



Regulus



The Newsletter of the RASC Kingston Centre

2000 May-June

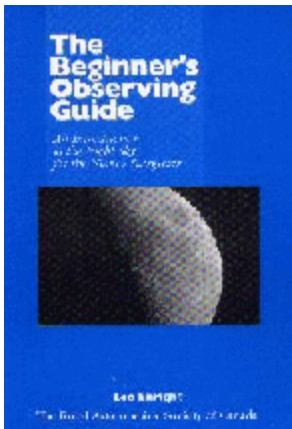
Astro Week 2000: May 8-13

Monday May 8th-Friday May 12th: Solar Observing sessions (12:00-13:00 EDT) at the Murney Tower Museum Park. We need 1 volunteer each day with a scope and solar filter.

Monday May 8th-Saturday May 13th: Stellar Observing Sessions (dusk to +1 or 2 hours) at the Murney Tower Museum Park. We need 2 volunteers each night with scopes for general viewing.

Contact Tom Dean (Observing Chair) for scheduling and other info.

Saturday May 13th Astronomy Display at the Cataraqui Town Centre (South entrance)



The newly revised **Beginner's Observing Guide** is designed for newcomers to astronomy, and is an ideal starting point to the wonders of the heavens. Its easy to read format, and clear, concise explanations make learning about the night sky a joy. Students and adults alike benefit from author Leo

Enright's handy star maps and simple instructions on reading them. Topics covered include recognizing constellations, and observing methods for stars and planets that can be seen with the unaided eye, binoculars, or small telescopes.

It is available in local retail bookstores OR from The Kingston Centre (at a good discount off retail pricing!)

"GA 2000: The Millennium Assembly"

Summer is the season when starry skies, late nights, astronomers and mosquitoes all gravitate to each other. This year in Winnipeg we anticipate the brightest stars, the smartest astronomers and the biggest mosquitoes ever! It all comes together from June 29 through July 02. Planned for this event is an exciting line-up of speakers and paper presentations, as well as events and activities to be enjoyed and remembered by family members for years to come.

The list includes three dynamite speakers for the Assembly, lead off by Dr. Wendy Freedman, one of the three co-leaders of the Hubble Space Telescope Key Project. Recently featured in Astronomy magazine, Dr. Freedman's interests lie at the beginning of things - the age and evolution of the universe. Those beautiful images from Hubble showing distant galaxies, Cepheid variables, and the transient glow of supernovae are all part of her search for the beginning of it all.

Steve Edberg and Don Parker are well-known names in the amateur and professional community. Both appear frequently in the pages of Sky and Telescope and Astronomy magazine, Don

for his spectacular high-resolution images of the planets and Steve for his equipment reviews and observing tips. In his day job, Steve works for the Jet Propulsion Laboratory in Pasadena where he helps manage the Cassini probe that is now on its way to Saturn. Don is the consummate planetary observer whose first love is Mars. His work has found a place in professional journals and graced the pages of other publications as well.

The centre of activity will be the campus of the University of Manitoba. Reasonably priced accommodation is available at St John's College. Meals, residences, lectures, the banquet, the Barbecue - everything is within walking distance. For family leisure and entertainment, arrangements have been made for lots of activity. Waiting for visitors is the Zoo, The Fort Whyte Nature Centre, Oak Hammock Marsh Waterbird Sanctuary, the Museum of Man and Nature, and the Planetarium. The Red River Exhibition will be in full swing until the 1st of July.

Just one hour away are the sunny beaches of Lake Manitoba, reckoned one of the best in the world with their incredible white sands. From the centre of Winnipeg, at the historic confluence of the Assiniboine and the Red Rivers, is The Forks, from which river boat trips go downriver to the restored Hudson Bay Company fort. The Forks is also the place to be on Canada Day to join in the big party to celebrate our national identity with a Stage Show and Fireworks, or perhaps visit the shops, Children's Museum, or take in the Children's Theatre. Astronomy has not been forgotten either - the Winnipeg Centre's observatory with its 14" 'scope is always pointed up! Information and registration packages can be found at the GA 2000 web site:

<<http://www.rasc.ca/ga2000/>>, by contacting Stan Runge at stan.runge@mts.mb.ca, or by sending a note to Stan Runge, GA 2000, 35 Cunard Place, Winnipeg, MB, R3T 5M1. Information on poster and paper presentations can also be found in the same places. A limited number of registration packages are also available through your Centre representatives. Love to see ya! FL Price 3348 Assiniboine Ave Winnipeg, Canada

R3K 0B1 Tel: (204)831-0150

E-mail: flprice@mb.sympatico.ca

I-net: <http://www.mwcs.mb.ca/~pricef>

From "1,001 Useful Phrases in Everyday Latin"
Hostes alienigeni me abduxerunt
(I was kidnapped by aliens.)

Submissions from Members

Science Fair 2000

by Dave Pianosi, Awards Committee Chair

Leo Enright was kind enough to be RASC judge at the L&A Science Fair yesterday (Saturday April 8th).

1st Prize - Ben Angle : 'Gauging Luna, Terra, Sol.'

2nd Prize - Neeraj Gupta and Ritesh Acharya : 'Mission to Mars'

3rd Prize - Tabitha Hole : 'Just the Solar System'

Thanks very much Leo.

Observatory Building 101

by Norman Welbanks <skyguy@sympatico.ca>



There are a number of considerations that have to be taken into account when you decide to build an observatory. Terrence Dickinson and Allan Dyer outline these elements very well in *The Backyard Astronomers Guide* and I recommend it as required reading to anyone before they start. The A.T.M.

page also has links to a number of designs and sizes, complete with pictures, that are also helpful.

I decided on a roll off design, and decided to make it bigger than I actually needed, because it would be too difficult to enlarge at a later date. Luckily, I live in Yarker and was able to ask Mr. Dickinson for his input in regards to anything he

might have done differently on his own observatory.



The basic dimensions are 10'x23'. The roof actually rolls 18', which allows for a 5' warm room. The piers are made from 6" well casing with a

flange welded to the top. This allows you to be able to change the top section to accommodate any different mounts that may present themselves in the future. The piers are sitting on bedrock with concrete poured around them. The building is fairly simple from there on up. The floor is constructed of 2x10 pine lumber sitting on decking block.



The deck blocks keep the building off the ground and therefore help delay the inevitable rot that will happen if it is in contact with the ground. The

floor is covered by 5/8" plywood, and the walls are 16" on centre construction. The walls are 6' high from floor level, and the south wall has 2 sections that fold down to allow viewing to the horizon. The west end gable also folds in for the same purpose.



The roof presented its' own unique challenges as it had to be strong enough to hold a modest snow load, and light enough to be able to roll it

easily. The roof beams are 2x8" pine with 2x4" pine attached. These last 2x4's were "ripped" on an angle which gave us a pitch to the roof. This allows the rain and snow to run off easily. The reason the 2x4 were attached to the 2x8 is it is far cheaper to

make mistakes on 2x4 stock than it is on 2x10! The roof frame sits on casters that sit on angle iron. The only thing I would have done differently would have been to use steel channel instead of angle iron. This would have helped the roof track accurately. Instead, I had to install guide wheels to insure that everything stayed straight. Not a big deal, just another challenge.

The roof is covered with off white steel and the exterior walls are a finished plywood. It does not have power as yet. I run a couple of extension cords from the house. It is a "work in progress" but the main work is now complete.



The main difference now is that within 10 minutes, I can be out observing when before it took me almost 45 minutes just to carry everything out of

the house and set it up. The best part is at the end of the night, I can just pull the roof closed, go to bed, and clean up the next day!

How much did it cost? About \$4000.00 so far. That includes clearing and levelling the site, building permits, contractor fees, and all materials.

Was it worth it? Time will tell. I would be happy to answer any questions. You can reach me by email at xxxx@xxxxx.xx or by phone at 613-xxx-xxxx.

Binocular Observing by Dave Pianosi

After years of observing with a telescope I've recently discovered the joy of using binoculars. At StarFest '99 I purchased a decent quality binocular (12X50). I took them out that same night and, under average Mount Forest night skies, my friend Joe pointed out M27 right off the bat with them. When I tried for M27 I was thrilled to see that most

of Sagitta was in one field. Then a casual sweep up to M27. Compared to seeing through a telescope, these binoculars gave me an excellent idea of where I was in the sky, something that I've always found difficult. But the really amazing thing to me was "my discovery" of Neptune on Aug 5. I had run off some large and fine scale charts of the pertinent Capricorn regions on my computer and went out to the backyard and started to peer at the dim area through the sky glow of Kingston, ON. As I craned my neck to the sky, binoculars around my neck, camera tripod in one hand and charts in the other, there was a feeling that I was forgetting something. I've never started a hunting observing session with only one trip outside. I had rigged up a \$1.50 bino mount using a small angle bracket, thumbscrew and my camera tripod. This proved to be a tremendous boost to my new way of observing. Within a few minutes I had confidently located Uranus and Neptune! I was enthralled with myself. After trying for four years to find Neptune, there it was. Not in my scope as I figured, but in fairly standard pair of binoculars. I was confident that I was seeing Neptune, but in order to double check, I went inside and ran my computer program a few days forward and saw that, sure enough even distant Neptune would show a small yet discernible position change. The next clear night came four days later and just as the program had predicted, that tiny blue star had indeed shifted to the west, changing a straight line pattern of three faint stars into an extremely flat triangle pattern. Bona fide success: the thrill of finding something using new methods is one of those reasons that we deprive ourselves of sleep. What a great feeling! I quickly hauled out my 6" Newtonian to close inspect the catch. No problem finding Neptune now that I had a really good sense of where I was in the sky. Three trips in and out of the house later, I was set up. However, disappointment was my overall feeling. Compared to the binoculars I had lost the colour which was the most unique thing about it. That fine bluey star pinpoint of light as seen through the binoculars had become an off-white grey fuzzy blob. Low power eyepieces were in order but nothing compared my first binocular view of

Neptune. I'd suggest that, if you haven't already, buy or borrow a pair of binoculars and see what you've been missing.



More from: David Pianosi <xxx@xxx.xx>

So....here's my homemade, home ground 7.1" f5.5 Newtonian on Dobsonian mount. IT WORKS!



HIGH-ENERGY ASTROPHYSICS WORKSHOP

by Ray Berg
<berg3@netnitco.net>

Favourite deep sky objects twisted into unfamiliar shapes and odd colours, bizarre objects appearing in previously empty space..... These are some of the things I encountered at the recent High-Energy Astrophysics Workshop for Amateur Astronomers, sponsored by NASA Marshall Space Flight Center and the American Association of Variable Star Observers (AAVSO). This superb event was conducted at the Marshall Space Flight Center in Huntsville, Alabama on April 13-14, 2000. A total of 85 amateurs, from 25 US States and 10 countries made up a very receptive group, intent on learning more about the discoveries in this area and sharing the information with others. Attending with me, as representatives of RASC Kingston Centre, was Richard Schumde from Barnesville, Georgia.

The purpose of this intensive workshop was to provide an effective means of education and outreach to the general public of the recent discoveries and advances in high-energy astrophysics. Two days of lectures were presented by twelve NASA research scientists to a group of

selected amateur astronomers who have played a role in recent high energy-multiwavelength observing programs. These amateur participants are then expected to return home and use this information to educate and inform other amateurs and the general public about this rapidly expanding field. I have a continued interest in this fascinating area of astronomy and have been visually monitoring cataclysmic variable star outbursts for NASA and ESA satellite programs through the AAVSO. Thus, I jumped at the chance to join this exciting activity.

The presentations covered the high-energy area of the electromagnetic spectrum, from gamma rays through x-rays and ending with the ultraviolet. Descriptions of Gamma-Ray Bursts (GRBs) and the time related problems in observing them, neutron stars and magnetars defined the highest end of the spectrum, along with a panel discussion on a program being developed for rapid observations of GRBs by amateurs. In the x-ray region, images from the recently launched Chandra X-Ray Observatory were part of a presentation on galactic jets, black holes, pulsars and blazars. X-ray timing and the RXTE mission was a particularly interesting topic. Cosmic rays, multiwavelength observations of supernovae and extreme ultraviolet astronomy rounded out the discussions. Dr. Janet Mattei of the AAVSO closed the session with a description of amateur astronomer contributions to high-energy astrophysics.

A full afternoon tour of the NASA Marshall Space Flight Center wrapped up the workshop. This is home to many interesting space research programs focused on topics such as gamma ray and x-ray astronomy, cosmic ray research, space plasma physics, and solar physics. The highlight of the tour was going through a mockup of the International Space Station where testing is done on many of the components of the real thing. This was really neat and as I visualized myself floating instead of walking through the various segments, I could foresee the great adventure awaiting the future occupants of this station. Also visited were the facility that was used to calibrate the equipment for the Chandra X-Ray Observatory satellite, and

the project of the Burst and Transient Source Experiment (BATSE) on the Compton Gamma-Ray Observatory satellite. As a solar observer, I was particularly interested in the tour of Marshall's solar observatory, where daily magnetic studies of sunspots are conducted to predict and study solar flares. The effects of solar flares can be very disruptive to earth bound communication and power systems as well as being dangerous to satellite equipment and potentially lethal to astronauts.

Overall, the presenters of the workshop were very successful in demonstrating how high-energy astronomy is central to the study of some of the most interesting phenomena in modern astrophysics. In turn, I have outlined my own program for the next 12 months to disseminate this information to fellow amateurs and the general public, through a series of slide presentations and written articles. Included will be a write-up for REGULUS and hopefully a presentation at one the monthly Kingston Centre meetings.

YOG

by Hank Bartlett

Feb. 2000

The Youth Observing Group continues to meet 1st and 3rd Wednesday of each month 6:30pm - 8:00pm in room 108 at Holy Cross Secondary School. With two new youth signing in on the 16th of this month we now have 12 members.

Notes from the Secretary

Lack of space prevents the inclusion of the minutes of the Kingston Centre Meetings of March and April 2000. However, they, along with all kinds of other minutes and information, are available on our secure web site.

National News

From: S.D. Gagnon

<sdgagnon@mercury.kosone.com>

Subject: Nat council mar 18 as I saw it!

Date sent: Thu, 13 Apr 2000 22:31:07 -0400

Hey kids!

Sorry that this has taken so long, I thought it was a great meeting. All reports are on the web site and the official minutes are to come, but I tried to hit the highlights here. Susan.

National Council March 18, 2000

Flash minutes available on the web site and official minutes still to come. These are the highlights as I saw them...

The **President's Report** included several interesting items.

CASCA and RASC sharing office space... CASCA will pay RASC to handle membership, production and distribution of an annual Member's Directory, bookkeeping, ballot creation and distribution.

Payment will cover, hourly rate and overhead, as well as costs for materials and postage. It was agreed by all that it will most likely benefit both parties. Negotiations continue to work out all of the details, and we will know for certain if it is a go by the GA.

Canada Wide Science Fair: The Executive approved a \$1000 expenditure to support this effort. 2000 London, 2001 Kingston, 2002 Saskatoon, 2003 Calgary
Centre participation is encouraged.

Looking Up: Michael Watson to be looking into!

National Secretary's Report: Kim has been working on the Manual and will have it on line soon. This way, updates can easily be downloaded by Centres.

Financial Report: Council recommended fees be increased to \$40 per year regular and \$25 for a youth and \$800 for life (+ surcharges).

The **special projects Grant** to Saskatoon was approved for \$3000 (original request was \$9700).

Journal Editor's Report: Needed i) a book review editor, ii) an education notes editor, iii)

one or two active associate editors who can assemble material for publication, maintain contact with authors, edit material for publication and look after the details of images associated with such articles. And iv) one or two individuals to replace me.(Dave) There has been an overall drop-off in the submission of popular and research items.

BOG Editor: Leo initiated a reprint of the BOG, 3000 copies and sales are not expected to slow down. In the time between the October meeting and March sales have been over \$11,000. The Handbook and the Calendar are always the Society assets that get all the press but the BOG is working hard for us too.

Calendar Editor: Calendar was also up this year and all of the numbers are in the report on file. There was a motion to increase the bulk price to non-RASC clubs and it was passed. Please remember that you can submit your photos for the calendar.

National Library Committee: Great asset but getting no use. The committee will tackle several key issues listed in their report.

Awards.: Chant Medal: No suitable nominations
Service Award: Phil Johnson, Calgary.

Ken Chilton Prize: No nominations

Simon Newcomb: No nominations received prior to the deadline.

Historical Committee: A formal archiving policy is being developed for the Manual, which will include suggestions guidelines for Centres as well.

Nominations Committee: Rajiv Gupta was nominated for and accepted the position of Editor of the Handbook. Leif J. Robinson was appointed Honorary Member of the RASC.

Nominations to be finalized at the GA this summer are, 2nd Vice President, Mary Lou Whitehorn, and National Librarian, Colin Haig.

Observing Certificate Committee: New Certificates are being created including, a binocular list, moon list, and double stars.

Public Education Committee: This committee has been very busy, watch for additions to the RASC website and possibly education related additions to the Handbook.

GA registration Forms are in! See the Winnipeg Centre web page or your National Rep.

Editor's Corner

by Kevin Kell

RASC GA2000

Book your vacation days now for the RASC 2000 GA to be held in Winnipeg Manitoba around the July 1st long weekend, specifically Friday June 30th to Sunday July 2nd

Starfest 2000

Starfest is scheduled for Thursday Aug 24th to Sunday August 27th

Regulus Back Issues Wanted:

Again, I am requesting that if you have any issues of Regulus from 1988 and before, please send them in to me so I can make copies for our archives (and I will send the original back to you). Thanks to one of our past Presidents, Angelika Hackett, for sending 6 issues from 1979, 1980 and 1988). There are now 3 archive copies of these held by the Librarian, Secretary and Editor.

Slide Loan Sets:

To remind you that we have a large selection of 35mm slide that can be loaned out to members for use in giving public talks, talks to schools, etc. And we forgot to mention two of our own!
Expanding Their Universe Set #1 (40 slides)
Expanding Their Universe Set #2 (40 slides)

Email Announcement List

We've maintained an email announcement list for several years now but many members are still not entering their email addresses onto their renewal forms. The Announcement list is very low traffic - generally 1-5 messages/month - announcing items of interest to Kingston Centre Members from the Executive. If you would like to be included on this list, please notify me with an email note. I maintain

the list and a copy is on the secure web site if you wish to contact other KC members by email. For those not on the list, here is the current list of members on the list, to give you an idea of its size.

Dave Pianosi Andrew Telesca Kendra Angle Ray Berg
Mike Drew Robert Gent Cathy Hall Christopher Osburn
Christine Kulyk Dean North Tom Dean David Levy
Donald Lever Don Mastrianni Doug Angle Edward
Engle David Hanes Steve Hart Ronnie Beck Judith Irwin
John Griese Jim Temple John Brooks David Joiner
Joseph Pasek Jim Purser Kevin Kell Kevin Fetter Kim
Hay Kevin Kell Leo Brodeur Mark Kaye Mark Sonntag
Thomas Massey Mike Cord Mark Payne Paul Winkler
Peter Kirk Pornchai Pacharin-Tanakun Richard Adduci
Laura Gagne Ronald Johnson Susan Gagnon Kinchen
Searcy Stan Hanna Norm Welbanks Sue Knight-Sorensen
David Stokes Susan Phillips Ruth & Terry Hicks Tom
Matis John & Peggy Hurley Tim Seitz M Suhonen
Walter MacDonald Brenda Shaw

New - Member Web Sites: Check out <http://members.kingston.net/rasc/memlinks.htm> for links to the web pages of our members. Good for seeing astroimagery, project ideas and details and more!

For Sale: A Home on the Holleford Crater.

The house on the west rim of the Holleford Crater, north of Kingston, is for sale. Not only would living on the rim of an impact crater be a unique location for an astronomy buff, the house is on the rim's high point of land, affording excellent sky access. The site is far enough north of Kingston that excellent dark skies prevail. For further information call Jennifer Bennett at xxx-xxxx.

Heard of Storm Chasers? Read this note from our Pluto Chasers!

Ken Kingdon and Steven Manders are orchestrating an effort to view Pluto from Dark Skies in the next few weeks. They have a dark site near Enterprise (40 minutes northwest of Kingston) but the actual date is floating. For more details call Ken at xxx-xxxx

Charleston Lake Star Party

This year it has been set for Friday August 4th. Yay!
A non-work night!

This event has been an Annual Slide Show Seminar and public observing session since 1987 (at least by my records) hosted by the Park Staff and Terry Dickinson. We are invited to help out by providing telescopes and operators and normally have a great time in a dark site.

Come on out! We sent a note off to Atilla Danko and the Ottawa Group to let them know.

Education Group News

We recently ran a 3rd print run of the "Expanding Their Universe Companion" Book (1st edition) and did a 2nd duplication run of ETU Slide set 1 and 2, as we had sold out. Orders continue to come in.

Work is underway on the Grade 6 edition as well as thoughts on revisions for the 2nd edition of the Grade 9.

Public Observing Sessions

Tuesday March 14th 7:00-8:00pm EST (Sunset 18:10) at the Murney Tower Museum Park (King & Barrie Sts) **Results:** A slight clearing in 0 degree weather with a good wind blowing in clouds. We got in about 70 minutes and had to pack it in. About 15 people dropped by to see some fantastic lunar vistas, saturn, jupiter and the orion nebula.

Tuesday April 11th 8:30-9:30pm EDT (Sunset 19:55) at the Murney Tower Museum Park (King & Barrie Sts) **Results:** Snowed out!

Tuesday May 9th 9:00-10:00pm EDT (Sunset 20:37) at the Murney Tower Museum Park (King & Barrie Sts) Actually all week long! (Astroweek)

Tuesday June 13th 9:30-10:30pm EDT (Sunset 21:12) at the Murney Tower Museum Park (King & Barrie Sts)

Equipment Loan Program

- the newest addition to our loan program is a Televue 19mm Panoptic 1.25" eyepiece

- Barney-the-purple-telescope is our ATM built 200mm f4.5 dobsonian - now comes with a purple carry bag for accessories
- Voyager is our commercial "Astroscan style" 114mm f4.3 scope
- The Fitz is our ATM built 200mm f6.9 dobsonian
- The Douglas is our 254mm f5.5 dobsonian and now comes with a blue carry bag for accessories

RASC Kingston Centre Meetings

The Kingston Centre RASC meets once a month on the 2nd Friday of each month at 8:00 pm (20:00) in Mackintosh-Corry Hall, Room B-201 on Queen's University Campus **unless noted otherwise**. We have adopted a policy of moving any meeting that is held on a holiday weekend to the **WEEK BEFORE**.



Event Horizon 2000

! Friday May 12th

Regular Meeting. Guest Speaker: Kathy Perrett (Queen's University) on the Queen's New Observatory at Ellis Hall.

!

Friday June 9th Regular Meeting. Guest Speaker: Ray Berg (Kingston Centre) - A Southern Odyssey This accounting of a month long journey through New Zealand, Fiji and Australia describes the author's observations of the wondrous night skies at these locations, meeting with southern amateurs and a visit to famous Siding Springs Observatory. Comments are presented on southern variable stars observed, including recently publicized Eta Carinae. David Malin's astrophotos obtained with the Anglo- Australian- Telescope illustrate some of the most impressive deep sky objects in the southern heavens.

- ! **Friday July 14th** Regular Meeting. Guest Speaker: Richard Schmude (Kingston Centre) (tentative booking)
- ! **Friday August 4th** Charleston Lake Star Party
- ! **Friday August 11th** Annual BBQ & Observing session, no regular meeting

2000 Officers and Executive Council

PO Box 1793, Kingston, On K7L 5J6
Infoline & answering machine xxx-xxx-xxxx

- President:** Doug Angle
- Vice President:** Laura Gagne
- Secretary:** Susan Gagnon
- Treasurer:** John Hurley
- Librarian:** vacant
- Editor:** Kevin Kell
- National Council Rep:** Susan Gagnon

Standing Committee Chairs:

- Observing Group: Tom Dean
- ATM Group: Kendra Angle
- Youth Group: Hank Bartlett
- Astronomy Day: vacant
- Publicity: Kim Hay
- Awards: Dave Pianosi

Changes to the Web Site in the last 2 months

<http://members/kingston.net/rasc>

* The password to the secure section was changed Friday January 14th, 2000

- updated ATM, How to Join, Benefits, Meetings
- added new members home page and changed links from frame to new window. - updated ATM project page
- updated Education page and Internet Resource guide
- added another 3 national council reports to the secure site, updated April meeting (Randy Attwood) details.
- added another 5 back issues of Regulus to the adobe acrobat archives - added National Council Reports for March 2000 meeting - added Grade 9 curriculum info and link to Ontario Ministry of Ed. - added photos to Loan page and photos to capital inventory page. - added application details to National Grant page - Help wanted updated with new project ideas - 10 full years of Regulus are now online in adobe acrobat .pdf format, in the secure web section. - updated Loan Page, added National Special Project Grant Summary - updated adobe .pdf brochures for Kingston Centre and Getting Started, added 1995 adobe .pdf Regulus issues , added in National meeting minutes to the secure page - updated Holleford Crater info, added Grade 6 Curriculum outline and a bunch of other stuff.

Observing Group Meeting

- April 1st, 2000 (Saturday)** We kind of missed the boat on this one!
- May 6th, 2000 (Saturday)** To be held at the home of Kim Hay north of Perth Road Village
- June 3rd (Saturday)** To be held at the home of Steve Manders (West of Railton)
- July** TBA

From The Net

compiled by Kevin Kell

Secret of Antigravity

It is a proven fact that if you drop a buttered piece of bread, it will fall on the floor butter-side down. So is the fact that if a cat is dropped from a window or other high and towering place, it will land on its feet. But what if you attach a buttered piece of bread, butter-side up to a cat's back and toss them both out the window? Will the cat land on its feet? Or will the butter splat on the ground?

Now we are not suggesting you spend your precious time doing the experiment. No, Sir. What we are saying is that with your scientific mind, you should be able to deduce the obvious result. The laws of butterology demand that the butter must hit the ground, and the equally strict laws of feline aerodynamics demand that the cat can not smash its furry back. If the combined construct were to land, nature would have no way to resolve this paradox. Therefore it simply does not fall.



That's right you clever mortal (well, as clever as a mortal can get), you have discovered the secret of antigravity! A buttered cat will, when released, quickly move to a height where the forces of cat-twisting and butter repulsion are in equilibrium. This equilibrium point can be modified by scraping off some of the butter, providing lift, or using a smaller cat, allowing descent.

Most of the civilized species of the Universe already use this principle to drive their ships while within a planetary system. The loud humming heard by most sighters of UFOs is, in fact, the purring of several hundred tabbies.

The one obvious danger is, of course, if the cats manage to eat the bread off their backs they will instantly plummet. Of course the cats will land on their feet, but this usually doesn't do them much good, since right after they make their graceful landing several tons of red-hot starship and pissed off aliens crash on top of them.

And now a few words on solving the problem of creating a ship using the aforementioned anti-gravity device.

One could power a ship by means of cats held in suspended animation (say, about -190 degrees Celsius) with buttered bread strapped to their backs, thus avoiding the possibility of collisions due to tempermental felines. More importantly, how do you steer, once the cats are all held in stasis? I offer a modest proposal:

We all know that wearing a white shirt at an Italian restaurant is a guaranteed way to take a trip to the laudromat. Plaster the outside of your ship with white shirts. Place four nozzles symmetrically around the ship, which is, of course, saucer shaped. Fire tomato sauce out in proportion to the directions you want to go. The ship, drawn by the shirts, will automatically follow the sauce. If you use t-shirts, you won't go as fast as you would by using, say, expensive dress shirts. This does

not work as well in deep gravity wells, since the tomato sauce (now falling down a black hole, perhaps) will drag the ship with it, despite the counter force of the anti-gravity cat/butter machine. Your only hope at that point is to jettison enormous quantities of Tide. This will create the well-known Gravitational Tidal Force.

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 \$10/quarter, \$20/half page, \$50/ full page and should be in electronic format.

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May June 2000 Publication Run=225

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

Newsletter Submission Info: The deadline is 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)

Post: Box 2033 Kingston Ontario K7L5J8 Canada
ascii or most major word processors (Corel WP8 for windows preferred) via E-mail or 3.5" DOS floppy disk