

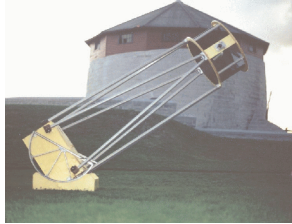


Regulus



The Newsletter of the RASC Kingston Centre

2003 January



*The 61 cm Venor
Dobsonian-Mount
telescope.*

2003 - The Year of The TBD*

* To Be Determined: The new President, in conjunction with the new executive, are working hard on determining new objectives for 2003... stay tuned!

If any of you have suggestions, questions or requests with regard to Centre business, functions or programs please contact me or one of the executive. We are always looking for volunteers to help out but I assure you that just because you enquire or make a suggestion you will not be coerced into seeing the issue through, this is what the executive is for. The only way we can keep improving the Kingston Centre is with your input, and help if you so desire.

In the coming year I invite all of you to attend our regular meetings whenever you can and especially encourage new members to come, ask their questions, look for guidance and participate in observing reports. There is a wealth of experienced observers in the Kingston Centre that can aid you in perusing this wonderful hobby.

In closing I would like to wish all of you and your families a very Merry Christmas and holiday season. Don't forget to get out there and observe while you are on days off.

Share the View. Hank Bartlett

The President's Voice



Hello to all from President Bartlett, and no, you are not about to tune into the West Wing. For those of you at a

distance or those who do not regularly attend the Kingston Centre meetings and functions I would like to introduce myself, my name is Hank Bartlett, I have been a member of the Kingston Centre since 1994. I am a recreational/special event astronomer who leans toward the "Wow, doesn't that look cool!" rather than the "Oh, I had better enter that into my Astronomical Log Book." category of observer. I do save on logbooks and pens that is for sure but occasionally I run out of "Wows".

For two years I headed up the Youth Observing Group and have worked with the education books with regard to the star maps. I have helped represent our Centre at Starfest for eight years as well as attending our own Fall'n'Stars for its first three years. This past year I worked on the committee organizing Fall'n'Stars and was very pleased with the turn out by members and the quality of the star party, I urge all of you to consider attending in 2003. I like to attend observing sessions whenever I can and take a keen interest in helping new observers get started. Being a talker I love public observing sessions like Astronomy Day where we have the opportunity to educate, entertain and dazzle the public.

One of my passions is daytime observing of stars and planets, having worked with a Celestron C4.5 for over tens years this part of my hobby is about to become more interesting with my newly acquired Meade SN10 LXD55. I have observed all of the naked eye planets in daylight sky and six stars other than the Sun.



Contents of this Issue available at
<http://130.15.144.99/rasc/secure/regulus/reg200301.pdf> include:

- * Looking Back 25 Years Part 4
- * National Council Report from 2002 Oct 26 Meeting
- * Treasurer's Annual Report
- * Secretary's Annual Report
- * December meeting minutes

Contents of the 2002 December newsletter available at
<http://130.15.144.99/rasc/secure/regulus/reg200210.pdf> include:

- * 2003 Election results for RASCKC Executive Officers
- * Pictures from the 2002 Annual Awards Dinner
- * The citation for the 2002 A.V. Douglas Award winner
- * 2002 President's Report
- * 2002 Librarian's Report
- * 2002 Webmaster's Report
- * 2002 October meeting minutes

Submissions from Members



LOOKING BACK 25 YEARS Part IV: Kingston Centre Events From November 1977 through February 1978 Reminiscences By Leo Enright and David H. Levy

Part A: Perspective From Leo Enright Overview

In the three previous articles of this series, there was an attempt to present an account of the main events in the life of the Kingston Centre in the first ten months of 1977, and thus to convey a sense of what Centre members were concerned with at that time. Throughout that year, especially from the time of the annual meeting on March 29 and continuing through the summer and fall, there were many new and different activities undertaken. In September and October, a new spirit of enthusiasm was seen at the meetings held every second week. Our participation in the Queen's Clubs Night on October 4 was regarded as a success. It was the occasion, in fact, when our executive was introduced to someone who quickly became a dedicated and enduring member, David Levy.

All of those positive trends that had begun at that time continued throughout the next four months, the period of reporting in this article. Of particular interest are the number, variety and calibre of speakers we had at our meetings during that time.

Our Meetings From November 1977 Through February 1978

The months of late autumn and winter 1977 - 1978 provided a time of very memorable meetings for the members of the Kingston Centre. Fascinating and topical ideas were presented by our guest speakers who included three people who had served as, or would later become, the national president of the R.A.S.C..

Beginning on Tuesday, November 8, 1977, Dr. Allen H. Bridle of the Queen's University Physics Department spoke on the topic: "The VLA in New Mexico". It outlined the operation of the newly-commissioned array of radio telescopes, the largest grouping of such instruments anywhere in the world and suitably named The Very Large Array. Spread out over the Plains of Saint Augustine near the town of Socorro in southern New Mexico, this collection of 27 enormous dishes stretched over several kilometres in three different directions, effectively giving an enormous aperture and greatly improving on the resolution of radio signals from remote parts of the universe. I recall how intimately Dr. Bridle knew the many details of the operation of this great array. It was very evident that he was, not only an authority on the science of radio astronomy, but also an unrivaled expert on this amazing new state-of-the-art instrument, which would vastly expand our knowledge of the universe. In fact, our Centre was extremely fortunate to be able to have him as a speaker at that time -- a fact that I did not fully appreciate until some time later. He had just returned from the site of the VLA, and before long he would be returning to Socorro.

I should explain that, a short time later, maybe a month or so later, I just happened to be changing television channels at the time of the supper-hour news. As I went

past the Channel 7 - Watertown program, I immediately recognized someone being interviewed on the CBS Evening News. It was Dr. Bridle, spokesman for, and at the time I believe, one of the directors of operations at the VLA, the world's newest and largest radio telescope. He spoke about the capabilities of the most sophisticated radio telescope on the planet and its potential for answering some "ultimate questions" about our universe. It was then that I realized how especially fortunate our small group had been in having him as our speaker on November 8th.

Two weeks later, on Tuesday November 22, our guest was someone whose initials were the same and whose reputation among Canadian astronomers was huge. Dr. Alan H. Batten, a scholar and recognized authority in stellar and galactic astrophysics, was at that time (i.e., for the years 1976 and 1977) the president of the R.A.S.C.. His topic was Close Binary Systems. His talk was most interesting, enlightening, and well-received. Most of the Centre members had never before seen or heard a national R.A.S.C. president, and so they eagerly received the information he shared about the state of the Society, as well as his explanation of a type of stellar system that is very common in our galaxy.

On Tuesday, December 6, the speaker was Dr. John R. Percy, then the First Vice-President of the R.A.S.C. and the editor of *The Observer's Handbook*. He would begin his two-year term as National President the following year, and his decade-long term as editor of *The Observer's Handbook* would last for two more years. Dr. Percy's topic was Pulsating Stars, a talk elucidating the forces that cause brightness variations in the large percentage of variable stars that belong to this category. Centre members realized our good fortune at having, for our third consecutive meeting, a recognized authority in his field of astronomy and also someone who had contributed enormously to our Society, as indeed he would continue to do for many more years. Our members had an opportunity to ask Dr. Percy about the response to the recent landmark report from a committee of the Society, the one that has ever since been termed "The Percy Report", which gave an assessment of the "state of the Society" and which made recommendations about the future course it should pursue. Dr. Percy, I recall, was pleased that ours was one Centre that had given a written response to "the Report".

At the meeting of December 20 there was a display of books and magazines by various members of the Centre. Astronomical slides were also shown.

For the first meeting of 1978, the one held at 8:00 p.m. on Tuesday January 10, there was a display of astronomical equipment and astronomical photographs.

On Tuesday January 24, our Centre members enjoyed a talk by David Levy, who had been one of our members for only about three months and who was already giving his second talk. It was indeed a fascinating presentation, this time on the topic, "The Great Comet of 1861". David had been able to glean many historical details about this interloper in the inner solar system; they were a part of the Master's thesis on which he was working and concerned the appreciation of this spectacular sight by Gerard Manley Hopkins, one of the finest of Victorian English poets.

On Tuesday February 7, I presented a talk on the topic, "The Astrolabe: Its History and Use". Later that year I also used the topic of the astrolabe when speaking to the London Centre, on one of the occasions when Peter Jedicke and I were involved in what was called a "Centre Exchange". Later in the year, Peter also spoke to the Kingston Centre.

Our guest speaker on Tuesday, February 21, 1978 was someone very special indeed. It was our own Honorary President, Dr. A. Vibert Douglas, who had been National R.A.S.C. President in 1943 and 1944, and had founded the Kingston Centre in 1961. Although she did not then frequently attend Centre meetings because of her declining health, she maintained a strong interest in the Centre. It was a rare and special treat to have her speak on her topic, "The I.A.U. and Its Triennial Congresses". She was a widely recognized authority on the history of astronomy, having already been associated with the R.A.S.C. for well over fifty years, and having known, and worked with, some of the outstanding figures in astrophysics of the twentieth century; in fact, she was one of them. In the 1920's and before, she had collaborated with Arthur Eddington (later Sir Arthur Eddington), the great cosmologist and early exponent of relativity. She had worked at Yerkes Observatory when the world's largest refractor was adding to our knowledge of the universe.

There could have been no Canadian better equipped than Dr. Douglas to speak to us on the topic of the I.A.U., because no Canadian had attended as many of its triennial congresses. In fact, probably no more than a half-dozen individuals anywhere had attended more of these conventions. She was able to recount stories of well-known scientists she had met at some of those early meetings. She recalled the 1924 I.A.U. Congress at Cambridge, Mass., that included a side trip to view a total solar eclipse at Magog, Quebec, a trip that was unfortunately not rewarded with good weather.

Dr. Douglas mentioned some of the unfortunate post-war political wrangling that was part of both the Zurich and Rome meetings held in the late 1940's and early 1950's, but there were many positive experiences connected with her attendance at so many of them, such as the enjoyable side trip to the Russian observatories in the Caucasus at the time of the 1958 I.A.U. Congress in Moscow.

Though one might think that she would be content to conclude merely with a summary of the many I.A.U. Congresses that she had attended, Dr. Douglas was still looking forward to at least one more. At the end of her talk, she announced that, when the seventeenth I.A.U. Congress would be held the following year, 1979, in Montreal, it would be her twelfth, and she hoped that it would be our first.

I know that her talk had a profound effect on at least two people in that audience, both of whom probably resolved at that instant to do everything within their power to be in Montreal the following year. I definitely wanted to attend some of the triennial events of the organization that governs the protocol and the recognized international conventions of astronomy world-wide. The I.A.U. had now grown from about a dozen committees, known as Commissions, to over fifty such groups, and it would be meeting in Canada for the first time in August, 1979. Yes, in fact, both David Levy and I did subsequently attend some of the events of the Seventeenth I.A.U. Congress, and it was a fascinating experience. It was proof that Dr. Douglas's talk of February 21 had been a powerful introduction some of the astronomical achievements of her era.

Other Kingston Centre Activities

Besides the Centre meetings, there were several other astronomical events and activities that attracted our interest.

On the morning of November 5th, a close conjunction of Regulus, Saturn, and the crescent moon was the centre of

attention for a number of people, and I enjoyed photographing it. It is quite interesting to think now that Saturn, within just a few short years, will have passed from its current position above Orion and through Gemini and Cancer and will once again stand beside Regulus as it did on that early November morning in 1977. Saturn's 29 1/2 -year cycle now puts it only about "two constellations" away from its position 25-years ago!

In December 1977, Jupiter was very near M35, a large open cluster of stars in Gemini, and, of course, it was the dominant planet of the winter season that year. Interesting that going forward 25 years, which is slightly more than two "Jupiter cycles" through the sky, means that the giant planet is now just one constellation past, or east of, where it was at the end of 1977.

How interesting, too, that these two planets again dominate the winter sky this year, but this time Jupiter is farther east and it rises a little later than Saturn. We can look at the two of them this winter and try to "juxtapose them" into the positions they had 25 winters ago!

Aurora was of interest, too, at that time. In the first of the two November 1977 newsletters, I reported seeing two auroral displays, and David Levy recorded seeing a good aurora on December 1, and an even better one on December 11.

The night of January 3-4, 1978, proved to be a very interesting one with both the Quadrantid Meteor Shower at its peak and an intense auroral display active in the northern sky. I was able to take advantage of the exceptionally good conditions to do some interesting astrophotography.

As reported in both our Centre newsletters for early December and for January, there was considerable interest among the astronomical community in the recent discovery by Charles Kowal of an "object" between the orbits of Saturn and Uranus; it had been discovered on November 1 with the 48" Schmidt telescope in California, though subsequent research showed that it had been photographed a number of times in the previous thirty years. Originally called "O.K.", an abbreviation for "Object Kowal", it was later called "Chiron", and eventually designated "1977UB", following the convention for naming asteroids, "pending its identification as an asteroid".

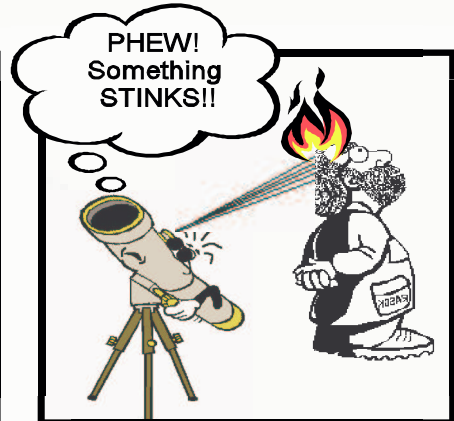
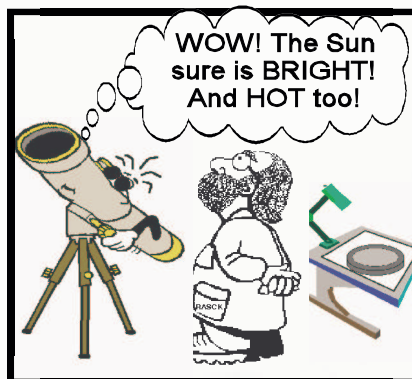
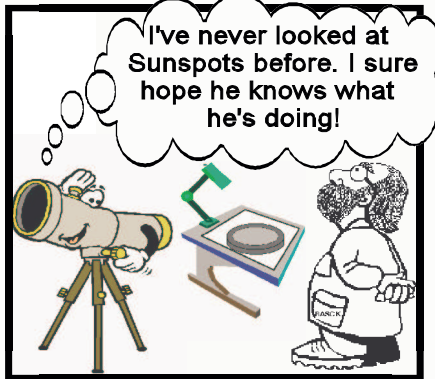
Among the general public, there was a great deal of interest in several astronomy and space-related "sci-fi" movies. At that time, two examples of the latest rage were the movies, "**Close Encounters Of The Third Kind**", and "**Starship Invasions**" (whose subtitle was "We know they are here. What do they want?") In the very recent past, the public had also been captivated by two other very successful movies, "**2001 - A Space Odyssey**" and "**Star Wars**", the latter of which had just replaced "**Gone With The Wind**" and "**Jaws**" as the all-time movie money-maker. Interest in astronomy and space travel, even if somewhat fanciful and far-fetched, certainly seemed to be reaching new heights twenty-five years ago this winter!

The winter of 1977 - 1978 was one I found very busy, but most interesting. Having been elected president of the group at the previous March 29th Annual Meeting, I was happy to have been able to arrange for, and to introduce, the special guest speakers whom we had at our Centre meetings. It was all part of the job of being president in those days. I had also the duty of newsletter editor, and producing the newsletter, usually twice a month, was a special labour of love. Receiving an occasional article, such as the review of Dr. Douglas's talk from David Levy,

NEWT

by E. Kliptik

2002



(See Regulus predecessor, first issue of March, 1978) made the editor's job, namely writing the newsletter, much less demanding. How great it would have been to have received one such article every month, or twice a month!

On reviewing copies of Regulus's predecessor for that period, one can easily notice an upgrade in the quality of the production beginning with the second December issue of 1977. Prior to that, I had typed the newsletter on a tiny manual portable typewriter [that stood about 60cm (2 ½ in.) high]. Understandably, the quality of reproduction was far from even. After that time, I began taking the rough draft of the newsletter to a school secretary who used an electric, or at least a "full-size" typewriter, not one like my tiny portable! A definite improvement in newsletter quality!!

In summary, I am extremely happy to recall this period 25 years ago as a time of enthusiasm, growth, and innovative ideas in the Kingston Centre.

Part B: A Perspective from David H. Levy

I particularly enjoyed Dr. Bridle's talk. In fact, a year later, when astronomers Gerald Cecil and Constantine Papacosmas and I were headed southwest to Arizona (I was moving from Kingston to Tucson.), we stopped by the VLA. We walked into the Visitor Centre and talked briefly with the staff person there, and we casually mentioned that we knew Dr. Bridle. We started taking the standard self-guided tour when we were accosted by one of the observatory officials. "Did you say that you knew Dr. Bridle?"

"Yes," I replied.

"Well, we like him very, very much at the VLA," she continued, "and we would like to take you on a full personal tour!"

What a surprise that was! We visited the innards of Telescope Number 7, and fully enjoyed our tour. The place is huge -- operating on a very large area on the Plains of St. Augustine in New Mexico, south of Albuquerque and west of Socorro. What stark beauty this land is!

On January 24, 1978, I was the speaker at the Kingston Centre meeting. My topic was "Comet Hunting and The Great Comet of 1861". That comet was a big interest of mine at the time, since I thought it might be the one that Gerard Manley Hopkins used in his poem on comets. It turned out the correct comet, I later found, was that of 1864, but still, the 1861 comet was a tremendous sight in

July of that year with its head near Capella and its tail stretching out to Hercules. Afterwards, the Centre resolved to begin a comet-hunting observing section and a Messier Club for members to observe all of the Messier Catalogue. (Do we still have either of those activities?)

The next week (January 25) I visited Dr. A. Vibert Douglas at her home. She was in her 80's, over 50 years older than I; yet we joked, talked, and shared our experiences as if we were the same age. We both had gone to the same school, were both life members of the Kingston Centre, and both had been deeply involved in the Montreal Centre.

On February 21, Dr. Douglas addressed the Kingston Centre meeting. She said that her first address to any centre of the R.A.S.C. was on January 14, 1926, and she was still at it! Her topic was The International Astronomical Union. (I think she was preparing her address on the history of the I.A.U. to give at the Montreal meeting that would be held in 1979.) Back then [1926] she had been working at Cambridge on absorption spectra. She recounted how she had met Albert Einstein, and had asked him whom he thought to be the world's greatest intellects. His prompt answer: "Hendrik A. Lorentz." Lorentz had made important contributions to our understanding of moving bodies.

"Would you place anyone beside him, Dr. Einstein?"

"No," he said.

She also explained that evening how she had tried to observe the total the eclipse of the sun from Magog, Quebec, but that she "stood under a cloud". I noted in my diary that evening that this was the finest R.A.S.C. meeting I had ever attended!



National Council Rep Report

by Peggy Hurley

National Council Report
2002-10-26 Meeting

On October 26 of this year, the National Council met in Toronto for the second meeting of this term. This meeting was held a little earlier than usual as the Toronto Centre had invited the National Council to their Observatory, which is located outside Collingwood (a two hour drive from the city).

The President reported that he was present at the Queen's visit to the University of Victoria. Although he was not personally presented to the Queen, a request for a calendar to be sent to the Queen was made. Rajiv Gupta also reported on the state of the copy write violations and on a National initiative to send old handbooks to District School Boards across the country. The Toronto School Board was the first recipient of 100 2002 handbooks.

The Second Vice President, Scott Young, then put forward another initiative concerning the application for grants from Centres. It was agreed in principle, until a formal motion can be drafted, that all Centres applying for grants, either on a local or national level, will inform National Office of their intent and send a copy of the grant application. The reason for this is so that the National Office will put in applications for National Grants, which are for initiatives that involve most of the Centres, and co-ordinate more local grants so that one Centre is not preventing another Centre for being accepted for the same grant at a later date. With very local grants, the National Office would like to be able to inform other Centres about what grants may be found locally and to 'brag' a little about Centre accomplishments.

The First Vice President then made his report which included many more asteroids with Canadian connections. Peter Jedicke is interested in posting the stories behind these asteroids with the list of names and has requested that anyone who knows the stories contact him. Please check the web site for the list. It was also suggested, in jest, that a new list be created for yet another observing certificate, 110 finest Canadian asteroids!

Kim Hay, our National Secretary reported that one of our Honorary Members had passed away. The Nominating Committee will be looking for suggestions for new Honorary Members. Kim also nominated a number of new members into the RASC and provided names of new Messier and NGC observing certificate recipients.

Michael Watson, National Treasurer, then made his report. As far as can be seen at this time, the finances are going as expected. Most of the projected income is still coming in. There was a substantial increase in the cost of mailing Handbooks to Canadian members (some \$8000) which may be offset by not publishing "Skyways" this year.

As chair of the Publications Committee, Peter Jedicke made the report for all publications. He congratulated Rajiv for yet another award for the calendar. While on the topic of the calendar, a long discussion took place concerning possible electronic versions of other publications. There was much debate over this and the topic will be revisited. As your representative on Council, I would appreciate your thoughts on this topic. Would you like to receive your Journal, Annual Report and possibly the Handbook through e-mail or CD?

When the discussion went back to the calendar, a concern was mentioned concerning the photograph(s) that were not by RASA members. Rajiv explained that CCD images did not expand to the required size well and that what was needed was film images. He felt that there were not enough members still using film for their astrophotography and that was limited the choice. He also felt that we would not want to reduce the quality to

maintain full RASA membership for producing the calendar. It was also made very clear to Rajiv that some of our astrophotographers were no longer sending submissions because they were not informed whether their photographs were even received by the publisher. Rajiv has promised to be better about that particular issue. Also, Rajiv commented that he does not like to publish great photos of the same subject two years in a row so photographers should avoid sending subjects from the previous year's calendar.

It was also reported that there has been positive responses for renewing on the e-store. The promotional materials are still not available at this site, but this should be amended soon. There was also a great deal of discussion concerning the Annual Report. This topic will also be discussed at the February meeting, and some guidance from the membership would be appreciated. In its present form, the Annual Report must now be sent as addressed admail and that is a substantial increase in the cost of postage. Under consideration is interpreting the bylaw to include e-mail as part of 'send', or a change in format for the Annual Report or the inclusion of the letter from the president soliciting donations. A couple of Reps suggested that the Annual Report could be sent as a CD.

Astronomy week begins on May 10 and ends on May 15th, which corresponds with a total eclipse of the moon. Scott Young suggests that Centres that find this too late in the year move their own activities to a more appropriate date but include some public event for the eclipse.

The Awards Committee is looking for nominations for National Awards. These need to be made before the end of December. The Constitution Committee will be working on drafting a new version of Centre bylaws. No other bylaw changes are seen at this time. Mark Kaye reported for the Computer Use Committee. All is going well there and Michael Watson complimented the web master, Kevin Kell, for the promptness of his changes to the web site.

The next major issue was brought out by Rob Dick. During his report on light pollution abatement, Rob requested that this committee be changed from a Special Committee to a Standing Committee. The difference here is that a Standing Committee gives the Chair of the committee a vote on council and funding to attend Council meetings. After a lengthy discussion, this request was voted down.

The Observing Certificate Committee requested a change in their mandate so that they could expand and monitor their program. They also asked to be changed from a Special Committee to a Standing Committee. This motion was passed.

The Education Committee gave a report on the status of 'Skyways' and had some completed copies for our perusal and for teacher approval. They then also put forward a motion to become a Standing Committee. This motion was also passed.

Peter Jedicke then brought forth a motion under Other Business which would remove the vote from the Chairs of Standing Committees and Appointed Officers. This motion was passed.

Both Vancouver and St. Johns presented information concerning their respective General Assemblies.



Treasurer's Annual Report

by John Hurley

Enter all amounts rounded off to the nearest dollar.

REVENUE

Membership Fees (Regular)	3098.00
Membership Fees (Basic surcharge)	867.00
Membership Fees (Special surcharge)	60.00
Life Members Grants	141.00
Donations	446.00
Fundraising	313.00
Educational Activities	860.00
Interest and Dividends	3.00
Sale of Handbooks (Net)	84.00
Sale of National Calendars (Net)	745.00
Sale of Beginner's Observing Guides (Net)	35.00
Advertising	0.00
General Assembly (Including Travel Grants)	0.00
Miscellaneous:	1759.00
TOTAL REVENUE	8411.00

EXPENDITURES

Fees Remitted to National Office	98.00
Library	363.00
Meetings	153.00
Newsletter	1388.00
Annual Dinner (Net)	1033.00
General Assembly (Including Travel Grants)	0.00
Equipment and Supplies	906.00
Office Administration	255.00
General Expenses and Audit	93.00
Educational Activities	712.00
Insurance	0.00
Awards and Donations	118.00
Observatory	1836.00
Miscellaneous	1978.00
TOTAL EXPENDITURES	8933.00

SURPLUS OR DEFICIT ON OPERATIONS - 522.00

BANK BALANCE FROM PREVIOUS YEAR 15,572.00

BANK BALANCE TO END OF THIS YEAR 15,050.00



2002 Annual Report of the Kingston Centre as Prepared by the Secretary: S. Gagnon

At the time of the preparation of this report the Kingston Centre looks forward to electing a new executive and celebrating the end of another busy year. The major focus of excitement this year has been the completion of the Centre's 61 centimeter Venor scope. An enthusiastic and talented group has laboured for 3 years to produce this beautiful instrument. Superb optics and portable! (It takes only 1 to 6 people to move it, depending on the grade.)

Kingston area weather continues to be less than observer friendly and a large number of the monthly sessions scheduled at member homes have been clouded out. In an effort to ease the frustration, several members have spent considerable time and effort in conducting a search for a permanent dark sky observing site, and some good spots were found. The Centre hopes that this search will yield a permanent observatory site.

A rapidly developing skill in the KC is the production of cookbook CCD cameras. The CCD observing group has taken up this pursuit in earnest.

Public events were very successful this year and Astronomy Day was a great lesson in quantity vs. quality. Choice of location is always the dilemma when it comes to public events and sometimes high traffic levels of a frantic nature often result in fewer meaningful contacts. Astronomy Day was preceded by a week of public observing and ended with the first public appearance of the Venor scope.

July's major public event is the local charity fundraiser "The Sky is the Limit Festival" and the turn out was good although solar viewing got off to a slow start due to heavy haze from Quebec forest fires.

The Charleston Lake Provincial Park night with Terry Dickinson was a great time. There were line ups at the smallest of scopes, but when the voices dropped the prevalent sound was that of observers climbing up and down aluminum ladders to the big scopes.

The Annual Fall'N'Stars Dark Sky Camping and Observing weekend was also deemed a success. This event is a cooperative effort of the KC and the Belleville Astronomy Club. It is held in September, north of Belleville. A stunningly colourful aurora display featured prominently on the Saturday evening.

Observing and BBQing are a popular combination and there were several such events this year, (perhaps because you can BBQ in the rain).

Monthly public observing downtown continues to draw respectable numbers often in spite of the weather.

The Centre is enjoying a new meeting room in the Astronomy and Physics building, Stirling Hall. And here is a list of talks presented,

February 8th, Regular Meeting, Guest Speaker: Dr. Tom Dean (KC) "Introduction to Predicting Satellite Apparitions using Orbital Elements"

March 15th, Regular Meeting, Guest Speaker: Rocky Persaud "Mars on Earth" The Devon Island Research Lab.

April 12th, Regular Meeting, Guest Speaker: Dr. Brian Hunter (K.C.) "Observing Earth Satellites"

May 13th, Regular Meeting, Guest Speaker: Dr. David Levy.(K.C.) "What the RASC-KC Tucson Branch has been up to."

June 14th, Regular Meeting, Guest speakers: FLA County Science Fair presenters

July 12th, Regular meeting, Guest Speaker: Fred Barrett (K.C.) "Observatory Building and Other Projects"

August 16th. Annual Markfest with guest speaker, Dr. Larry Widrow. "Dark Matter Research: M31".

Sept 13th, Guest Speaker: Attila Danko (Ottawa Center) "How to Forecast Observing Conditions - the Sky Clock"

There were a few more members nights for shorter presentations this year since evenings with invited speakers leaves little time for this. Fundraising draws continue at every meeting due to a steady supply of homemade wine with the much coveted event related labels, as well as numerous other member donations.

The Education Committee has produced a new edition of the secondary school teachers guide to astronomy "Expanding Their Universe". The sale of this and the grade 6 book "Worlds to Discover" and their accompanying slide sets have been a major fundraising activity for the Centre as well as a tool for the promotion of astronomy.

As we approach 2003, Kingston faces challenges similar to other centres, expansion of the active volunteer base while fighting burn out in the terminally committed. One strategy to be examined is to split committee chairs that have become too successful to survive. We invite you to check our progress now and then through our newsletter, Regulus or the Centre website.

This is my last report as Secretary and I would like to say how much I have enjoyed the last 3 years. I thank the Kingston members for giving me this opportunity and I wish my successor as rewarding an experience.



Webmaster's Corner

by Kevin Kell

Locally: Kevin Fetter will be taking over the reins for the Kingston Centre Web site effective January 1st. It's time for a change and hopefully we'll see some fresh ideas for organizing the 650mb+ of content that we have online in various places.

Nationally: Interested in National Council?

Past meeting minutes all the way back to 1990 are now online! Other new info includes **General Assemblies** back to 1984 with photos and information on who Chaired them, the attendance and who spoke. Note that I am looking for more from 1983 and back!

Keep your eyes on <http://www.rasc.ca/ga2002/> for information about the 2003 General Assembly, to be held in Vancouver on the July 1st

long weekend.



Kingston Centre Membership Information

Current Membership Total of the Kingston Centre (as of November 30, 2002): 144 (down from 159 last issue)

Welcome our new members!

Paul Wiegert (Kingston), Gerry Cyr (Kingston), R Brown (Kingston), George Fortier (Battersea), Zach Dickeson (Kingston)



Notes from the Secretary

Minutes of Friday December 13th Regular Meeting submitted by Susan Gagnon

Laura called the meeting to order at 19:46 and announced that the originally scheduled presentation of science projects by local youth would be cancelled due to less than optimistic weather reports.

Doug carried on, undaunted, with the **What's Up** Beginners Observing tips. Among the winter favourites were, Betelgeuse and Rigel as a nice colour contrast set, Saturn, some easy Messiers in Auriga, and the ever popular Orion Nebulae. Hank mentioned the approaching shadow transits of Jupiter's moons and Doug ran through the sequence with the StarryNight program. Another event coming up is the January 4th occultation of the Crab Nebula by Saturn, also accompanied by a simulation. **Brian Hunter** was up next with a great sample of the videos he makes while tracking **interesting satellites**. Brian also showed us a satellite light curve that he had plotted and a brief interpretation of what he thought was going on, and he cannot wait to spend many, many, many more hours plotting some more points! We were introduced to the Motorola smart antenna and the use of a GPS device as an accurate time reference. Brian also had a handout for the next good showing of the ISS for the next 5 nights.

Doug then presented his latest work on the **Christmas Star** and what the possibilities may have been. The focus was not on the search for a unique event but something rare enough to be regarded as special by people very familiar with the sky. Doug had his computer compile a list of conjunctions for a period of 6000 years and then checked the frequency to see what might be considered rare, show as a triple and have sufficient magnitude to be truly memorable. This is an ongoing project. There were no reports to speak of, **Kevin** wanted all to be reminded of the Regulus deadline. Susan will be handing off the Secretarial duties to **Barb** over the next month.

Hank then took the chair and went down the list of existing **committee chairs**, what is filled and what is not. Please take a serious look at all of the positions and think

about what you might like to participate in, if not chair, in 2003!

Email Hank if you have questions, at the rascckexec email list. Many 2002 chairs have volunteered to assist in some capacity. (Notice the 3 way break up of Observing.)

Astronomy Day, Chair:

ATM, Chair:

Awards, Chair:

CCD, Chair: Jan Wisniewski

Education, Chair: Hank Bartlett

Fall'n'Stars, Kingston Co-Chair:

LPA, Chair:

Publicity Chair: Kim Hay

Sky is the Limit Festival, Chair:

Banquet, Chair: Susan Gagnon

YOG, inactive new ideas welcome.

WebMaster: Kevin Fetter

Public Obs, Chair: Tom Dean

Member Obs. , Chair: Kevin Fetter

Equipment Loan, Chair: Tom Dean

Editor, Regulus etc. Kevin Kell

Hank took a moment to announce that the observing reports will resume in 2003. Doug gave a few hints at future speakers: in Feb, Jan will do a Marathon Prep presentation, April will be a talk by Dan Falk, May David Levy will visit. The meeting then adjourned to Harvey's before 10 pm!



Observing Group Meetings

These are regular meets at the home of members who volunteer their locations and homes to us on or near a new moon. Contact Kevin Fetter if you are

interested in hosting a session in 2003



Public Observing Sessions

These are the public observing sessions, normally held at Murney Tower Park on the Kingston waterfront on King & Barrie Sts. On the first Tuesday after a

new moon.



Equipment Loan Program

Members in good standing are able to sign out Centre equipment, including:

- ☆ 25cm (10") f5.5 Douglas Dobsonian Advanced Users

☆ 20cm (8") f7 Fitzgerald Dobsonian Intermediate Users

☆ 20cm (8") f4.5 Barney Dobsonian Intermediate Users

☆ 11cm (4.5") f4.3 Bushnell Voyager Starter Users

☆ 11cm (4.5") f7.9 Orbitor 3500 Equatorial Starter Users

☆ 5 barndoor tracking platforms 1999 February - Starter Users 5

☆ Collimating Tool 2001 August - All Users

☆ Binocular Set #1 B&L7x50 1999 April - Starter Users

☆ Binocular Set #2 B&L10x50 1999 April- Starter Users

☆ Binocular Set #3 Bushnell 7x50 1999 April - Starter Users

☆ Binoculars Set #4 Stem 7x50 1995 - Starter Users

☆ 19mm Televue Panoptic Eyepiece 2000 March - Intermediate Users

☆ Filter Set - ND13, 4 colour, O3 nebula

- all 1.25" 2000 September - Intermediate Users

☆ Kodak Ektagraphic 35mm slide projector 2000 November

RASC Kingston Centre Meetings

The Kingston Centre RASC meets once a month on the **2nd Friday of each month at 7:30 pm (19:30) in Stirling Hall Theatre D** on Queen's University Campus **unless noted otherwise**. We have adopted a policy of moving any meeting that is held on a holiday weekend.

2002 Officers and Executive Council

PO Box 1793, Kingston, On K7L 5J6

Infoline & answering machine: 613-377-6029

Email: rascckexec@cliff.path.queensu.ca

We also have an email chat list "rascchat". Send your email address to Kevin Kell to be added to the RASCCHAT list.

President: Hank Bartlett

Vice President: Doug Angle

Secretary: Barb Holt

Treasurer: John Hurley **Librarian:** David Maguire

Editor: Kevin Kell

National Council Rep: Peggy Hurley

Committee Chairs will be announced when we have more information.

Regulus is published 6 times per year on paper and 6 times per year in adobe acrobat format files. Both are available on our web site. Views and opinions expressed herein do not necessarily reflect the official position of the Royal Astronomical Society of Canada or its officers and members. **Subscriptions:** Members of the Kingston Centre receive Regulus as a benefit of membership. Advertisements are free to members of the Centre. Commercial advertising is \$15/quarter, \$25/half page, \$50/ full page and should be in electronic format.

Contributions are more than welcome. Submitted material will be edited for brevity or clarity. Copyright 2002 All rights reserved. Permission is granted to other publications

of a similar nature to print material from Regulus provided that full credit is given to the author and to Regulus.
January Print Run=180

The Newsletter of the Kingston Centre of the Royal Astronomical Society of Canada

Newsletter Submission Info: The deadline is usually the 3rd Friday before regular meetings in odd numbered months. The preferred method is E-MAIL, then disk, lastly paper.

E-mail: <kell@cliff.path.queensu.ca>

Fax: 1-613-533-2907 (with cover page to Kevin Kell)
ascii or most major word processors (Corel WP8 for windows preferred) via E-mail or cdrom or 3.5" PC floppy disk

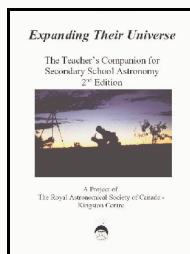
Resources Available to Members:

(See bottom of page 10 for passwords)

- **RASC-Kingston Centre Handbook** at:
<http://U99.N144.queensu.ca/rasc/secure/kingstonmanual20011203.pdf> (a new update will be published over the next few weeks)

- **RASC National manual** at
<http://www.rasc.ca/private/rascmanual2002jan.pdf>

- **RASC-Kingston Centre Loan Program** at:
<http://members.kingston.net/rasc/loan.htm>



New From the Education Group

check out

<http://members.kingston.net/rasc/educate.htm> for more info

Expanding Their Universe - The Teacher's Companion for Secondary School Astronomy 2nd Edition(161 pg) 2002

In writing this guide, we have followed the new curriculum as dictated by the government of Ontario, similar to new curriculums across Canada. You will find that the specific expectations laid out in the curriculum are all represented in this guidebook. The book has been divided into four sections, and although copyrighted, any parts may be reproduced for classroom use. In order to facilitate copying the book, it has been bound in a open-flat wire format.

The **first section** is called Understanding the Universe and includes much background information and concepts. The information included here is intended to bridge the gap between the textbook and the expectations listed in the curriculum.

The **second section** is a called Practical Astronomy for Everyone and includes many projects.

The **third section** is devoted to activities. The best way to learn is by experience.

The **final section** is a listing of resources available for you.

Coming in early 2003:

The ATM Project Book Volume 1

Item	Price per unit (Shipping and taxes included) Regular (Member)	Quantity	\$ Total
*Expanding Their Universe 2 nd Edition - The Teacher's Companion for Secondary School Astronomy 161 pg 2002 NEW!	\$30 (\$24)		
*Worlds to Discover 1 st Edition - Astronomy for Elementary School 154 pg 2000	\$15 (\$12)		
*Slide Set #1 companion for Expanding Their Universe 40 slides	\$75 (\$60)		
*Slide Set #2 companion for Expanding Their Universe 40 slides	\$75 (\$60)		
*Slide Set #3 companion for Worlds to Discover 20 slides	\$35 (\$28)		
*Students Guide to Careers in Space, 2 nd edition 33 pg 1998	\$5 (\$4)		
*Secondary School Combo 1: ETU book, Slide Set #1 OR #2 (Circle choice), Careers in Space	\$100 (\$80)		
* Secondary School Combo 2: ETU book, Slide Sets #1 AND #2 (Circle Choice), Careers in Space	\$160 (\$125)		
*Elementary School Combo : WTD book, Slide Set #3, Careers in Space	\$50 (\$40)		
Beginner's Observing Guide	\$15		

* Consider a membership in the RASC-KC. A new benefit (2001 March 01) includes a 20% discount on Centre produced material.

Kingston Cosmic & Event Calendar 2003

Prepared by Kim Hay

Month and Date	JANUARY 2003	Event
Jan 2- Thursday		New Moon 15:23 EDT
Jan 3-Friday		Quadrantid Meteor Peak 7:00 pm EDT
Jan 5-Sunday		Go out and observe Comet Kudo-Fujikawa (C/2002X5) Time 18:36.1 UT +22.56 46.0 mag 6.1 in the Constellation Hercules
Jan 10- Friday		Kingston Centre Regular Meeting, 7:30 pm Stirling Hall Theatre D
Jan 10-Friday		1st Quarter Moon 8:15 EDT
Jan 18-Saturday		Full Moon 5:48 EDT
Jan 18- Saturday		CCD Meeting – Home of Jan Wisiewski
Jan 21-Tuesday		Zodiacal Light visible in West after evening twilight for the next 2 weeks
Jan 25- Saturday		3rd Quarter Moon 3:33 EDT



Month and Date	FEBRUARY 2003	Event
Feb 1- Saturday		New Moon 5:48 EDT
Feb 3- Monday		Winter Star Party – Florida Keys www:scas.org (through Feb 8)
Feb 9- Sunday		1st Quarter Moon 6:11 EDT
Feb 14-Friday		Kingston Centre Regular Meeting, 7:30 pm Stirling Hall Theatre D
Feb 15- Saturday		CCD Meeting- Home of Jan Wisiewski
Feb 16-Sunday		Full Moon 18:51 EDT
Feb 19- Wednesday		Zodiacal light visible in the West after evening twilight for the next two weeks.
Feb 22- Saturday		National Council Meeting- Toronto, Ontario 10:00 am-5:00 pm.
Feb 23- Sunday		3rd Quarter Moon 11:46 EDT

For more detailed information, please refer to the RASC 2003Calendar, and the RASC 2003 Observers Handbook. Available from your local promotions committee or from National Office, <http://www.rasc.ca>