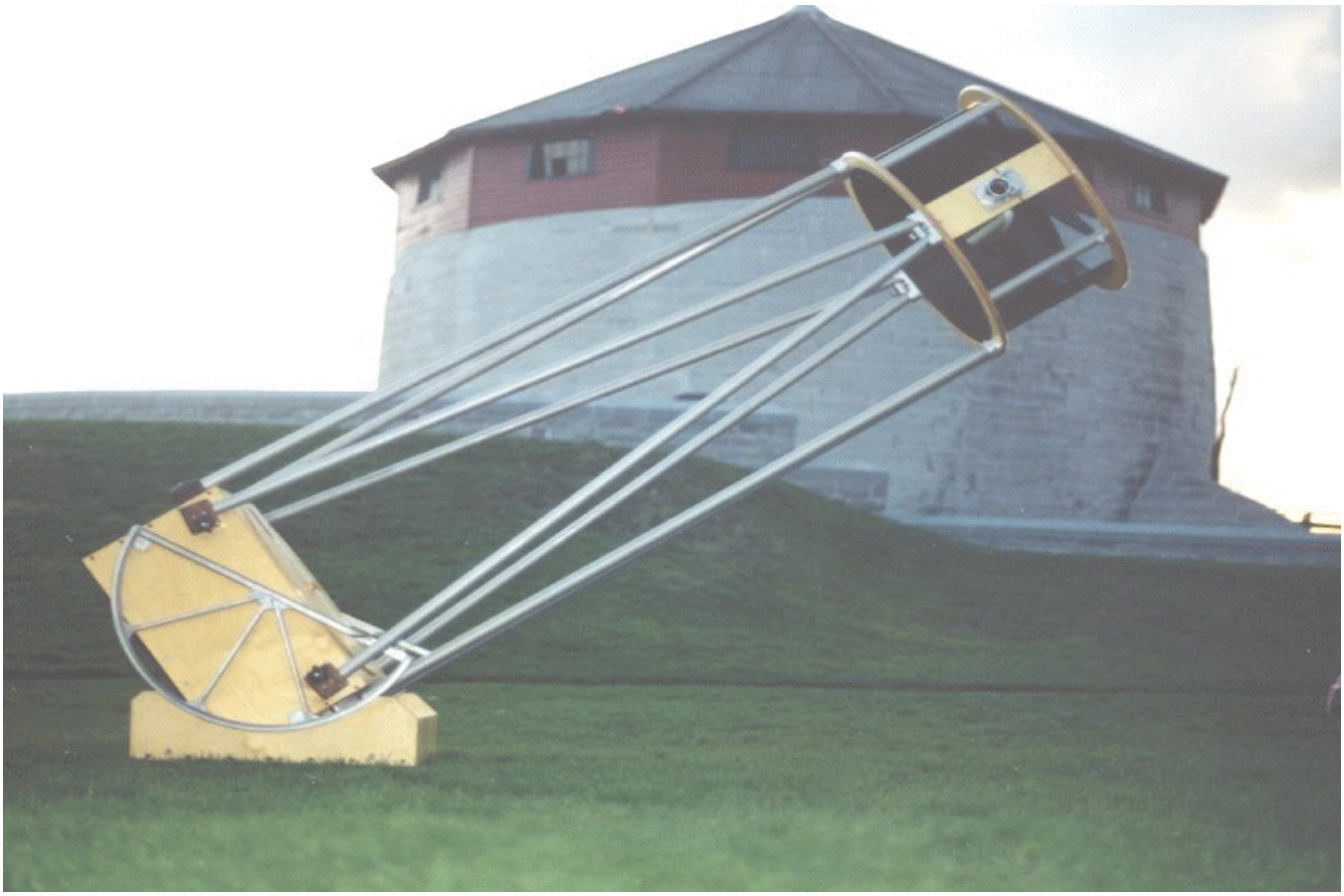
Regulus

The Newsletter of the RASC Kingston Centre 2002 May

1961-2002 - 41 Years of Astronomy in Kingston



The 61cm (24") Venor Telescope

Three years of an Amateur Telescope Making Project comes to a close with First Light Ceremonies for the 61cm (24") Venor Telescope, held on Astronomy Day, Saturday April 20th, 2002 at the RASC-KC public observing sight, the Murney Tower Museum Park in Kingston, Ontario.

Over 100 members of the Centre and the public attended (see photos in the electronic 2002 June issue of Regulus - and read the Editors column for more information on the new monthly publishing schedule) and it took roughly 2 hours to allow everyone a look at the tremendously bright moon and the not-so-bright Jupiter.

Primary Mirror: 610 mm (24")
Secondary Mirror: 127mm (5")
Focal Length: 2745 mm (108")
F-ratio: f4.5

Primary Mirror gross area: 292,238 square mm (0.29 square meters) (452 square inches)
Secondary Mirror gross area: 12,667 square mm (0.0127 square meters) (19.6 square inches)
Primary Mirror Net area: 279,571 square mm (0.28 square meters) (432 square inches)

History:
We received a donated 24" (61cm) glass blank in the fall of 1998 from the Estate of Robert Venor of Montreal. Over the fall we worked out the design and started grinding in the spring of 1999.
The mirror was coated on Saturday 2002 March 23rd at the DDO in Toronto. Now we start hunting for Observatory property!

From the President

By Laura Gagne

Spring is upon us now and the hunting season is past (Messier hunting, that is). I hope those of you who attempted a Messier Marathon were successful. This is a good time of the year to observe many of these objects, so if you haven't finished your list, or you just want to see some very beautiful objects, grab your telescope and get out there! If you did attempt a marathon, write an article for Regulus and let us all know how you did. Kevin is always looking for submissions from members.

Astronomy day this year must have been the most exciting one yet for Kingston Centre. We had many, many interested people visit our display. I won't say anymore than that Kim Hay and her team of helpers did an awesome job and I applaud their efforts. You can read Kim's report for details. In the evening, we inaugurated the Robert Venor Telescope, our 24" pride and joy. There is a photographic documentary of the construction of the telescope on our web page. Just follow the ATM link to the Venor project. We are now in the process of trying to find a piece of land in dark sky country near Kingston where we can build a permanent observatory for it. In the meantime, you can make arrangements to use the telescope with Doug Angle, who is currently housing it at his home near Sydenham. We hope in the future to be able to use the telescope for research projects as well as pleasure cruising through the universe. Doug, the chair of the ATM group (Amateur Telescope Makers), and his team did an excellent job on the telescope. It is a work of art as well as a very fine instrument. Congratulations and thanks to all who helped out.

In May we have a visit by Dr. David Levy, our honourary president, who will be telling us what he has been doing recently. We are very excited about his visit, which will be on Monday, May 13th instead of our regular meeting night. Be sure to mark your calendars and come early so you can get a seat! If you can't make the meeting, then be sure to read Susan's secretary's report in the next issue of Regulus. After David's visit, the GA will be upon us. As usual, Kingston centre will be sending a contingent, and there will be many reports for you to read following discussions about issues that concern all of us. If you can't get to the National Council meeting, then be sure to get your proxies in to Peggy Hurley ASAP so your voice will be heard.

I hope you have many clear skies and mild weather for observing. I am going to visit the Virgo cluster and try to add a few more Messiers to my list while I'm out there, since Kevin insists on posting all of our numbers! Send your numbers in too and maybe we can do a friendly across-the-centre competition.

National Council Report

By Peggy Hurley

The Annual General Meeting will be held in Montreal this year from May 17th to 20th. There are three items for constitutional change this year. The first of these concerns electronic methods of attending National Council Meetings (such as conference calls, teleconferencing). This is expected to make it possible for more National Council Representatives to attend N. C. meetings, lower the transportation costs to National Office and allow the N. C. meetings to move locales more easily. The second amendment concerns terms of office for the N. C. executive. This would allow an officer of the National Council to hold a post, take a term away from the post and return to the post. The restriction would be for consecutive terms of office.

The third proposed amendment concerns the split in funding between the National Office and the individual Centre. This amendment is proposing that the present split of 60% to National Office and 40% to the Centres is unwieldy and that National Office should be able to set a fee that it needs to operate and the Centres set their own fees. Those that are supporting this amendment see this as a simple book- keeping change. Those that do not support this see it as a major change to the way RASC operates and possibly detrimental to both the National Office and the individual Centres. This is a controversial issue with many side issues (including how the life membership funds will be handled as well as fees to unattached members) not all of which are addressed in the present proposed amendment.

As this is such a controversial issue and (as all constitutional changes) requires a two thirds majority vote in order to pass, we are asking all members to send in their proxy votes to the Centre.

Until next publication, clear skies.

Science Fair

By Peggy Hurley

The Frontenac, Lennox and Addington Science Fair took place on the first weekend of April this year. This was the largest Science Fair to be held at McArthur College and there were nine projects directly related to astronomy. That is the most we have had so far as well, and they were all great projects. This made the judging very difficult for us.

There were three projects in the junior division and six in the intermediate

division. The junior projects included a project on the planet Mars, a second on the Rings of Saturn, and a third on craters on Earth. For the craters project, the children had assumed that there were no craters on Earth, at least none like on the Moon, but they quickly discovered that their premise was wrong and they found the reasons why so many craters are not easily seen. An added difficulty for this pair of siblings was the language of the judges. This project was in French (which we read reasonably well but spoken French is another matter) and the children spoke to us in English as they explained to the best of their ability. We were quite impressed with this project and it was awarded the third prize for astronomy.

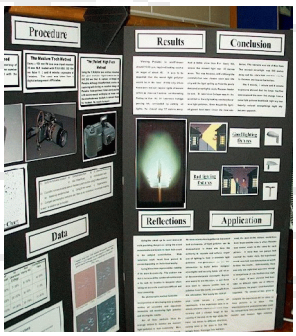
There were two other projects by French students in the intermediate division. Both of these young men also explained themselves to us in English and their command of English was much better than out command of French. One of these projects was on how stars were formed and the other was classifying stars by their spectra.

The other intermediate projects included a proof that the Earth rotates by observing stars, a look at the Sudbury Neutrino Observatory and two on light pollution. The Sudbury Neutrino Observatory project included explanations of neutrinos, information on the morphing of neutrinos, a model of the detector and a brief comparison of other neutrino observatories. This project received second place in the astronomy awards.

The two light pollution projects were really quite different from each other. One involved looking at specific lighting needs and the changes to that lighting using a full cut off hubble hood. The second involved observing the Plieades from various locations around Kingston and counting stars. This involved naked eye observation, binocular observation, photographic observation and digital observation was tried but was unsuccessful. Both light pollution projects were inspired by an article in the Globe and Mail newspaper that focused on the possible links human health and light pollution. Both young women were particularly struck by the plight of baby sea turtles and migrating birds due to light pollution.

The first prize for astronomy was awarded to Ariane Menard for her project on light pollution involving counting the stars in the Pleiades. Congratulations Ariane and all participants.

The judges were so impressed by the projects this year that we have decided to invite the participants to the June meeting and to make a brief presentation of their projects to the members of the Kingston Centre. Come out and support the future of Astronomy in Canada.



Submissions from Members

Night Vigil

Stars like brilliant diamonds shine,
suspended in the cloudless night;
I marvel at them, cold and hard,
while all my earthly cares take flight.

The Moon, a silver orb in space,
beckons me with smiling face.
Bold Jupiter, and Saturn pale
entice me on to pierce their veil.

The hours pass; I search, then stare,
then search yet more the deep;
for there's so much I've not yet seen
I cannot bear to sleep.

Yet as the coldness slowly grows
and numbs my fingers, feet and toes
I sigh, then yield with modest sorrow;
"Good night, my friends, see you tomorrow."

Paul Bock
Hamilton, VA U.S.A. December, 2001

Astronomy Week 2002 April 15-21

By Kim Hay-Astronomy day Coordinator

TEAM WORK, that is what it is all about. We had a **GREAT** team this year to help make Astronomy Week/Day (April 15-21) a great success.

Kingston Centre Members (Tom, Don, Vic, Barb, Sarah, Susan, Hank, Kim) set up their scopes at Murney Park, at

noon and at night to bring the day/night sky a little closer to those who wished to stop by. We also supplied handouts on the sun, and star maps of the Planetary Alignment coming up. Though some times were clouded and rained on, the majority of the week held clear.

Astronomy Day, was held at one of the local malls, the Frontenac Mall. We had members (Hank Bartlett, Laura Gagné, and Mike Earl from Ottawa) and their telescopes set up outside which showed the sun, Jupiter, Mercury and Venus.

Inside the mall we had 6 display tables with many interesting contributions from Centre members. Leo Enright, who had Astrophotographs and posters. Peggy Hurley with a painting of an Aurora, which she did herself. Kim Hay who had many different posters. Hank Bartlett , who brought his moveable Solar System, Posters and his Galactic friend, CSAR. Don Mastrianni who lent us his Hubble Model, and, Kevin Kell who lent us his Lunar Lander Model. We also had a children's table set up which was manned by Jessica, Stephen and Sylvain Gagné. They had many children stopping by to make playdough aliens, do word searches, and take home lunar projects.

We also had an earth theme with Bill Broderick lending us his display of Meteorites – (Canyon Diablo, Pallasite, Octahedrite slice showing the widmanstatten pattern, also a brecchia sample from Sudbury), Susan Gagnon had made a wonderful Meteorite poster of Canada's meteor impact sites. From the Queen's Geology Department (thank you to Mark Badham) there was a selection of rock cores (Chazy sandstone, Beekmantown Polomite, White LS Mark #4, Shaley LS Mark #2, Altered Zones, Coral Type #3, Gypseous Fragmental, and Gypseous Marker #4, Grant Brecria Marker #5 (Holleford Crater), Sandy Dal marker #6, and Main Gypsum Marker #7).

There was also a StarLab which is operated and owned by Theodore Micholias (http://www.geminispace.com/), which attracted quite a crowd young and old, with over 100 people in the 6 shows (every 20 minutes) that was put on.

There were several Telescopes on display (The Venor

brought by ATM Chair Doug Angle, The Douglas, The Voyager which was brought by Observing Chair, Tom Dean). We had a wonderful binocular setup with the binocular tripod on loan by Norm Welbanks. There was also a Tasco Telescope on display, to show the public what not to purchase.

We also had members of the Mars Society, Rocky Persaud (Toronto), Matt Bamsey(Ottawa), Navin Chari (Kingston),Erin (Ottawa), Judith & Victor. The display set up by the Mars Society was a great opportunity to show the model of the ARES Rover to members of the public. For more information on the Rover please visit (www.engsoc.queensu.ca/ares). There was also a model of the Devon Island Flashline Mars Artic Research Station. Tshirts, memberships and Mars Globe balls were also available. If you wish to know more about the Mars Society and have a chance to See the Vision, live the Dream, please visit http://www.marssociety.ca/

At the end of the day, we held a draw, in which we had many people enter. Our prize winners were Sheila Round, who won a Mars Society T-shirt (Donated by the Mars Society). Sara Prest who won the Beginners Observing Guide, signed by the author Leo Enright. Ryan Low, who won the Youth Membership to the Kingston Centre (Donated by the Kingston Centre), and our last winner was Klara Vodicka who won the Subscription from Sky News. Congratulations to everyone!

Our day did not end there. We went to the Public Observing area, Murney Tower and set up our new 24"Telescope (The Robert Venor Telescope). Here we had first light, with over 100 public and members show up to view the magnificent sights. There were other Telescope's, set up to let the public view the night sky. Though the day was clear and cool, the night brought out the clouds (Murphy Law #1, when there is new astronomical equipment about, clouds will appear). We did manage to see the Moon and Jupiter through the 24" scope, and other interesting galactic wonders were seen in the other telescopes.

I would like to thank everyone, who helped out in anyway, all those mentioned above, Kendra Angle and Arlyne Gilliespie who helped out on the Greeting table (lots of

handouts from Astronomy, Sky & Telescope, SkyNews and the ASP. For all those, who showed up and spent some time with us, and for those with mighty muscles to help us put our displays together and tear down (John, Tom, Hank , Kevin, Don, Norm). For those who created works of art , posters, and models. To everyone who helped us show that Astronomy has many different forms.

From the feedback that I have received from the Mall Liason (Vivian) we did just that. They want us back again later in the year. That is a fantastic feeling

Our next Public Event will be Space Day, May 2, 2002. We will be working along with Queen's University, Astronomy & Physics Department and the Mars Society to bring a slide show, a tour of the Queen's Observatory, and introduction to the Mars Rover and Public Observing down at Murney Tower. This will be starting at 7:00 pm. Queen's University, Ellis Hall.

This is what it is all about, **TEAM WORK**. To be able to achieve the presentation of our hobby to the public, and have them take a few moments and look up into the night sky, and say WOW.

Editor's Corner

by Kevin Kell

Among many other activities, including emptying my house :), I with the help of others, have put out the **2002 versions of various brochures** the Centre uses at public events. New versions exist of: RASC Kingston Centre, RASC-KC ATM group, RASC-KC Light Pollution Abatement. These are also online our website http://www.rasc.ca/kingston and the national web site http://www.rasc.ca/ if you are needing copies to hand out and have the ability to print off your own legal size pages.

Regulus Publishing Change

Starting in June, we will start publishing an alternate-month, bimonthly electronic issue of Regulus. Paper one month, electronic the next, paper the next... you get the idea.

The first reason for this is to allow for distributing better quality imagery to you, as the B&W photocopies often turn an astrophoto into and ugly mess (see this issue for examples).

Secondly the timeliness of important news is improved.

Thirdly, we can pass on far more information and more pages than we can with Canada Post's mailing limits and fees.

In the long term I hope to reduce and possibly eliminate the paper mailed version, as the newsletter is the centre's single biggest annual expense. Other centres have already stopped producing paper copies and I suspect more will follow suit.

To announce the release of the new newsletter, I will be sending out a notice with a web URL in the monthly email announcement list that many of you currently receive.

If you are NOT receiving a monthly "what's happening in the Kingston Centre" email and wish to, simply send me (Kevin Kell, kell@cliff.path.queensu.ca) your email address with a request to be added to the list RASCMEM.

Note that we also have an email "chat" list, that you can join as well for idle chatter about astronomy, observing sessions and tips, etc.
it's name is RASCCHAT.

Call for member astronomical interests paragraph.
At the last regular meeting people were requesting that I put in a little article requesting a paragraph from our members on what their Astro related interests are, in hopes of getting members communicating with each other more and allowing more shared interests. One good example is the guest speaker from April, Dr. Brian Hunter and his interests in satellite observations.

Kevin Kell (that's me!) is currently hunting down my messier list, actively work on ATM projects (see http://130.15.144.100/atm/), and would like to work on building in the near future some alt/az tracking platforms for small video cameras to track the sun all day/ moon all night and maybe our yet-to-be-built observatory when no other targets are available.

Kingston Centre Membership Information

Current Membership Total of the Kingston Centre (as of March 31, 2002): 152

Treasurer's Corner

John Hurley

And for item we sell Centre members on Centre produced material you get a 20% discount!

Item	Regular price (member price)
Books	
Expanding Their Universe Grade 9 (ETU)	$15 ($12)
Worlds to Discover Grade 6 (WTD)	$15 ($12)
Careers in Space (CiS)	$5 ($4)

Misc	
RASC-KC pins	$6 ($4.80)
Slide Set #1 (40 slides)	$75 ($60)
Slide Set #2 (40 slides)	$75 ($60)
Slide Set #3 (20 slides)	$35 ($28)
Grade 9 Combo #1 (ETU9, Slide Set #1 or #2, CiS)	$90 ($70)
Grade 9 Combo #1 (ETU9, Slide Sets #1&#2, CiS)	$160 ($125)
Grade 6 Combo #1 (WTD, Slide Set #3, CiS)	$50 ($40)
RASC2002 Calendars	$15
Beginners Observing Guides	$15
Observers Handbook 2002	$22
Memberships	
Regular 1 Year	$49
Youth (under 21) 1 Year	$27.50

Orders must be prepaid by cheque or by Institutional Purchase Order. You can email rascexec@cliff.path.queensu.ca or see our online catalog at http://members.kingston.net/rasc/educate.htm or mail the order to PO Box 1793 Kingston Ontario K7L 5J6 Canada

Light Pollution Abatement

New brochures were done up this past month and are available online if you happen to need some quick to hand out at some event. Go to the Centre's LPA page at http://members.kingston.net/rasc/lpa.htm and print it off (it is in adobe acrobat format and us legal sized).

Amateur Telescope Making Group

The 24" mirror fresh from the vacuum coating chamber at the DDO - 2002 March 23

Aluminizing the Mirror

by Doug Angle

Early in the morning on March 23, we loaded the mirror into my van, and Jan Wisneiwski, Tom Dean, Kevin Kell, Kim Hay, and I headed off to the David Dunlop Observatory to get the mirror coated. When we arrived, we met Paul Winkler, John and Peggy Hurley, and Dave Maguire. Al Ward from Moonward coatings in Sudbury arrived a little later to help with the process. Archie Ritter is the observatory director and did the aluminizing for us.

The coating process is basically three steps: the mirror is prepared and put in the chamber, then the air removed, and finally the coating applied. The preparation involves cleaning the optical surface. This may not sound like much, especially since it was freshly polished, and so pretty clean to start. But clean in this sense means removing any traces of chemical impurities from the surface. After rinsing with water, Archie swabbed the mirror with Nitric acid for about 10 minutes. This was followed by a special surfactant – basically a high purity soap solution – for about the same time. It was then rinsed with distilled water, and dried.

The mirror is mounted on metal clamps on the chamber door, then swung shut. A roughing pump takes the pressure down to about 0.06 mm Hg in 20 minutes. Then it's safe to start the diffusion pump, for the final ride down to 2 x 10^{-5} Torr.

The pumping takes about 2 hours total. We could watch the gauges move, roughly at the same rate as the hour hand on your watch. You might think that this would be boring, but the excitement in the room was tangible. We also started looking around at old books and equipment. We found a copy of David Hanes graduate thesis (globular clusters surrounding M87). A book on Saturn a couple of inches thick. Descriptions of building the Yerkes observatory. Lots of cool stuff. Just when we thought we'd found our little Eden, Heidi arrived and offered a tour of the observatory. Wow!

We started in the library (not to be confused with the hallway where we found all the old books!). Some books dated from the 19th century. The room itself was very elegant, with a portrait of David Dunlop over the fireplace. Next stop the chart room. Among other gems was a set of prints of the Palomar Sky Survey. Heidi explained that these are only copies – the good ones are stored downstairs, where the floor will handle the weight of all the glass plates.

Next to the roof where domes house the 24" and 19" reflectors. Both are massive instruments, extremely well

built, but currently unused. The main dome houses the 74" reflector. It is used almost exclusively for spectroscopy, although can take an eyepiece for visual observing during public tours. The mount and gear trains are massive, but elegant, smooth and nearly silent. The 70 year old instrument is well equipped with CCD detectors and computer network for acquisition and storage of the data. It's a very impressive setup.

All too soon, we received a call that the coating chamber (remember the coating chamber?) had reached it's target pressure and was ready to fire the coils, so we returned to the basement lab.

The coating itself is a anticlimactic. Electric current is passed through tungsten coils, which have clips of aluminum hanging on them. From the outside, all that can be seen is the current fluctuate as the aluminum first coats the coil then evaporates. The pressure spikes as the aluminum knocks stray molecules loose from the walls of the chamber. About 5 minutes of this, then the coating was complete, the chamber opened, and we had our first look at our shiny new mirror. Then it was say thanks and good-bye, box up the mirror, and haul it back up the stairs to the van. The trip home was uneventful, and soon the mirror was resting in my garage, were it would have to wait several weeks for the coating to develop its oxide layer before it could be used. The day was a success.

24" Venor Telescope – Engineering trials

By Doug Angle

On April 10, the 24" mirror was installed in the optical tube, completing the construction of the Robert Venor Telescope. Jan Wisneiwski, Tom Dean and I hauled the scope out to the rock behind my house to do the first optical trials.

The first step was collimation. With this being the first assembly, we needed to make some large adjustments. Then it was time for an eyepiece.
Saturn was a bright jewel, with a couple of moons visible. The Cassini division was just visible at low power.

Ikeya-Zhang was low on the horizon, and a virtually essential target. We could clearly see the bright coma, with the nucleus nearly filling the field. The tail extended in a cone from the coma backwards, with a little structure visible.

At first I didn't recognize M42. The wings on the nebula filled the field, with wisps of gas and dark lanes not only visible, but striking. In my refractor, the trapezium can be (just) split at high powers. In the 24" the trapezium was 4 distinct stars with dark space in between. And that's at the lowest power available, about 65x.

M1 was quite large and bright, but no structure visible. Oh well, some objects are fuzzy no matter how you look at them.

Jupiter was a little painful to look at because of the brightness. We spent some time with the low light video camera trying to get an image, but it was too bright for this, and saturated the chip. Eventually we succeeded with the camcorder by reducing the exposure setting (a lot!). In the video, you can see some of the equatorial bands, but visually there was quite a bit more detail visible.

We wanted to test the resolution of the instrument. By this time, we had found that the telescope wasn't holding collimation well, and so the stars were more lines than points. Even so, we cleanly split Castor – a double star with about 2" separation. We checked the figure with a Ronchi grating, but it was difficult to tell much with the collimation problem.

Our last object was M51. The spiral structure was clearly visible, and averted vision gave more detail yet. The companion galaxy was fairly bright. Jan commented that he could see the band connecting the two galaxies, but I didn't see it. It wasn't quite like the picture on the cover of Burnham's, but close.

We spent about 2 hours observing and adjusting the scope. In the course of the evening we discovered a few minor deficiencies, all of which should be easily correctable. The focuser motion was a little rough. Subsequently, we replaced a bad bearing and it's much better now. The worst problem is that it doesn't hold collimation, probably due to the sling. Overall, we are very pleased with the performance, and look forward to even better things as we continue corrections and adjustments.

Quick and Dirty Pier Making

By Mark Kaye

This composite shot above shows the stages of construction of an easy to build pier from wood and two scope mounts that we have built using this idea. Try to get below your frost line and have as much wood below as above for the pier

height. The upper left shot shows how the four pieces fit together, the narrow side against the corner of the wide side of a piece of 2*4 pressure treated lumber. The fourth piece completes the square pier. I have given a talk to numerous clubs across the country and it is gratifying to get email from people who have copied this idea either in the field or in their observatory. I used a post hole digger to dig a hole as deeply as possible, lowered in the pier and poured concrete to keep it in place. I then filled the interior with sand.

Notes from the Secretary
March 15th, 2002, Regular Meeting of the Kingston Centre

(The meeting was very well attended but only 15 people signed the attendance sheet, please remember to sign in at some time during the evening. This is a nice historical document.)

President, Laura Gagne called the meeting to order at 19:35 and we began with a quick overview of what is prominent in the sky this month with **Observing Chair, Tom Dean.** Highlights included pointers on finding Comet Ikeya-Zhang, and the arrival of Messier Marathon season. Next our **VP, Paul Winkler,** introduced our speaker for the evening, **Rocky Persaud.** Rocky is a U of T Masters student in Geology. He hopes that his undergrad degrees in Engineering and Geology are just the beginning of a long list of areas he will cover to qualify for an astronaught program. Rocky is already in space exploration planning through his work with the Mars Society, the Canadian chapter of which he has been recently named President. **The Mars on Earth Program** uses private and public funding to run two Mars Habitat simulations, one at the Haughton Impact Crater site on Devon Island and the other in the desert of Utah in the U.S. The entire presentation was very enjoyable and a good round of Q and A followed. There was a brief break followed by the **prizes** of Wine(donated by Hank),50/50, and a Photo (donated by Jan). **ATM** was the first of the routine reports, and **Doug Angle** presented the 24" in its almost complete state. (a small band of folks hope to escort the mirror to the David Dunlap for aluminizing next weekend.) Doug presented a rundown of the optical testing of the primary so far and by all accounts it seems that the centre has a fine mirror! Next Ken Kingdon gave the group a rundown on the Tower Hill situation, not only is Bell interested in leasing the land to us, they are considering selling the land. He will keep an eye out for developments of this sort**. Ken will also coordinate the April members dark site observing night** at Camden Lake. The good weather window will be April 5th to the 14th. Let Ken know that you want to be notified by emailing him at kenkingdon@hotmail.com., we will go out the 1st clear night. Laura announced that if anyone knew the StarryNight program and would like to fill in for Tom at the beginning of the meetings let her know. Reports continued with the **Secretary, Susan Gagnon** announced that she had found out the date of the Charleston Lake night and it is August 12th, for anyone who could participate.**John Hurley, Treasurer** encouraged participation in the Centre discounts for Astronomy and Sky and Tel subscriptions. **Paul** gave a quick rundown of speakers lined up for the next few months. **Peggy Hurley, National Council Rep.** encouraged the use of proxies for the GA in Montreal if anyone had strong feelings about any of the motions. **Kim Hay, Astroday Chair** reminded everyone who could participate that the date of the Observing week was April 15 to 20 and the Frontenac Mall daytime display is April 20th. Tom Dean is the one to sign up with if you are interested in the public observing sessions, evening or solar.

Kim, again, as Light Pollution Abatement Chair, continues to attempt to get some lighting samples for displays and reports that the City of Kingston is replacing all old broken cobras with full cut off fixtures. However there are still new private installations that are very offensive. **Kim,** is also **Publicity Chair**. Tom, has this Tuesday as Public Observing night and Members Dark Site Observing will be the 1st clear night of March 22 or 23 at Tessa's. There will be a yes/no go message on the web site. **Jan Wisniewski has cancelled the CCD session this month** due to Messier Marathon efforts. **Bill Broderick** has invited all interested parties to the 2nd meeting of the Belleville chapter of the **Ontario Skeptics**, March 28th, 07:30, Loyalist College, Pioneer Bldg., room P21. The meeting wrapped up with an array of slides from the Leonid peak taken by **Kendra Angle** and a full account of her recordings. The meeting adjourned at 22:15 to Harvey's.

Regular meeting of the Kingston Centre April 12, 2002

Laura called the meeting to order at 19:40. The first order of business was a recently received response to our invitation to the Venor family saying that they would be unable to attend the dedication of the scope on Astronomy Day but hoped to visit Kingston later in the year. Susan, Secretary had no report. Paul, VP announced a change in speaker line up with Fred Barrett moving his talk on observatory construction and other projects, to July so that there could be a selection of science fair projects presented at the June meeting. Peggy's National Council report was a request for proxy forms for the GA. Also as Awards Chair, Peggy gave the results of the Science Fair. First prize which included a membership was a project by Ariane Menard, and the topic was Light Pollution. (Second prize SNO, and 3rd prize Why are there no craters

on Earth?). John, Treasurer, reminded members of magazine discounts and items for sale. Tom, Observing chair had Kevin Fetter volunteer for members observing on May 11th, June 1 will be at Doug's. Jan, CCD chair gave the 20th as the next meeting date. Doug, ATM chair said that the Venor has been tested after its trip to Dunlap for aluminizing, and there will be a bit of work but it should be in good shape for the 20th. Kim, Astro Day chair, gave a run down of what is planned for the display and public observing. We have also been invited to take part in the Queen's Space Day activities, May 2nd. Things will start with a slide show at 19:30 followed by and Observatory tour and small scopes out side. Although attempts to get the Audio/visual equipment working failed, Paul introduced our speaker for the evening. Dr. Brian Hunter, Centre member, and Professor of Chemistry and Engineering at Queen's would speak about observing some of the many satellites orbiting our Earth. The talk was very informative and enjoyable and did not suffer at all for lack of computers. After a short break the usual draws were made for wine, 50/50 and this week maple syrup donated by Doug. Jan gave a report on the Messier Marathon that he, Doug and Fred participated in at Fred's place. There were many good tips and we must consider the source reliable with a total of 106 objects bagged! Kevin, Editor, announced April 26 as Regulus deadline and has asked for observing reports for the newsletter, what are you observing, what are you observing with? Ken reported that the floating observing session went well, the night chosen was clear and the location was dark. Steve may coordinate another night if there is interest. The meeting adjourned at 22:09 to Harvey's.

Observing Group Meetings

These are regular meets at the home of members who volunteer their locations and homes to us on or near a new moon. Contact Tom Dean if you are interested in hosting a session.

May: Saturday the 11th Host: Kevin Fetter - Brockville.
See his web site for more info:
http://ca.geocities.com/kfetter/obsgroup.html
June: Saturday June 1st Host: Doug Angle - Sydenham
July: TBA
August: Friday 16th at the home of Mark Kaye - Inverary

RASC Kingston Centre Meetings

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

2002 Officers and Executive Council
PO Box 1793, Kingston, On K7L 5J6
Infoline & answering machine: moving
Email: <rascexec@cliff.path.queensu.ca>
We also have an email chat list "rascchat". Send your email address to Kevin Kell to be added to the RASCCHAT list.

President: Laura Gagne
Vice President: Paul Winkler
Secretary: Susan Gagnon
Treasurer: John Hurley
Librarian: David Maguire
Editor: Kevin Kell
National Council Rep: Peggy Hurley

2002 Committee Chairs
ATM Group Chair: Doug Angle
Astronomy Day Chair: Don Mastriani
Awards Chair: Dave Pianosi
CCD Group Chair: Jan Wisniewski
Education Group Chair: Laura Gagne
FallNStars2002: Kevin Kell
Light Pollution Abatement Chair: Kim Hay
Membership Chair: Kim Hay
Observing Chair: Tom Dean
Publicity Chair: Kim Hay
Social Activities: Susan Gagnon
Youth Group: vacant

Regulus is published 6 times per year on paper and 6 times per year in adobe acrobat format files. Both are available on our web site. Views and opinions expressed herein do not necessarily reflect the official position of the Royal Astronomical Society of Canada or its officers and members. Subscriptions: Members of the Kingston Centre receive egulus as a benefit of membership. Advertisements are free to members of the Centre. Commercial advertising is $15/quarter, $25/half page, $50/ full page and should be in electronic format.
Contributions are more than welcome. Submitted material will be edited for brevity or clarity.
May Print Run=190

The Newsletter of the Kingston Centre of the Royal Astronomical Society of Canada
Newsletter Submission Info: The deadline is usually the 3rd Friday before regular meetings in odd numbered months. The preferred method is E-MAIL, then disk, lastly paper.
E-mail: <***kell@cliff.path.queensu.ca***>
Fax: 1-613-533-2907 (with cover page to Kevin Kell) Post: Box 2033 Kingston Ontario K7L5J8 Canada ascii or most major word processors (Corel WP8 for windows preferred) via E-mail

or cdrom or 3.5" PC floppy disk

Kingston Kosmic & Event Kalendar 2002

Prepared by Kim Hay

For more detailed information, please refer to the RASC 2002 Calendar, and the RASC 2002 Observers Handbook. Available from your local promotions committee or from National Office, *http://www.rasc.ca/*

Month and Date	Event
Thursday May 2	Space Day Celebrations to include a side show with observing at Queen's Observatory in the evening, and later observing at Murney Tower
Saturday May 4	3rd Quarter Moon at 3:16 am EDT Mercury at greatest elongation East (21º) best evening view of 2002
Sunday May 5	0-Aquarid Meteor Peak at 12:00 am EDT Texas Star Party, Fort Davis TX through May 12 www.metronet.com/~tsp
Saturday May 11	Member Observing session at Kevin Fetter's- Brockville
Sunday May 12	New Moon at 6:45 am. EDT
Monday May 13	**CHANGE OF DATE** RASC –KC Regular Meeting Stirling D, Queen's University 7:30 pm. EDT **Speaker:** David Levy Good evening grouping of Crescent Moon, Saturn, Venus, Mars and faint Mercury
May 17-19	General Assembly 2002 in Montreal Quebec (Friday to Sunday) Visit http://www.rasc.ca/ for more information
Saturday May 18	CCD Imaging Group- Host Jan Wisniewski
Sunday May 19	1st Quarter Moon at 15:42 pm. EDT
Monday May 20	Victoria Day
Sunday May 26	Full Moon 7:51 EDT, Penumbral Eclipse
Saturday June 1	Members Observing at Doug Angle's- Sydenham
Sunday June 2	3rd Quarter 20:05 EDT
Friday June 7	Pluto at opposition
Monday June 10	Annular Solar Eclipse, partial phase visible in most of N. America except extreme east. New Moon at 19:46 EDT
Wednesday June 12	Jupiter 2º to left of Crescent moon at 8:00 pm EDT
Thursday June 13	Venus 2º East of Crescent moon at 8:00 pm EDT
Friday June 14	RASC –KC Regular Meeting Stirling D, Queen's University 7:30 pm. **Speakers:** Science Fair(Astronomy Related) Participants from April 6, 2002
Saturday June 15	CCD Imaging Group- Host Jan Wisniewski
Monday June 17	1st Quarter Moon at 20:29 EDT
Friday June 21	Summer Solstice at 9:24 am EDT Mercury at greatest elongation W.(23º)
Monday June 24	Full Moon 17:42 EDT

For more detailed information, please refer to the RASC 2002 Calendar, and the RASC 2002 Observers Handbook. Available from your local promotions committee or from National Office, *http://www.rasc.ca/*