 1997 Alain Beauchamp (Montreal)

1998 Dean McLaughlin (McMaster)

1999 Stéphane Charpinet (Montréal) 2000 Alexei Razoumov

(British Columbia)

2001 Peter Brown (Western)

2002 Edward W. Thommes (Queen's)

2003 Tracy Webb (Toronto) 2004 Jo-Anne C. Brown (Toronto)

2005 Christian Marois

(Université de Montréal)

#### **Service Award**

The Service Award was established in 1959 and takes the form of a bronze medal presented to members who have performed outstanding service to a Centre or to the National Society. Below is a list of recent winners of the Service Award.



1990 Mary Grey (Ottawa)\*

1991 Don Hladiuk (Calgary), Ian McGregor (Toronto)

1992 Jean-Marie Frechette (Quebec), Michael Watson (Unattached, Canada)

1993 Eric Clinton (London), David Tindall (Halifax)

1994 Randy Dodge (St. John's), Garry Dymond (St. John's), Mel Rankin (Edmonton)

1995 Ron Gasbarini (Niagara), Patrick Kelly (Halifax)

1996 Sidney Lee (Calgary)\*, Robert Venor (Montreal)\*, Abbe Alphonse Tardif (Quebec)

1998 David Lane (Halifax), Roger Hill (Hamilton), Sandy Ferguson (Saskatoon)

1999 John Mirtle (Calgary), Ralph Chou (Toronto)

2000 Phil Johnson (Calgary)

2001 John Rousom (London), David G. Turner (Halifax)

2002 (Not awarded)

2003 David McCarter (London)

2004 David Clark (London), Jim Failes (Okanagan Centre), Art Fraser (Ottawa Centre), Guy Nason (Toronto Centre), Stan Runge (Winnipeg Centre)

2005 J. Randy Attwood (Toronto), Dr. Robert Garrison (Toronto)

#### General Assemblies – 1990 to 2005

#### The following Centres hosted the General Assembly from 1990 to 2005:

1990 Ottawa 1996 Edmonton 2002 Montreal 1991 Vancouver 1997 Kingston 2003 Vancouver 1998 Victoria 1992 Calgary 2004 St. John's 1993 Halifax 1999 Toronto 2005 Okanagan

1994 St. John's 2000 Winnipeg 1995 Windsor 2001 London

#### Simon Newcomb Award

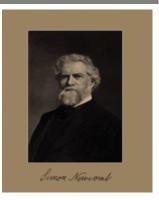
This award was instituted in 1978 to recognize literary ability among non-professional members of the society.

1994 Michael S.F. Watson (Unattached, Canada)

1999 Terence Dickinson (Toronto) 2001 Dan Falk (Toronto)

2002 David Levy (Kingston)

2003 Alister Ling (Edmonton) 2004 Mary Lou Whitehorne (Halifax)



#### Honorary Members of the RASC Past Elected Officers of the RASC

Dr. R.B. Baldwin (United States)

Dr. F.M. Bateson (New Zealand)

Dr. David L. Crawford (United States)

Dr. A. Dollfus (France)

Rev. Robert Evans (Australia)

Dr. Owen Gingerich (United States) Dr. Stephen W. Hawking

(United Kingdom)

Dr. Jean Meeus (Belgium)

Dr. Patrick Moore (United Kingdom)

Dr. Jay Pasachoff (United States)

Dr. P.J.E. Peebles (United States)

Mr. Leif Robinson (United States)

Dr. A.R. Sandage (United States)

Mr. William Sheehan (United States)

Dr. Carolyn Shoemaker (United States)

Below are lists of former Honorary Presidents, Presidents, Secretaries, and Treasurers of the RASC. For names before 1990, please refer to "Looking Up - A History of the RASC" by Peter Broughton.

#### **Honorary Presidents**

1989-1993 Ian Halliday 1993-1997 Alan Batten 1997-2001 Jack Locke 2001-2005 Roy Bishop 2005-2009 Robert Garrison

#### **Presidents**

1990-1992 Damien Lemay 1992-1994 Peter Broughton 1994-1996 Doug Hube 1996-1998 Doug George 1998-2000 Randy Attwood 2000-2002 Robert Garrison 2002-2004 Rajiv Gupta 2004-2006 Peter Jedicke

#### **Secretaries**

1987-1993 David Tindall 1993-1996 Randall Brooks 1997-1999 Raymond Auclair 1999-2005 Kim Hav 2005-Stan Runge

#### **Treasurers**

1989-1991 Karl Miller 1992-1994 Terry Hicks 1994-1998 Rajiv Gupta 1998-2004 Michael Watson 2004-2006 David Clark

The following Centres will host the General Assembly in the future:

> 2006 - Ottawa 2007 - Calgary

