



613-xxx-xxxx

The Centre now has a telephone and an answering machine. This is intended mainly for public information and a contact place rather than for the membership (you already have phone numbers for the executive and most members). We are starting another concerted effort in membership recruiting and felt that the public would respond better to this than other avenues (email, web, etc).

**The Royal Astronomical Society
of Canada
Kingston Centre
Presents
Christmas and Awards Banquet 1998**



**Saturday December 5th, 1998
Golden Rooster Dining Lounge
111 Princess Street**

**Before Dinner Gathering 6:30pm.
Dinner at 7:30 pm.
Hot & Cold Buffet
Cost \$20.00 per person**

**If interested in joining us for fun, door prizes,
Awards and a Guest speaker , please make
your cheques out to Kingston Centre-RASC
and mail to:**

**Kim Hay c/o Christmas Banquet
1462 Leland Road, RR#2 Perth Rd, Ontario
K0H 2L0**

Or get your ticket at the November meeting!

Merry Christmas Everyone

We are having a banquet this Christmas!

In the past, this annual dinner event has been a group reservation at a restaurant with a regular meeting afterward. Between the rush to finish and the inability to hold any conversation in a large loud public area, we wanted to try something different.

If you are in or near the Kingston area on **Saturday Dec 5th**, please consider coming. Tickets are \$20/person, in advance only, as with any banquet we must tell them in advance the number of guests.

Contact Kim Hay <xxx@xxx.xxx.xxx> for tickets. If you enclose your email address, Kim will confirm by email your tickets and they will be held at the door on the Banquet night. Tickets will not be mailed as the timings may be too short.

Deadline for tickets is **Friday November 27th**.

Additions to the Web site now include:

- ★ Historical Membership lists from 1992,1993 and 1995.
- ★ A search engine for material on the site.
- ★ A Software resource list for astronomy related software
- ★ A library list, soon to be split into "online (at the meeting room)" and "offline (at the home of the Librarian)"

Do you have any suggestions? Please send them in!



The Kingston Centre

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

Newsletter Submission Info: The deadline is the 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: 1-613-545-2907 (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>

1998 Officers and Executive Council

President: Peggy Hurley

Vice President: Bill Broderick

Secretary: Laura Gagné

Treasurer: John Hurley

Editor: Kevin Kell

National Council Rep: Susan Gagnon

Librarian: Brenda Shaw

Honorary President: David Levy

Committee Chairs:

Observing Group: Tom Dean

ATM Group: Tom Dean

Youth Group: Brenda Shaw & Laura Gagné

To Send E-mail to all members of the Kingston Executive, address it to: <rascexec@cliff.path.queensu.ca>

To join the National E-mail List, send a message to:

<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 for 1998

Friday November 13th

8:00pm Annual General Meeting & Elections. No speaker scheduled.

Saturday December 5th

6:30pm Banquet & Awards Dinner @ Golden Rooster Restaurant, downtown Kingston (tickets in advance only).

Friday December 11th - CANCELLED

* special meeting dates one week early due to holiday Fridays

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).

Other Events

Saturday Nov 21 @ dusk Observing Group meeting @ Peggy&John Hurley's near Sharbot Lake (members & guests only)

Tuesday Nov 24th @dusk PUBLIC Observing Session, Murney Tower Museum waterfront at King & Barrie St in Kingston WEATHER PERMITTING. If it is raining or snowing we won't be there! If it is cloudy we won't be there! If it is partially cloudy we will be there. Contact Tom Dean for info.

Saturday November 28th 08:30-6:00pm Youth Group Field Trip To Ottawa Museum of Sci & Tech. Permission forms required. Parents welcome but must pay own admission to museum (\$2-3). Bring along \$\$ for lunch and gift shop. (Contact Laura Gagne & Brenda Shaw for more info)

Monday Nov 30th 7:00-8:30 Queens Observatory Open House @ Ellis Hall Observatory (slide show and telescope tours). Sidewalk Astronomy set up in front.

No Observing Group, Youth Group, Public Observing or ATM meetings in December.



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.

Advertisements are free to members of the Centre. Commercial advertising is \$25 per half page, \$50 for full page and should be in electronic format

Contributions are more than welcome. Submitted material may be edited for brevity or clarity. Copyright 1998. 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.

From The Editor

Changes/corrections of address received (I pass any I receive on to the Centre Treasurer who passes them on to UTP) since the master January list was published:
Kinchen J. Searcy San Diego CA 92131 email:

I've been going through old records of late and have compiled three sets of newsletters from the Centre. These will be kept with the Secretary, Librarian, and Editor. It is amazing how easily records disappear or are never kept at all in the first place! In any event, this is part of my long term project of digitizing as many newsletters as I can, put them up on our web site and index them with a search engine. They make remarkable reading when you sit down and go through a whole bunch at a time!

I am also looking for information contained in old National Annual Reports. I do not need a copy of the report just the following information: Revenue, number of members, expenses, surplus/deficit & balance figures and executive member names for the Kingston Centre for the years 1988 and before. And number of members, revenue, expenditures, & surplus/deficit figures for the National Organization for 1988 and before. These will be added onto our Web Site information.

Educational Slide Sets

Slides for you! The Kingston Centre has purchased the following slides sets for use by the Centre and its members to help educate an share with the public our love for astronomy. These sets are appropriate for all age groups and may be used in schools, guides, cubs, any other clubs or even family gatherings. They have already proved invaluable as a back-up against cloudy weather.

Members wishing to sign out a set or selected slides should contact Hank Bartlett at 613-xxx-xxxx or

<knah@adan.kingston.net>

Slides may be signed out for a predetermined period. The following is a list of the purchased slide sets, all of which come with support documentation (a project will be undertaken to simplify this information into point form). A project is currently underway to provide support documentation for all member donated slides.

GRAND TOUR OF THE UNIVERSE- 40 slides.

From relative sizes of the planets, to individual planet slides, to deep space objects (HST). Along with a 74 page book.

THE HUBBLE SPACE TELESCOPE 1996- 30 slides. A collection of HST slides with a 27 page booklet including support captions and Hubble facts.

TERRESTRIAL IMPACT CRATERS- 26 slide

set. Crater slides of the Earth and some other planets and the Moon, a 20 page booklet with an introduction to craters and their formation.

THE RADIO UNIVERSE II: The best of The Very Large Array(VLA)- 30 slides with support text.

WOMEN IN ASTRONOMY- 26 slides. Pictures of the women who have helped change our view of the universe in which we live, supported by a 35 page booklet. the booklet provides a historical introduction to women in astronomy as well as multi paragraph captions supporting each slide.

ASTRONOMICAL CARTOONS by SIDNEY HARRIS- 20 slides. A collection of cartoons intended to inject some humour into your slide show. Self explanatory, no supporting documentation.

From The Prez

It's hard to believe that yet another full year has passed. It's been a busy one. Astronomy is gaining in popularity amongst the general public and our contacts are becoming more important all the time. We were out in the public more this year than many previous years. There was Astronomy Day, at the Catarqui Town Centre, with lot's of people and lot's of help. We received a summons to appear at Grass Creek Park to help the OPP with a fundraiser. We demonstrated telescope making, showed off some sun spots and generally answered questions. We were set up right next to the dunk tank, too. I hope no one got any ideas. We also hosted a Barbeque with our Youth Group, held at Rotary Park, and this was well attended. Some people even came back after dark so that they could observe with us. Then there have been Open Houses at Queen's Observatory, Science Quest, Charlestown Lake and other places where we help others with our telescopes. Our Observing Chair has even organized monthly public sessions both in the evening



and in daylight at a downtown site. We began a Youth Group this year, with the help of government funding. This funding required that we emphasize careers in Astronomy and related sciences. In the meantime, we talk and do interesting things with astronomy. The Youth Group speakers have included, Dr. Judith Irwin, Dr. Martin Duncan, Dr. Jill Tarter of the Phoenix Project, Terence Dickinson, Brenda Shaw, Laura Gagne, Denise Sabatini, Leo Enright and others. There have been field trips as well. Leo lead a trip to Holleford Crater, the barbeque has been mentioned above, and we are heading to the National Museum of Science and Technology this month. It's been a lot of fun with young people aged between ten and twenty-four years old. We plan on keeping it running for next year. The Amateur Telescope Maker's group has also been running well. A second telescope is almost completed (it's being aluminized now) which will bring our Centre total to three. They also purchased back the grinding machine that we had sold to North York Astronomical Society and it is available for all who wish access to it. The Observer's Group continued to meet this year. We have done a little better than last year for clear skies. Ken Kingdon bagged his last Messier at Laura's place. Even if it is cloudy, the get-togethers are fun. Public observing has been organized and we have committed to sponsor four public nights during the year at Charleston Lake, outside of the night we help Terence Dickinson. We also had a Future Committee struck and discussed where we would like to go with the Centre. The gist of that meeting was to continue to support public education in a big way, perhaps even present 'in-service' for elementary and secondary teachers. We also have long term planning sites on a big telescope, preferably with remote connections. Doing some research was also a possible direction. Our regular meetings have been well attended. All our speakers but December's have come from the Centre itself. Csar has been a welcome addition as have Hank's liquid donations for raffle and the other donated raffle items. December will mark our First Annual Award Banquet, organized by Kim Hay. The speaker will be Joady Ulrich from the Windsor Centre. Individuals within the Centre have been very busy as well. One of our Youth Group, Dustin Freeman, (who are not officially RASC at this time) placed second in the Mars Society's First Annual Writing Contest. David Pianosi and Ken Kingdon have both earned Messier Certificates. And our Honorary President has had at least two books published this year, has his own website, and won an Emmy!

Congratulations to all. Clear Skies, Peggy Hurley

From The Secretary

Subject: RASC Meeting minutes, Sept 11, 1998
Called to order 8:09

Reports: **Newsletter editor:** Newsletters are available now. There are many interesting handouts available as well should anyone wish to take some. All items are free to guests as well.

Observing and Telescope Making: The next observing session will be at the home of Steve Manders on Saturday, September 19th at 5:00 pm. There will be a BBQ before the observing. Meat is from the August Rotary Park BBQ. October will be at the home of Laura Gagne, and November will be at the home of Peggy and John Hurley. The new mirror is accurate to 1/7.4 wave and is to be sent off for aluminizing. The next meeting of the telescope making group will be Sunday, September 27th at the home of Doug Angle. The mirror grinding machine is permanently set up at the home of Tom Dean and is available for personal member's use by making an appointment with Tom.

Library Report: All of the books have been catalogued. The best of the collection has returned to the bookcase, the rest is coming soon. The list of on-line/off-line books will be posted on the website. Videos and magazines are pending...

National Council Representative: Next meeting is the first weekend of November. Michael Watson has still not acknowledge our request to have our constitution changed so that we can give receipts for charitable donations. Sue is chasing him.

Secretary's Report: Laura Gagne made a motion to accept new member Ross Munroe into Kingston Centre. The motion was seconded by Doug Angle. Carried. Laura has the keys to the observatory booked for each meeting night. (addendum after the fact.....several guests accompanied Tom Dean, Doug Angle and myself to the observatory for their first look at Jupiter, Saturn and the moon. They were thrilled and will probably come to future meetings as well.).

Treasurer's Report: see treasurer's report in the newsletter. If members wish to renew subscriptions to Astronomy magazine or Sky and Telescope then they can give their renewal forms to John and he will send them in a bundle from the centre. There is a club discount so that subscriptions cost \$35 US for Astronomy and \$37 US for Sky and Telescope. Pay John when he tells you the cost in Canadian dollars, plus your share of the group money order cost.

Long-range planning committee: Peggy and John are arranging a wine and cheese get together for the long-range planning committee. Details will be given to those who signed up.

Awards Committee: Peggy would like three volunteers to set up an awards committee to decide the winners of this



year's awards. Those interested were asked to meet with her at the break.

Observing Reports: [edited out]

Presentations: Tom Dean - Tom showed two designs for barn door devices for photography. One has a single arm, the other is double. The single arm style can be made for \$10 each. There was sufficient interest among the members to build their own barn doors, that Tom will set up a workshop. Tom showed slides of a Foucault test done on the new mirror as well as assorted starfest blackmail shots.

Frank Hitchens - Frank showed a computerized barn door device he built with spare parts from a telescope drive system. The wheel turns as opposed to the rod, which gives a smoother flow. It is controlled by a keypad, which means your hands never touch the barn door, causing a reduction in jiggling.

Kim Hay - Kim showed slides of her trip to Greenbank, West Virginia to the National Radio Astronomy Observatory. It is open for public tours. The telescope is unbelievably huge- it filled the whole camera frame from one mile away!

Kevin Kell - Kevin showed blackmail slides from Grass Creek Park and Starfest.

Hank and Kevin have several new professional slide sets in the collection as well as donated member slides. These are available to members needing materials for public/school talks by contacting either Kevin or Hank.

Kevin would like to set up a regular (weekly/monthly) public solar observing session schedule at City Park. Anyone with a solar filter, please contact him if you are willing to share with the public.

Adjourned to the observatory at 10:42

These are the minutes of the regular meeting of October 2, 1998.

Called to order 8:10pm

November meeting: November's meeting will be an election/general meeting. People need to think about whom they would like to nominate for executive positions.

Long-range Planning Committee: A meeting of the long-range planning committee will be held at the home of John and Peggy Hurley Saturday, October 3rd at 5:00pm. It will be a pot-luck dinner. The centre has approximately \$8000 in the bank, and plans must be made for future projects or investments. Everyone is welcome to come.

Thanks from Grass Creek Park day: The Ontario March of Dimes sent a thank-you certificate to the centre for our participation in their fund-raising Sky is the Limit festival in July. Members expressed an interest in doing it again next year if we are invited.

David Levy: Our honorary president, David Levy, recently won an Emmy for his part in the documentary "3 Minutes to Impact". Shame on him for not telling us about it himself (some people are too humble).

Kim Hay: Kim announced the 1st annual awards banquet to be held Saturday December 5th, 1998 at the Golden Rooster Restaurant on Princess Street. Tickets will be sold in advance for \$20 each. It will be a hot/cold buffet dinner with music and doorprizes (donations please), but no dancing.

ATM: The next ATM (amateur telescope makers) meeting will be Sunday, October 18th at the home of Doug Angle from 2:00 to 5:00 pm.

Observers' Group: The next observing meeting will be October 23rd at the home of Laura Gagne. November's meeting will be on the 21st at the home of John and Peggy Hurley.

Public Observing events: Tom needs 3-4 telescopes for a public observing night to be held Tuesday, October 27th at the Murney Tower Museum parking lot. It will start at about 6:00pm. Contact Tom if you are available. Future events include daytime solar observing in City Park near the MacDonald statue for passersby. If you are interested in doing sidewalk astronomy, contact Tom.

Charleston Lake: Tom, Susan Phillips and others met with the "Friends of Charleston Lake" to discuss offering public observing nights at the park next year. We could potentially attract thousands for a weekend event. We may also be able to offer solar viewing at the beach in the same vein as sidewalk astronomy. Tom is also considering holding a star party like a baby Starfest for members only (and other paying registrants).

Newsletter: The next newsletter will be the last of the year. Kevin needs submissions.

Treasurer: We have T-shirts for sale, crater cards, Leo Brodeur photos, BOGs and Rasc calendars (\$14). Members can renew or subscribe to Astronomy or Sky and Telescope magazine through the centre for a substantial savings. Contact John if you are interested.

New Member: Tom made a motion to accept Paul Bowman as a new member of Kingston Centre. Seconded by Kim Hay. Carried. Welcome to the family, Paul.

Night Watch: Terry Dickinson has generously made his new Night Watch available to the members of Kingston Centre for \$27. It is breathtaking, as usual, and takes you through to 2010. Everyone needs the new edition, even if you have the old one. Interested members can contact Laura Gagne (53w1-9717 or rainbow@adan.kingston.net).

Speaker: Tim Seitz talked to us about how an impact from a large body (comet or asteroid) might have been responsible



for the shifting of the earth's crust which caused the poles to change positions. Fossil evidence has been found in the arctic of tropical plants and evidence of glaciation has turned up in the tropics. Scientists have used many ideas to explain this, but none have been convincing.

Special Observing Dates: Leo Enright told us of some important dates coming up for observing. October 8th will be the Draconids meteor shower and may be a storm. The parent comet for this shower can be seen in the sky right now (see November issue of Sky and Tel). On Oct. 10th the comet goes right through cluster IC 4665. It is 9th magnitude, so should be easy to find. The Orionids peak on Oct 21st.

Club slides: Kevin and Hank showed the tour of the solar system slide set as well as some Hubble images and cartoons. Each meeting more club slides will be shown. These slides are available for use by members making public presentations. Contact Hank Bartlett if you need them.

Kevin's Mount: Kevin showed his equatorial mount he made for a Dobsonian telescope. It cost approximately \$20 for parts and wood.

Jupiter and Saturn: These planets are about to come into a conjunction. Uranus and Neptune are in Capricorn.

Terry Dickinson: Terry is doing a slide show and book-signing at Indigo book store on Thursday, Oct 8th. Adjourned to the Observatory 10:30pm.

Youth Group News

The September meeting of the Youth Group was held in the conference room at CFB Kingston. We called Dr. Jill Tarter, the director of the Search For Extraterrestrial Intelligence at the SETI Institute in California. Dr. Tarter was in Melbourne, Australia at the time, but she agreed to talk to us. We asked her many questions and every youth had the opportunity to talk to the world's leading authority in person. She is a very nice person, and we are very grateful that she took the time during an international conference on SETI to talk to a small group of Canadians.

In October, we studied Archaeoastronomy with Ms Denise Sabatini. She talked to us about the Maya and their incredibly complex astronomy. Did you know that the pyramid at Chichen Itza is a perfect 365 day Calendar? (5 days are festival days and all the steps add up to 360 arranged in 4 seasons). The Maya also knew the cycle of the phases of Venus exactly...to the day! Peggy Hurley also taught the group some ancient pagan rituals surrounding Halloween...a propos since the meeting was on the 31st of October.



Observing Group News

1998 Observing Schedule

1998 Saturday November 21st @ dusk:

The home of Peggy and John Hurley (Sharbot Lake). From Kingston & the 401 Highway. Head north on Highway #38 for approx 65 km. Go through Harrowsmith, Hartington, Parham and Tichbourne. Go past Crow Lake Road (on your right), go past St. George Lake (on your left), go past Shibley Road (on your right). You are very close now. Xxxx

1998 December: No meeting this month

ATM Group News

Kevin Kell has finished grinding, polishing and figuring his 7" f4.5 mirror and has shipped it off for coating at Moonward in Sudbury. You can see some pictures of the initial scope design and mount at <http://130.15.144.100/atm>

National News

The last National Council Meeting took place on Saturday, November 7, 1998 in the Meeting Room of the Montreal Planetarium.

In 1999 RASC National Office will bring membership in-house, ending our difficult relationship with UTP. There was a motion passed, where approval was given for retaining a consultant to assess the needs of the office, selection and purchase of software, installation, and follow-up training. It was also decided, after much discussion and a tight vote, that the floating membership year be retained.

Another logistical problem, to be tackled by Randy, is a space and muscle issue. There is no room at DuPont Street for 6000 Handbooks and it is not an easy task to pack and ship a 100 Handbook order. Randy would like this to be farmed out, along with the shipping of promotional items, the BOG and the calendars. A part time person has been hired, Isaac McGillis, and he and Bonnie seem to be making great strides in organizing the office.

A number of membership certificates were approved for Saskatoon and Kingston. Kingston names include Warren Morrison, Kim Hay, Ruth Hicks, Peggy Hurley, Arthur Covington, Susan Gagnon, Kevin Kell, Sue Knight-Sorensen, Walter MacDonald, Dieter Brueckner, and Peter Kirk. The Messier Certificate list includes Kingston's



Ken Kingdon.

The Journal editor, Dave Turner, reports a decline in the number of publishable papers submitted for the research paper section. If you are sending in a report of a deceased member, please send a summary of important biographical material, perhaps a suitable image. David also would like to remind the membership that Focal Plane is for RASC member opinions. He also solicited an increased contribution from the National Executive.

National Secretary Raymond Auclair will resign the post of Secretary due the increased workload in his job. He hopes to complete a revision of the RASC Manual (Randy Attwood is preparing an executive manual and Bonnie is preparing an office manual).

Astronomy Day coordinator Scott Young has also resigned.

A new issue of the BOG will be available soon and there will be a small increase in price to centre members (was 9.50 will be 12.00) The retail price will be \$19.95.

Kingston has finally received the OK of the Constitution Committee and the approval of the National Council for its Non-Profit Status.

A proposal for a meteorite search program to be assisted by RASC with a donation of \$5155 was defeated.

There was a promotional package presented by the Toronto Centre regarding GA99. GA2000 will be in Winnipeg and no one has made a bid for 2001.

These were the high-lights of the regular meeting. On the Sunday there was a session devoted to a list of items that Randy Attwood felt will have to be dealt with soon, and I will attempt to present a rough overview here.

Handbook Editor Roy Bishop is persisting with his proposal of increasing membership to \$60 or more. You may recall from last years GA that Dr. Bishop expressed a degree of frustration with the reality that revenue from the sale of handbooks is just being churned back into the operating budget. He thinks that membership fees should reflect the price of running the society and profits of the handbook should go to research projects.

These were some of the points made: volunteerism takes many forms in RASC, the efforts of the handbook contributors and editor just happen to generate cash. The increase in fees would never result in a substantial operating fund increase because membership would drop off Council is almost unanimous in its desire to be involved in research but also wants to fund more Centre activities (telescopes, observatories) there are large sums of cash in the possession of the Society and knowing this members will not tolerate the increase.

Dr. Bishop may not get a fee increase but he sure knows how to get a conversation going. There were many good ideas. A couple of these were, taking some of the

profits from the handbook and purchasing publication expertise to take some of the load off of the Editor and several different schemes to find money elsewhere to fund research and center projects. I am sure that there will be more on this topic.

It was a great meeting. Montreal members are great hosts. Things were well organized and attention to detail allowed delegates to focus on the tasks at hand. The general atmosphere encouraged a productive exchange of ideas. Randy did a nice job as chair which really helps.

After dinner we had the pleasure of an informal presentation by Canadian Astronaut Bjarni Tryggvason.

BBS News

The following Kingston BBS's are RASC support boards: *Observatory East (Mark Kaye) 613-353-6495 FidoNet 1:249/109 2400-28800 bps 8N1V.34
* StarStream (Kevin Kell) 613-546-6403 FidoNet 1:249/112 14400-28800 bps 8N1V.34
* Moonlight Cascade (Kim Hay) 613-353-7369 FidoNet 1:249/133 2400-28800 bps 8N1V.FC

Fireball Group Submitted by Tom Dean

Fireball Report Line: 545-6000 ext 7608.

Fireball Web reporting form:

<http://www.astro.queensu.ca/~irwin/fireballs/fbhome.html>

There will be a **meeting of the Fireball group** Saturday November 14th at 2:00pm at the home of Tom Dean. Call xxx-xxxx for info.



From The Archives of the RASC Kingston Centre

From the minutes of 1972 Nov 08

The Shortcliffe donation was again discussed. No decision was made. Mrs. Shortcliffe will donate to the Queen's University Astronomy Club \$500 towards the cost of building an observatory and will also donate a 10" reflecting telescope to be housed in the said observatory. A committee was formed [Ed: Oh No!] to decide on all possible observatory sites. The chairman was Paul Brown.

From 1973 Jan 30

The Investigation Committee concluded that there was not a suitable site near Queen's University for an observatory and therefore the Astronomy Club could not accept the donation by Mrs. Shortcliffe.

From 1973 December

Welcome a new member, Mr. Leo Enright from Sharbot Lake.

From 1974 January

The Kingston Centre decided to make a \$10 contribution to the Centennial Observatory Fund of the Winnipeg Centre.

address is:

<http://heritage.stsci.edu>

An added bonus of the site will be that members of the general public will soon have the chance to cast votes for their favourite potential targets for Hubble to photograph. Results of these votes will be used to direct a portion of Hubble's telescope viewing time in future, and the pictures taken will of course be displayed on the Heritage Project's Website. Clear skies, Christine Kulyk

The Kingston Observatory Plaque

Sunday November 3, 1985 City Park

The first optical astronomical observatory in the province, the Kingston Observatory was established in 1855 after a solar eclipse aroused public interest in astronomical studies. Under the auspices of a committee of British military officers and 'gentlemen amateurs' a frame observatory was built here. It was transferred to the control of Queen's College in 1861 and within a year a new brick structure had been erected on the site. Staffed by Nathan Fellowes Dupuis, an able mathematician, the observatory, in addition to making conventional astronomical observations, produced barometric and thermal readings, fixed meridians for surveying and provided a time service. In 1881 it was moved to Queen's and today four cylindrical stones, former supports for the telescope, are all that remain of the old observatory building.

Submissions from Members

Jayanne English asked me to pass along the following to RASCans:

Since leaving Kingston for the wilds of Baltimore, Maryland, to work at the Space Telescope Science Institute, Dr. Jayanne English has kept very busy helping to set up the



Hubble Heritage Project. The project is a new public-information program that will make some of Hubble's best and most beautiful images available to the general public. Jayanne was delighted to announce that their new Website was launched today, October 21, with the

first four gorgeous pictures proudly on view. The Web

News from the Net

Headlines from The Space Telescope Science Institute at:
<http://oposite.stsci.edu/pubinfo/whats-new.html>

October 14, 1998 RELEASE: 98-190 SOHO IS NEARLY BACK IN BUSINESS

High-quality new pictures of the Sun, taken earlier this week from the Solar and Heliospheric Observatory (SOHO), have raised hopes that the mission may soon be returned to scientific operations. Engineers have successfully reactivated nine of the 12 instruments on the European Space Agency (ESA)/NASA SOHO mission, which has been out of commission for nearly four months after contact was lost on June 24.

"It's very exciting to see these images again after so many weeks of concern. We hope that all the SOHO



scientific instruments can be returned to the same level of health, so we can resume normal scientific operations in the near future," said Dr. Joseph Gurman, the U.S. project scientist for SOHO, and co-investigator on the Extreme Ultraviolet Imaging Telescope (EIT).

"As of today, nine of the 12 instruments on board SOHO have been turned on. Four of them are already fully functional; the other five are still undergoing careful recommissioning activities. But so far no signs of damage due to thermal stress during the deep freeze have been detected. I tip my hat to the engineers who built this spacecraft and these sensitive but robust instruments," said Dr. Bernhard Fleck, the ESA project scientist for SOHO. The remaining three instruments will be switched on over the next few weeks..

SOHO operates at a special vantage point 1.5 million kilometers (about one million miles) out in space, on the sunward side of the Earth. The spacecraft was built in Europe and it carries both European and American instruments, with international science teams. SOHO was launched on an Atlas IIAS rocket and is operated from NASA's Goddard Space Flight Center in Greenbelt, Maryland.

Details about the operations and about SOHO in general, can be found at: <http://sohowww.estec.esa.nl> and <http://sohowww.nascom.nasa.gov>

October 14, 1998 RELEASE: 98-188
JUPITER'S "WHITE OVALS" TAKE SCIENTISTS BY STORM

As powerful hurricanes pummel coastal areas on Earth, NASA space scientists are studying similar giant, swirling storms on distant Jupiter that have combined to spawn a storm as large as Earth itself.

Three separate cold storms, called "white ovals" because of their color and egg shapes, have been observed in one band around Jupiter's mid-section for half a century. Two of the storms recently merged to form a larger white oval, according to scientists studying data from NASA's Galileo spacecraft, the Hubble Space Telescope, and the Agency's Infrared Telescope Facility atop Mauna Kea, HI.

"The newly merged white oval is the strongest storm in our Solar System, with the exception of Jupiter's 200-year-old 'Great Red Spot' storm," according to Dr. Glenn Orton, senior research scientist at NASA's Jet Propulsion Laboratory (JPL), Pasadena, CA. "This may be the first time humans have ever observed such a large interaction between two storm systems."

Each of the white ovals that merged were about two-

thirds the diameter of the Earth before the merger, when they combined to form a feature as large as the Earth's disc. Although scientists have observed the end result of the merger of the two white ovals, the actual "collision" took place under cover of darkness while Jupiter was turned away from view.

Adding to the mystery is the fact that a nearby storm rotating in the opposite direction to the new white oval used to be warmer than its surrounding. "This probably means that the feature contained mostly downwelling winds," said Orton. However, Galileo's photopolarimeter radiometer instrument showed this feature had cooled down to temperatures that were about the same as its surroundings.

Orton suspects that this storm somehow lost power and is no longer spinning as fast or downwelling as strongly as a year ago. This storm was once positioned between the two smaller white ovals that merged, and Orton theorized that when this storm system lost power, it removed the buffering mechanism that kept the two original white ovals apart.

Galileo has been in orbit around Jupiter and its moons for 2 1/2 years, and is currently in the midst of a two-year mission extension, known as the Galileo Europa Mission. JPL manages the Galileo mission for NASA's Office of Space Science, Washington, DC. JPL is a division of Caltech, Pasadena, CA.

Related images and information on the Galileo mission are available on the Internet at the Galileo website: <http://www.jpl.nasa.gov/galileo>

Sept. 29, 1998 RELEASE: 98-172
TREMENDOUS GAMMA-RAY FLARE BLASTS EARTH

An intense wave of gamma rays, emanating from a catastrophic magnetic flare on a mysterious star 20,000 light years away, struck the Earth's atmosphere on August 27, 1998, providing important clues about some of the most unusual stars in the Universe. Scientists said the gamma radiation posed no health risk to humans.

The wave hit the night side of the Earth and ionized (or knocked electrons out of) the atoms in the upper atmosphere to a level usually seen only during daytime. This astonishing blast of ionization was detected by Prof. Umran Inan of Stanford University. "It is extremely rare for an event occurring outside the solar system to have any measurable effect on the Earth," Inan said. It was so powerful that it blasted sensitive detectors to maximum or off-scale on at least seven scientific spacecraft in Earth orbit and around the solar system.

The wave of radiation emanated from a newly discovered type of star called a magnetar. Magnetars are dense balls of super-heavy matter, no larger than a city but



weighing more than the Sun. They have the greatest magnetic field known in the Universe, so intense that it powers a steady glow of X-rays from the star's surface, often punctuated by brief, intense gamma-ray flashes, and occasionally by cataclysmic flares like the one observed on August 27. Astronomers think that all these effects are caused by an out-of-control magnetic field -- a field capable of heating, mixing, and sometimes cracking the star's rigid surface to bits.

EDITOR'S NOTE: Additional information on magnetars or the Aug. 27 event is available on the internet at:
<http://www1.msfc.nasa.gov/NEWSROOM/> and
<http://www.magnetars.com/>

Callisto and another of Jupiter's moons, Europa, which has already displayed strong evidence of a subsurface ocean.

"Until now, we thought Callisto was a dead and boring moon, just a hunk of rock and ice," said Dr. Margaret Kivelson, space physics professor at the University of California at Los Angeles (UCLA) and principal investigator for Galileo's magnetometer instrument, which measures magnetic fields around Jupiter and its moons. "The new data certainly suggest that something is hidden below Callisto's surface, and that something may very well be a salty ocean."

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October 21, 1998 RELEASE: 98-192
JUPITER'S MOON CALLISTO MAY HIDE SALTY
OCEAN

Jupiter's second largest moon, Callisto, may have a liquid ocean tucked under its icy, cratered crust, according to scientists studying data gathered by NASA's Galileo spacecraft.

The Galileo findings, to be published in the Oct. 22 issue of the journal Nature, reveal similarities between