



## Amateur Telescope Makers - Front & Centre

The November meeting will feature the ATM group and the Centre's newest scope (pic right courtesy Tom Dean)

### From The Prez

#### PRESIDENT'S (Annual) REPORT

This has been a very busy year for the Kingston Centre. Not only did we have wonderful speakers at our regular meetings, many of them drawn from our own membership, but also we hosted the Annual General Assembly of the RASC. More about that below.

Astronomy Day this year was terrific, held in the main court of the Catarauqui Town Centre. We had lot's of people to help, lot's of displays to show and lot's of people to look. A big thank - you goes to Cathy Hall for her organization of this event. She even got our pictures in the "Journal" and "Sky News". The evening public observing was arranged in conjunction with Queen's University at Kingston Field. Thank -you Judith Irwin and Kathy Parrett for taking this on.

Several new groups started up this year, as part of the Kingston Centre. We now have an active Telescope Maker's Group thanks to a donation of many telescope parts. Several brave souls took on grinding, polishing and constructing a new 8" telescope for Centre use. The group is growing and there are more mirror blanks to process. The new 'scope should be in circulation before the end of the calendar year.

An Observer's Group also got a start this summer. It meets the Friday or Saturday near the new moon each month. The group is open to any RASC Kingston member and their guests and meetings are held at different member's homes each month. Check the schedule for a place near you. :-)

There seems to be a great deal of interest in radio astronomy within the Centre. Who knows, we might have a group of Radio Astronomers very soon. A Youth Group is also in the works.

Many of our members took astronomy to the public this year. Vic Smida and Laura Gagne were driving forces behind an astronomy club at La Salle S.S. Dieter Bruekner organized several sessions at the elementary school his children attend. Others assisted Terence Dickinson at Charleston Lake, joined with the Trenton group at both Bon Echo and Sand Banks Provincial Parks and spoke to local children's groups. Everyone who showed anyone the stars deserves a pat on the back. You never know when you are influencing someone for life.

The Queen's Observatory started a unique fundraising project this year. This is "Adopt a Star" and more information about this is available. The Centre adopted a star for Theo's daughter who was born on Astronomy Day this year. We would also like to adopt "Regulus" and will gladly accept donations to this end.

Judith Irwin also started a fireball hotline. This is a phone line for the general public to report fireball sightings. Centre members have volunteered to help follow up on phone calls received. If you are interested in this program, please contact Judith. Perhaps we can locate a meteorite one day. And then there was the last weekend in June.

Our General Assembly was very well attended with several people signing up who were not members of the RASC and one just happened to be in the residence and thought we looked interesting -- she ended up spending a very busy weekend. Thank - you to everyone who attended and especially to those who volunteered their time to make the weekend a success.

Each event had some aspect that will not be forgotten: Judith Irwin opening her lecture with a scene from "The Lion King"; Terence Dickinson's premier musical performance; the tall ships at Fort Henry; Peter and David with the "Stargazer's Lament"; the song contest; Leo and the Murphy slides; and not to be forgotten, "the body". (are you of the body?) I'm sure I have missed some aspect that was especially memorable to you, but I couldn't possibly name them all.

Perhaps the greatest thrill for me at the GA was presenting Gene and Carolyn Shoemaker with the portraits I had painted of them.

In closing, I would like to express our sincere sense of loss over the death of Dr. Eugene Shoemaker. He seemed to be a friend in the making and he was taken from us too soon.





## The Centre

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

### Newsletter Submission Info:

Deadline is the Friday before regular meetings in odd numbered months. The preferred method is E-MAIL, then disk, lastly paper (I hate retyping... too many mistakes happen). E-mail: [kell@cliff.path.queensu.ca](mailto:kell@cliff.path.queensu.ca)  
Fax: 1-613-545-2907 (with cover page to Kevin Kell)  
Post: Box 2033 Kingston Ontario K7L5J8 Canada  
ascii or most major word processors (WP6.1 for windows preferred) via E-mail or 3.5" DOS floppy disk

Our Web page can be found at:  
<http://www1.kingston.net/~rasc>

### Officers and Executive Council

**President:** Peggy Hurley  
**Vice President:** Christine Kulyk  
**Secretary:** Laura Gagne  
**Treasurer:** Kim Hay  
**Editor:** Kevin Kell  
**National Council Rep:** Kim Hay  
**Alternate Rep:** Susan Gagnon  
**Librarian:** Jim Towgood  
**Honorary President:** David Levy

To Send E-mail to all members of the Kingston Executive, address it to: [rascexec@cliff.path.queensu.ca](mailto:rascexec@cliff.path.queensu.ca)

To join the National E-mail List, send a message to: [listserv@astrotech.stmarys.ca](mailto:listserv@astrotech.stmarys.ca)  
In the body of the message put:  
subscribe rasclist Your Name (Center)

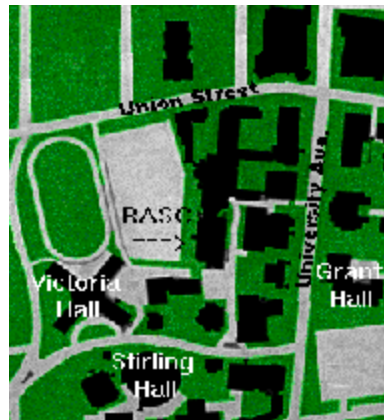
**Centre Location:** RASC - Kingston Centre, PO Box 1793, Kingston, Ontario K7L 5J6 Canada  
Approx Lat: 44 deg 14 min N Long 76 deg 39 min W

## Upcoming Meetings

**Friday 1997 Nov 14** The ATM group will be showing off the new 8" Fitz dobsonian telescope.

### Friday 1997 December

**12 Annual Holiday Dinner & Awards** at Kelsey's Restaurant on Princess near Sir John A MacDoanld. Regular meeting after dinner at the normal location. Speaker: Dr. Richard Schmude Jr (still tentative due to weather conditions)



### 1998

Friday January 9<sup>th</sup> A possible visit from the RASC National President Doug George.

Friday February 13<sup>th</sup> TBA  
Friday March 13<sup>th</sup> TBA  
Friday April 10<sup>th</sup> TBA  
Friday May 8<sup>th</sup> TBA  
Friday June 12<sup>th</sup> TBA

Regular Meetings of the Kingston Centre are held on the 2nd Friday of each month (unless noted otherwise) at 20:00 local time in **Room B-201, Mackintosh-Corry Hall** at Queen's University (parking available off Union Street at Frontenac).

Regulus is published 6 times per year. 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. Non-members may subscribe for \$15 per year.  
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## From The Editor

If you renewed your RASC membership early, you should have received your 1998 Handbook already.

The Jan-Feb 1998 Regulus will contain the latest Kingston Centre Membership listing.

### Top 10 Signs the New Mir Computer is Running Windows 95

#10: The computer keeps asking you to "Insert Setup Disk #3 to continue"

#9: There is no space left on the hard drive to store mission data.

#8: The computer refuses to interact with the Mir's "Mr. Java" coffee maker.

#7: Millions of dollars are traced to phone calls to a Redmond, WA 900#.

#6: Mir astronauts are caught stealing RAM from other satellite's computers to keep their system running.

#5: The Space Shuttle can no longer dock with Mir since "the proper driver cannot be found"

#4: The system locks up whenever the astronauts try to run life support, the solar panels and thrusters at the same time.

#3: The astronauts spend three days looking for Cyrillic version of the CTRL-ALT-DEL keys.

#2: Alien ships secretly observing Mir flee in terror.

And the number one sign the new Mir computer is running Windows 95....

#1: You start receiving welcoming e-mail from the Borg

**From: "John D. Baker" <bakerjd@kos.net>**

In the four month's I've been in Texas the state has suffered killer tornados, floods and a few days ago a brilliant daytime bollide over West Texas.

The amateur astronomy community is fairly large and active here. There are two big groups in the Dallas/Fort Worth area. The Texas Astronomical Society (Dallas) and the Fort Worth Astronomical Society. I've attended meetings at both clubs. The Fort Worth group is around the same size as Kingston but the Dallas group has 500 members.

Both clubs maintain nice observing sites. The Dallas group owns a 40 acre observing site two hours north of Dallas near Atoka Oklahoma. Many members have constructed observatories on the site. There's always someone there on clear nights.

I also drove across Texas from the Dallas area to West Texas to visit the McDonald Observatory. This is where the new 10 metre Hobby Eberly telescope has been constructed. The McDonald runs star parties for vistor's two nights of the week. I timed my arrival to take advantage of this. Great dark skies on all horizons! Being further south than

Kingston the Sagittarius region is well above the horizon and in the clear mountain air is worth the trip all by itself.  
Cheers John

## From The Secretary

October meeting Minutes:

We have three new members since our last meeting. They are Paul Winkler, Ken Kingdon, and Lionel Enright. Kim Hay made a motion that we accept them as new members in the centre. Bill Broderick seconded this motion. The vote was unanimous in favour of accepting them into the centre.  
Holleford Crater Tour:

The executive committee agreed to spend up to \$50 to pay for a room in which to hold the Holleford Crater Public Talk. Dieter will try to find a place either at Queen's University (preferably B201), or at KCVI. Christine made the motion to allow \$50, Laura seconded it. everyone was in favour.

Youth Group Grant:

Christine made a proposal to send a letter written by herself and unattached member Denise Sabbatini to a local organization asking for a grant of \$5000.00 to start a Youth Group at the centre. She asked that we vote by e-mail and send an answer to Peggy Hurley before October 15th so she can sign the letter and fax it to the L.A.F.L.G. Training Board.

Committees:

We need to decide which committees we will have in the new year, and who will chair them. This decision will be left to the new executive committee. Christine has prepared a sign-up list for the current committees and some new proposals such as the Youth Group. This list will be circulated at the meeting.

Election:

Votes were counted by Brenda Shaw and Ruth Hicks where there were two or more nominations for an office. There were 17 voting members present. The following are the new executive committee for the year 1998:

President : **Peggy Hurley** (by acclamation) agreed to stand for re-election

Vice President : **Bill Broderick** (by acclamation)

nominated by Christine Kulyk, seconded by Sue Gagnon  
Treasurer: **John Hurley** (by acclamation, subject to transfer of membership) nominated by Laura Gagne, seconded by Kim Hay

Secretary: **Laura Gagne** (by acclamation) agreed to stand for re-election

Librarian: **Brenda Shaw** (by majority vote) nominated by



Laura Gagne, seconded by Sue Gagnon (other candidate was Kendra Angle, nominated by Sue Gagnon, seconded by Brenda Shaw)  
Newsletter Editor: **Kevin Kell** (by acclamation) agreed to stand for re-election  
National Council Representative: **Susan Gagnon** (by acclamation) nominated by Kim Hay, Seconded by Laura Gagne

**Other Committees:**

A sign-up sheet was passed around with other committees listed on it. These are standing and new committees, including Public Education, Youth Group, Observer's Group, Amateur Telescope making group, Publicity, Light Pollution, Fund Raising, Social Committee, and a Constitution Committee.

**By-Law Amendment:**

The Kingston Centre has been trying to secure its own Non-Profit Taxation number so that it can issue receipts for donations to the centre. In order to do this it is necessary (according to Pat Sargent at Revenue Canada) that the centre make an amendment to its by-laws which would be article number 11. This clause must read "The Organization shall be carried on without purpose of gain for its members and any profits or other gains to the organization will be used in promoting its objectives." The constitution must also be redated to read "January 1, 1997.". According to our centre by-laws the Constitution can only be amended at the Annual Business Meeting by a 2/3 vote by ballot of the members voting.

Leo Enright, the chair of the centre's constitution committee, sent a report which was read by Christine Kulyk. He stated that he was personally opposed to the change, and felt that changing the date on the constitution would break our ties with A. Vibert Douglas, our centre's founder. He also warned that the finances of the centre would need to be audited annually and could create more work for the centre's treasurer.

Sue Gagnon pointed out that change is inevitable and the date on the constitution is likely to change in the future as other amendments may be made. She did not feel that our history would be taken from us just because the date on the constitution changed.

John Hurley served as the treasurer of Windsor centre for eleven years before coming to Kingston. He told us that when Windsor centre applied for and received their tax number his job as treasurer did not become more difficult, but rather he felt that it made things easier for him. He said that the only thing he had to do differently with respect to his annual report was to fill out the proper taxation forms at the end of the fiscal year. He told us that these forms are

easier to fill out than the personal tax forms that everyone fills out for themselves.

The motion to vote on the proposed amendment was put forward by Laura Gagne and seconded by Kim Hay. Voting was by ballot, counted by Ruth Hicks and Brenda Shaw. Sixteen ballots were cast: 1 abstention, 2 against and 13 in favour. carried.....

**Christmas Dinner:**

The centre's annual Christmas dinner will be held at 5:00pm on Friday, December 12, 1997 at Kelsey's Restaurant on Princess Street.

**Holleford Crater Tour:**

This public tour will be by ticket only. Tickets will be on sale through the local newspaper Kingston This Week. 94 seats are available. The cost will be \$4 for adults and \$2 for children under 12 and for seniors. On Wednesday October 22 there will be a talk on the crater at 7:30 pm, the location will be posted in the paper. The business portion of the meeting was declared adjourned at 9:32pm.

**Guest Speaker:**

Bill Broderick gave a very interesting presentation about the most important planet in our solar system - Earth. He talked about the forces of change such as earthquakes, erosion, glaciation and many other things. He also told us all about caves - how they are formed, the difference between stalagmites and stalactites (stalagmites run down, and stalactites run up). Bill brought with him some rock samples from his collection of igneous, sedimentary and metamorphic rock (some from New Zealand!). We are very fortunate to have someone as knowledgeable as Bill to show us what a unique and fascinating place our world is.

**The Canadian Campaign for Dark Skies:**

Bill Broderick, our National Light Pollution Committee chairperson, gave a presentation about light pollution and what we can, and should do about it. There is information about the campaign on the RASC homepage at <http://www.rasc.ca/> Dieter Brueckner mentioned that we need to broaden our description of light pollution to include the entire electromagnetic spectrum. Radio Astronomers are losing their sky too due to excess use of frequencies assigned for radio astronomy.

**Observing Reports:**

Brenda Shaw saw the Mir station, but just before it there was a very bright satellite visible. Dieter Brueckner also saw it. The shuttle was apparently in the sky near the time of the Mir sighting so it may have been that. The time



of transit for Mir was given as 7:39, whereas this object was visible at 7:36. It was variable in intensity, but overall brighter than Mir.

The meeting was adjourned at 10:49 pm.

#### **MINUTES SEPTEMBER 12, 1997**

The meeting was called to order at 20:13 hrs

##### Announcements:

There will be a memorial service for Gene Shoemaker on October 11. Donations to the Flying Doctors of Australia would be appreciated.

Brenda Shaw has set up a website where members can leave messages of condolence for Carolyn Shoemaker.

<http://www.geocities.com/Wellesley/2036/Shoemaker.html>

##### Observers' Group:

The observers group has had two very successful meetings so far. The first was at the observatory of Mark Kaye and everyone had a great time despite the rain. The second one was held at the home of Steve Manders and it was also a good time even though the sky was less than favourable. Our next meeting will be at the home of Laura Gagne on October 3rd at 20:00hrs. Let's hope for clear skies.

##### Telescope making group:

Parts of the new club scope are at the homes of various members being sanded and prepared for assembly. The next meeting of the group will be Sunday, September 21 at the home of Doug Angle at 14:00hrs. This meeting will be for final sanding, painting and assembly of the scope. The mirror has been aluminized and it looks beautiful (Mark Kaye showed it at the meeting). Once this telescope is complete, the group plans to begin work on another one of shorter focal length.

##### New Members:

Three people have applied for membership since our last meeting. Their names are Sandra Rutenburg, Diane Hurley, and Eric Petersen. Kim Hay made a motion that we accept them as new members in our centre. The motion was seconded by Peggy Hurley. ....Carried

##### RASC Calendars:

The new RASC Calendars are now available for \$11.00 each. Kim has 25 of them for sale. If you are interested in having one of these beautiful calendars see Kim.

##### Dieter Bruekner:

Dieter has Hale Bopp greeting cards and post cards for sale. Contact him if you would like to purchase some of these novel astronomical items.

##### Thank-you:

Theo Micholias thanked the centre for the purchase of gamma equuleus, a star, for his new daughter Cynthia. This star was adopted by the centre on her behalf from the Queen's University Adopt-a-star program. You can still get your very own star by contacting the Queen's University Astronomy Department, or by visiting their website.

##### Bye-bye Librarian:

The centre librarian, Jim Towgood, has gone to BC for the next couple of months. He plans to move there permanently. We will miss him. Best wishes, Jim, on behalf of the Centre.

##### Sky News:

Current and back-issues of Skynews can be purchased from Christine for a cost of \$3.00 each. This is a real bargain for those who do not receive this wonderful publication.

##### Guest Speaker:

Phil Gebhardt of the Ontario DX Association spoke to us about detecting meteors using an fm radio receiver. When particles enter our atmosphere they ionize gases there causing the gas to glow in visible light. This is what we observe as a meteor. Another thing that happens is that the particles leave an ion trail which bounces radio signals back to earth which would otherwise have escaped into space. If you tune your radio to a station where there are no signals, such as 88.2MHz, you may occasionally hear a clear signal which appears, lasts for a few seconds, then disappears. This phenomenon is caused by the radio waves being bounced off of a meteor trail. You can use this method to detect meteors in bad weather, when the moon is full or gibbous, or in broad daylight. You can also use it in conjunction with visual observations to find meteors which are too close to the horizon to be observed or are too faint. For further information check out the following websites:

<http://www.grove.net/~odxa/meteor.html>

<http://www.king.igs.net/~karc/index>

##### Talking Telescope:

Steve Manders told us about a unique telescope system which he saw displayed at Starfest. It was a display from Astrophysics using a CCD imager and laptop computer to track and display interesting objects. Using voice commands the operator can request any object by name or coordinates. The computer verifies the command by voice and then slews to the object and gives an oral description of it. This sounds fascinating, but is probably very expensive.

##### Make your own telescope:

Kendra Angle gave us a very informative slide presentation explaining the various methods of mirror- grinding and



testing that she used to make her own 7 inch reflecting telescope. She has requested that interested members come to her home when the telescope-making group is there next Sunday to perform the tests on her mirror so that she can be sure her own measurements are accurate.

#### Slides:

Several members showed slides, both murphy and otherwise. Among them were Leo Enright, Mark Kaye, Doug Angle, Cathy Hall, Hank Bartlett and Laura Gagne.

#### Professor E. Kennedy:

Professor Kennedy will be in town the week following our October meeting. He has offered to do a talk for our club if we can find a place for him to do it. Peggy will try to arrange to use a high school for this purpose as this will be during Queen's homecoming week and we will be unlikely to find a space on campus.

The meeting was adjourned at 23:04hrs.

## From The Treasurer

We are now into another fiscal year, at the Kingston Centre. Fiscal year 1996-97 showed the Kingston Centre with a profit. This was due to a lot of hard work from all of its Kingston Centre members. We had the pleasure of selling photo's taken by one of our members, Leo Brodeur. Some of you had seen his photo's on display at this years GA, sponsored by the Kingston Centre. Its been a very busy and nerve racking year. The Kingston Centre joined many Centre's in having UTP (University of Toronto) take over the memberships and send out our handbooks, and Journal with the addition of SkyNews. It has taken a whole year, for the growing pains to settle down, but things are starting to smooth out.

The Kingston Centre-RASC has had the annual election. I have chosen not to run for another term as Treasurer, so I hope you will give our new Treasurer, John Hurley, as much help as you all have given me over the last three years as Treasurer. John comes from the Windsor Centre, who by the way, married our President Peggy Hurley in July of this year, right after the GA.

I would like to point your attention to the list of books, calendars, and various articles that the Kingston Centre has to offer its members.

1998 Calendars \$11.00 (tax included) \$1.00 shipping (per copy)

1998 Obs. Handbooks \$20.28 (tax included) \$2.50 shipping

(per copy)

Jr. Observers Guide \$10.00 (tax included) \$2.50 shipping (per copy)

Looking Up \$37.40 (tax included) \$4.00 shipping (per copy) (History of the RASC)

Kingston Centre Lapel Pins \$5.00 (tax included) \$1.00 shipping (per pin)

For those who missed the GA, you can still be a part of it with the following items:

Holleford Crater Postcards \$1.00 ( tax included) \$.50 shipping ( per card)

1997 GA Tshirts ( L /XL) \$15.00 ( tax included)

\$2.00 shipping ( per shirt) ( 50% cotton/ 50% polyester) -grey

1997 GA Sweatshirts ( L/XL) \$25.00 (tax included) \$3.00 shipping ( per shirt) ( fleece 50% cotton/50% polyester)-grey

If you would like any of the following, please contact me ( Kim Hay) at [kimhay@adan.kingston.net](mailto:kimhay@adan.kingston.net), or Kingston Centre-RASC, P.O. Box 1793 , Kingston, Ontario K7L 5J6, or call at 613-353-1189.

The Club has its benefits if you wish to subscribe to one of the Astronomy magazines. Kingston Centre Members can renew or subscribe through the Centre with the price of Astronomy at \$35.00 (US), and Sky & Telescope at \$37.00 (US). If you would like to find out more information contact me at the addresses above.

I would like to thank everyone for a great year, and for all the help and fun I have had as Treasurer over the last 3 years, and on the executive for the past 6 years. I would also like to wish everyone, though it is early, A Happy Thanksgiving to our members in the United States, and a Merry Christmas to all our members. Warmest Regards Kim Hay, Treasurer, Kingston Centre RASC

## National News

From: Peter Jedicke

Subject: RASC Centres: "Flash Minutes" of National Council meeting 97 10 18

"FLASH MINUTES"

ROYAL ASTRONOMICAL SOCIETY OF CANADA

**Motions of National Council 1997 10 18**

Note: the following is presented merely to foster discussion and rapid communication within the Society. This list of the motions considered at the meeting of National Council is completely unofficial and is the responsibility of the National



Recorder. For official purposes, wait for the completed minutes in a few weeks.

**MOTION 97401**

It was moved by Mr. Ascroft and seconded by Mr. Enright that the minutes of the meetings of Council of 1997 06 28 and 1997 06 30 be accepted. The motion was CARRIED.

**MOTION 97402**

It was moved by Ms. Hurley and seconded by Mr. Gerin-Roze to accept the list of unattached members as circulated. MOTION 97402 was CARRIED by special resolution.

**MOTION 97403**

It was moved by Mr. Shepley and seconded by Ms. Hurley to award Messier Certificates to Mr. Steven Carrigan (Halifax), Mr. Scott Alexander (Saskatoon), Mr. Joe Cambala (Windsor). The motion was CARRIED.

**MOTION 97404**

It was moved by Mr. Shepley and seconded by Mr. Oakes to award an NGC Certificate to Mr. Daryl Dewolfe (Halifax). The motion was CARRIED.

**MOTION 97405**

It was moved by Mr. Shepley and seconded by Mr. Gerin-Roze to award Membership Certificates to Mr. Tim Bennett (Windsor) and Mr. George Ball (Victoria). The motion was CARRIED.

**MOTION 97406**

It was moved by Mr. Broughton and seconded by Mr. Kaye that the Finance Committee investigate the honoraria paid to lecturers and the financing of General Assemblies. The motion was CARRIED.

**MOTION 97407**

It was moved by Mr. Ceravolo and seconded by Mr. Munro that the Publications Committee consider hiring a production manager to oversee the production of the Journal, as opposed to entering into a contract with a production company. The motion was CARRIED.

**MOTION 97408**

It was moved by the Awards Committee that, whereas the current policy of offering travel assistance to major award winners for attendance at a GA (i) could be very costly, (ii) places an undue financial burden on the awardee, and (iii) by simple extension could not be applied uniformly at the Centre level, it is moved that the policy be rescinded. The motion was CARRIED.

**MOTION 97409**

It was moved by the Awards Committee that, upon approval of an award by National Council, the winner shall be informed immediately by formal letter; that, if the awardee is a member of a Centre, a copy of that letter shall be sent to the Centre's Secretary; that the Centre's Secretary shall be asked to provide names and addresses of local media to whom copies of the letter and of the citation which

accompanies the award can, and will, be sent; and that the citation shall be printed in the Journal. The motion was CARRIED.

**MOTION 97410**

It was moved by the Awards Committee that, in the event that the award winner referred to in MOTION 97409 does attend the General Assembly, the Society will pay his/her registration fees and the banquet cost for the winner and a guest.

**MOTION 97411**

It was moved by Mr. Watson and seconded by Ms. Hurley to amend MOTION 97410 to read "...the Society will pay his/her registration fees, accommodation at the accommodation facility provided for the General Assembly for two nights for the winner, and the banquet cost for the winner and a guest." The motion was CARRIED. MOTION 97410 was CARRIED as amended.

**MOTION 97412**

It was moved by the Awards Committee that, if the awardee referred to in MOTION 97409 is in attendance at the General Assembly following the announcement, the award shall be presented at that time; that, in lieu of attendance at the General Assembly, if the National President's travel itinerary includes the awardee's Centre during the ensuing year, the National President shall present the award at a meeting of the Centre; and that, in lieu of either of the above, the award shall be presented at a time and place mutually agreed to by the awardee and by the Executive Committee or a designated member thereof. The motion was CARRIED.

**MOTION 97413**

It was moved by the Awards Committee that the National President of the Society join with the National President of the Canadian Astronomical Society (CASCA) in reviewing the terms of the 'Helen Sawyer Hogg Public Lecture', specifically the honorarium and steps which might be taken to ensure publication of the lectures. The motion was CARRIED.

**MOTION 97414**

It was moved by the Awards Committee that the statement of expenses to be shared by CASCA and the Society for the Hogg Lecture read as follows: "Expenses: The following costs are to be shared equally by the two Societies: Honorarium of \$600; A maximum of regular return economy airfare plus up to four night's accommodation during the meeting; Page charges in the Journal plus 25 offprints." The motion was DEFEATED.

**MOTION 97415**

It was moved by Mr. Attwood and seconded by Mr. Broughton that Mr. Oakes be appointed as chair of the Historical Committee. The motion was CARRIED.

**MOTION 97416**



It was moved by the Nominating Committee to appoint Mr. Jedicke as National Recorder up to and including the meetings of Council during the 1999 General Assembly. The motion was CARRIED.

#### MOTION 97417

It was moved by Mr. Broughton and Mr. Enright to appoint Mr. Oakes as National Librarian. The motion was CARRIED.

#### MOTION 97418

It was moved by Mr. Watson that the meeting adjourn. The motion was CARRIED.

## BBS News

The pictures from the Mars Pathfinder mission continue to accumulate. If you don't have internet access, a computer, modem and telephone line will let you at these local resources.

The following Kingston BBS's are RASC support boards:

- \*Observatory East (Mark Kaye) FidoNet 1:249/109  
2400-28800 bps 8N1V.34
- \* StarStream (Kevin Kell) FidoNet 1:249/112  
14400-28800 bps 8N1V.34
- \* Moonlight Cascade (Kim Hay) FidoNet 1:249/133  
2400-28800 bps 8N1V.FC

## 1997 Observing Group Schedule

If any of this information is incorrect, let me know ASAP and I'll (Kevin) send out corrected info via the Kingston Centre Email list, with updates in the next newsletter.

The session on **Saturday November 1<sup>st</sup>** was completely and totally rained out! We may come up with some guidelines like (if it is precipitating horribly, don't go!)

#### Friday November 28th 6:00-6:30 pm (at or near dusk)

The home of Doug Angle Phone: 613-xxx-xxxx

Email:

Lat: 44 deg 23 min 45 sec North

Long: 76 deg 32 min 00 sec West

How to get there: (approx 30 minutes from Kingston)  
From Kingston & the 401 Highway  
Head north on Sydenham Road, past Elginburg, past Loughborough Lake. You'll come to a crossroad at Railton (which has a church and a store on the corner).

**December has been cancelled due to its close proximity to Christmas!**

Friday January 30<sup>th</sup> or Saturday January 31<sup>st</sup> 1998 TBA  
Friday February 27<sup>th</sup> or Saturday February 28<sup>th</sup> 1998 TBA

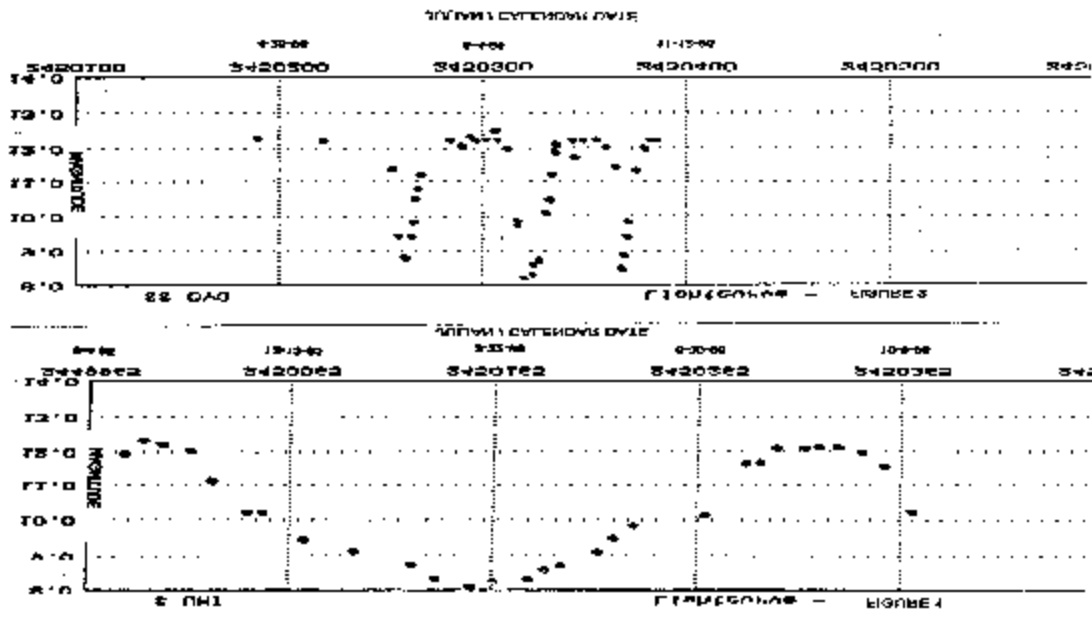
## Submissions from the Members

### VARIABLE STAR ANALYSIS

By Ray Berg

Over the past few years, I have been observing a number of variable stars, some of which have been particularly interesting. One of these is the pulsating Mira-type star, S Ursae Minoris. Because this star is circumpolar, it is possible to follow its variation in brightness all year from northern latitudes, throughout its normal period of 331 days. This red star varies over the relatively large magnitude range of 8.0 to 12.5, well within the capability of my 8-inch Meade Schmidt-Cassegrain, despite the unhappy light pollution conditions of our northern sky in northwest Indiana (Chicago and many smaller steel industry cities to the north and northwest). Figure 1 is a plot of the light curve resulting from my observations of this star over a year, from one minima to the next minima. Since this star changes brightness slowly, I had planned to estimate its brightness, using charts with standard magnitude values from the American Association of Variable Star Observers (AAVSO), once a week. Weather being what it is in Crown Point, Indiana, sometimes the estimates stretched out to 14 - 20 days apart. However, the data is still sufficient to approximate the actual variation that occurred during this particular cycle.

A totally different type of variable star that I follow every summer is SS Cygni. This star is a cataclysmic dwarf nova that sits quietly at the 12th magnitude for approximately 50 days (in actual practice, give or take 2 weeks) and then suddenly erupts with a blazing increase to the 8th magnitude within a day or two and finally returns to its original 12th magnitude over a several day period. I try to observe this type of star every clear night, but if the eruption occurs during a solid week and a half of



cloudy skies, it can be missed entirely. Figure 2 shows a plot of my estimates for a time period in which three successive eruptions were detected. My estimates of these and of other variable stars (about 200 - 250 observations per month) are sent to the AAVSO and are averaged with observations from hundreds of other amateurs to obtain highly refined final light curves which are made available to to astronomers worldwide for their research into stellar behaviour. In addition, real-time data on current star activity provided by the AAVSO has assisted with the ongoing programs of professional observatories and instrumented earth satellites.

In the final analysis, my satisfaction in following these stars is two-fold: A significant contribution is being made to professional science and equally important, it's just.....plain fun!!!

#### **Email From: Judith Irwin**

Does anyone know where I can get ahold of a large commercially available star chart, either of the northern sky or the whole sky? This would be for mounting and display just outside of the Ellis Hall Observatory. Size of order 4 ft by 3 ft, though this is just a guideline.

## Comet Watch

Comets Currently Visible from

[http://encke.jpl.nasa.gov/whats\\_visible.html](http://encke.jpl.nasa.gov/whats_visible.html)

Last Updated: 1997 October 07

Long-Period Comets: C/1995 O1 (Hale-Bopp), C/1996 J1 (Evans-Drinkwater), C/1997 J2 (Meunier-Dupouy), C/1997 N1 (Tabur), C/1997 N1 (Tilbrook), C/1997 T1 (Utsunomiya)

Short-Period Comets: 29P/Schwassmann-Wachmann 1, 43P/Wolf-Harrington, 65P/Gunn, 78P/Gehrels 2, 103P/Hartley 2

C/1995 O1 (Hale-Bopp)

This fading super-star comet is visible in the Northern Hemisphere until mid-November...low in the early morning sky. After that, It is only visible in the Southern Hemisphere. It is currently m1=5 and fading

C/1997 J2 (Meunier-Dupouy)

IAU Circular 6648 (May 8, 1997) reports the discovery of a comet by Michel Meunier (Arbonne la Foret) on May 7.9 UT, only some 6' southwest of comet C/1997 J1. The new comet is perhaps 0.5 mag brighter than C/1997 J1 but having a much slower motion. Philippe Dupouy and J. F. Lahitte (Observatoire de Dax) report additional observations (apparently, they made an independent discovery of the comet). An orbit published on MPEC K05 (May 17, 1997)



indicates that this comet will reach perihelion on March 10, 1998 with a perihelion distance of 3.06 AU. This comet is well-placed (high northern declination) for Northern Hemisphere observers in the evening sky. The comet will brighten very slowly as it drifts south and east. The comet is currently about magnitude 12.0.

#### C/1997 T1 (Utsunomiya)

IAU Circular 6751 (October 5, 1997) reports the discovery of a comet by Syogo Utsunomiya on Oct. 3. The comet is about 10.0 - 11.0 magnitude and CCD observations report a tail 4'-12' long in p.a. about 130 deg. Reported coma diameters are as large as 3.5'. The preliminary orbit of the comet, given on IAU Circular 6753 (October 5), indicates perihelion will be reached on Dec. 10, 1997 at a distance of 1.35 AU. The comet is current at very high declination (~+70) in the midnight sky. It will move south and west during October becoming an evening object. Its brightness (near its peak) is expected to remain constant during October as the comet approaches the Sun, but moves away from the Earth. After that it will fade slowly.

#### 103P/Hartley 2

This comet is about  $m_1=13$ , but is expected to brighten rapidly...reaching perhaps  $m_1=8.5$  by the end of the year. The comet will remain an evening object for both hemispheres, but the Northern Hemisphere will be favoured because of the longer winter nights.

## Space Calendar

The Space Calendar covers space-related for the coming months. This Calendar is compiled and maintained by Ron Baalke. Please send any updates or corrections to [baalke@kelvin.jpl.nasa.gov](mailto:baalke@kelvin.jpl.nasa.gov)

You can find this on the web at:

<http://newproducts.jpl.nasa.gov/calendar>

Last Updated Friday, November 07, 1997 at 07:37 AM PST

#### November 1997

- Nov 17 - Leonids Meteor Shower Peak
- Nov 19 - STS-87 Launch, Columbia, USMP-4, Spartan-201
- Nov 19 - Comet Russell 3 Perihelion (2.510 AU)
- Nov 21 - Mars Occults PPM 268761 (7.9 Magnitude Star)
- Nov 24 - Jupiter Occults PPM 722611 (9.9 Magnitude Star)
- Nov 28 - Mercury at Greatest Eastern Elongation (21 Degrees)

#### December 1997

- Dec 09 - Moon Occults Saturn
- Dec 09 - Venus Passes 2.5 Degrees From Neptune
- Dec 11 - Venus at Greatest Brilliancy (-4.7 Magnitude)
- Dec 13 - Moon Occults Aldebaran
- Dec 16 - Mars Passes 1.6 Degrees South of Neptune

- Dec 21 - Winter Solstice (20:07 UT)
- Dec 22 - Venus Passes 1.1 Degrees North of Mars
- Dec 22 - Ursids Meteor Shower Peak
- Dec 23 - Venus Passes 3 Degrees West of Uranus
- Dec 27 - Mars Passes 0.6 Degrees From Uranus

#### January 1998

- Jan ?? - Voyager 1 Overtakes Pioneer 10
- Jan 03 - Earth at Perihelion (0.983 AU from Sun)
- Jan 03 - Quadrantids Meteor Shower Peak
- Jan 05 - Moon Occults Saturn
- Jan 06 - Mercury At Its Greatest Western Elongation (23 Degrees)
- Jan 07 - Venus Passes 3.9 Degrees from Neptune
- Jan 07 - Mars at Perihelion

## News from the "Net: Astronomy Backs

**Einstein** -New observations suggest that enormous astronomical objects can actually move space itself, just as Einstein suggested 80 years. **Galileo Finds Arizona Sized Volcanic Deposit On Io** - Observations taken by NASA's Galileo spacecraft five months apart reveal a new dark spot the size of Arizona on Jupiter's moon Io, indicating that dramatic volcanic activity occurred during that time. **Pathfinder's Mission Over** - After operating on the surface of Mars three times longer than expected and returning a tremendous amount of new information about the red planet, NASA's Mars Pathfinder mission is winding down. **Milky Way Radiation Halo Reported** - A mysterious halo of high-energy gamma rays envelops the Milky Way, astronomers have discovered. The gamma rays bathe the galaxy with a glow that's invisible to human eyes but detectable by NASA satellites. **MGS Status**: (As of Oct 31, 1997) - "After a several-week hiatus in aerobraking, the Surveyor flight team will resume lowering the spacecraft's orbit beginning November 7th. This effort will proceed at a more gradual pace as compared to the original plan, and will extend the amount of time needed to complete aerobraking by eight to 12 months.