Regulus

The Newsletter of the Kingston Centre of the Royal Astronomical Society of Canada –October 2005

Coming up…

RASC Regular Meetings

Queen's University
Stirling Hall Theatre D
Friday, October 14 7:30 pm
Ken Kingdon - "Mars- A closest approach"

Friday, November 11 7:30 pm
Speaker TBA
Meetings are cosponsored by Queen's Physics and include astronomy lectures open to the public.

KAON Public Observing

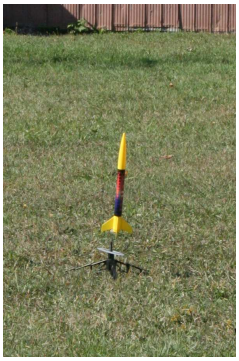
Queen's Observatory
Ellis Hall
Saturday, Oct 8 7:30 – 9:30
Saturday, Nov 12 7:30 – 9:30

AstroYak

Friday, October 28 7:00 pm
Friday, November 18 7:00 pm
at the home of Kevin Kell and Kim Hay, 76 Colebrooke Rd.

Members Observing

Oct 24 -30 7:00 Lemoine Point
Nov 23 – Dec 4 7:00 Lemoine Point



Kevin's rocket launch marks the closing of Fall n Stars, the annual starparty organized by the Kingston and Belleville Centres of the RASC

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President's Tid Bits

By Kim Hay

I am not really sure how this effects us all, but in some way the events that are taking place on older scientific establishments, is like losing your best bunny toy or blanket, or an acquaintance you have only met once or twice, but it is a sad state of affairs and disturbing.

Progress they say is for the best, and in some ways it is, but in other ways it destroys a past and a history that was before its time, and now is just being discarded.

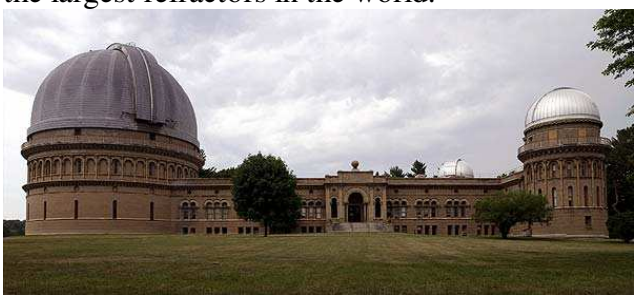
What I am talking about is a couple of Scientific establishments that are being slated for demolition, one for non-use and listed as a fire hazard, the other to be demolished for condominiums.

The Bracewell Observatory, named after Ronald N. Bracewell (http://en.wikipedia.org/wiki/Ronald_N._Bracewell) located at Stanford University in California, USA, has 5 60 ft radio dishes, along with the

Radio Dishes at the Bracewell Observatory

buildings and cabling. This establishment had been used up until the early 1990's until it was shut down. It was one of the sites used for the NASA moon Apollo landings, and it has been used for extensive radio work, including solar interferometry and spectroheliograph work. Dr. Bob Lash , members of the Society of Amatuer Radio Astronomers (SARA) (http://www.qsl.net/SARA/) along with the Pisgah Astronomical Research Institute PARI (http://www.pari.edu/) and other's have come together to help and rescue the dishes and raise funds to keep them going for the Radio Astronomers at Stanford University and the community, along with other Amatuer Radio Astronomers. At the time of this printing, the dishes are still standing, and the red tape is still being piled up. For further details on the "Save the Bracewell Observatory" visit http://www.bambi.net/stanford_dishes/rescue.html and perhaps even sign the petition!!

Just received this week at the National Office to pass on to members is this note from Bob Eklund, Publications & Programs Chairman of the Mount Wilson Observatory Association (MWOA). The Yerkes Observatory is a 100 year old observatory, located in William's Bay, Wisconsin. This observatory has 5 research telescopes, one being the largest refractors in the world.



The Yerkes Observatory

Einstein visited Yerkes and Chandrasekhar did his work on black holes that led to his Nobel Prize there. Others of great importance of the twentieth century researched there as well. This Observatory is at great risk of being sold by its owners, the University of Chicago, to a developer who wishes to build 200 condos and a hotel on the site. Bob prepared an article for the Mount Wilson Observatory Association newsletter. This article is available, and I will be getting it uploaded to our Kingston Centre webpage. If you want to read more about Yerkes Observatory and become part of the saving of Yerkes, please visit www.saveyerkes.com

If these great observatories are becoming a part of the past to make room for condos and wastelands,

what will happen to Canada's older observatories, like the David Dunlop Observatory (http://www.astro.utoronto.ca/DDO/) which is Canada's oldest optical telescope, and does research and public outreach. This Observatory is over 75 years old.

Administration building at the David Dunlop Observatory.

Just because the professional world may not be able to work with older equipment or buildings, and it may be on prime land for development, there are others in the amateur world who would like to use this equipment to do research, since we seem to have time to do observations and research, and would like a crack at the equipment not available to the general public.

Our new telescopes on Hawaii and Chili may be the best solution for the professionals, who only have but a few nights to do their observing, but lets give the underdog a chance to use the older equipment and present results for research projects that we may have.

I guess, it upsets me too see great pieces of equipment and buildings be destroyed for profitability, and not for the pursuit of science, either amateur or professional.

Take a minute to view the sites listed, for this may be only way you see them, as they may not be around much longer.

Till later, clear skies and keep looking up.

The Kingston Centre's Revised Nova Search

Program

by Leo Enright and David H. Levy

Background

The amateur astronomer who has an intimate knowledge of certain parts of the night sky has a great advantage over his/her colleagues who are lacking in a very close familiarity with the heavens. The past three decades provides us with four shining examples. Within the past month we have received the news that Robert Evans has discovered his 40th supernova visually, because of his memorizing the fields of over 1000 galaxies down to 15th magnitude. In 1987, Ian Shelton was the first discoverer of the brightest nova in over 400 years because of his knowledge of the sky. In 1975, Warren Morrison discovered Nova Cygni because of his superb knowledge of the star fields of that constellation. Over all three decades, David Levy became the world's top comet discoverer because of his knowledge of the night sky. These individuals made the effort to learn regions of the sky very well, and have been duly rewarded with the success that comes only with such knowledge.

Twice in the past our Centre has undertaken a Nova Search Program with the aim to give our members the chance to become very familiar certain areas of the sky and possibly attain some of the rewards that can come with such familiarity. Certainly, observing techniques can be practiced and skills can be improved, even if a notable discovery is never made. In 1978, David Levy who had just recently come to our Centre, introduced us to a nova and comet search program similar to the one that had been conducted in the Montreal Centre in previous years. In 1983, I revived that program by offering Kingston Centre members the chance to choose similar areas of the sky with which they were invited to become familiar. Different areas of the sky were chosen at three points during the year, and reports were made at Centre meetings of what had been seen in the appropriate area of the sky.

Aim of the Program

The aim of this program is simply to become more familiar with a certain area of the sky, so as to be

able to detect a nova if one were to occur in that area. A second aim is to become more aware of the many objects that are there to be observed (objects we may never even have considered being so accessible). A third aim is to improve our observing techniques through systematic practice.

Organization of the Program

Each participant chooses one of the 30 sections of the sky suggested for the current season of the year, and aims to become as familiar as possible with that section of the sky, based on the equipment that is available to her/him. The intention is that later in the year, and early in the coming year, a new list of sections will be suggested for the participants, sections of sky appropriate for those seasons..

Each section of sky is 1 hour of Right Ascension (that is, 15 degrees, as measured along the Celestial Equator) by 10 degrees of Declination. Participants are expected to become well aware of the positions and magnitudes of all the stars in the designated area, DOWN TO THE LIMITING MAGNITUDE, if possible, OF THE INSTRUMENTS THEY USE. No one is excluded because of the size of the optical instrument that he/she owns.

Reports of anything unusual in the selected area should be given at each Centre meeting, and if possible, there should be a designated time at each meeting for "Nova Search Program Reports". These should, of course, include any suspected novae or comets, (!!! Rare Eureka Events!!! – Doubtless previously reported to the IAU!!!) but also changes in magnitude of the variable stars in the area, asteroids in the area, even artificial satellites detected moving within the area. The reports should, over the months, reflect a gradual increasing familiarization with the chosen region of the sky. An example would be the reports from a person who begins with 7x35 binoculars and lives in the city, and is able to report on the number, and in some cases the variability (of the variable stars) of stars down to 7th, 8th, and 9th magnitude. Later, if that person uses larger binoculars, or a small telescope, or observes from a darker site, he/she may report on the number and variability (as applicable) of stars to 10th, 11th, or 12th magnitude. Such a person should surely be able to detect a fairly faint asteroid passing through the area, even if he/she had never heard of that asteroid before.

I have prepared a list of 30 regions of the sky, very easy to locate in the evening over the next three months. They are well above the murkiness of the horizon, and yet from this latitude, not in the difficult-to-observe area of the zenith.

Participants should choose their individual area and then study it carefully on the star atlas that they use. The area should be monitored every clear night, if possible. Here are the things that should be recorded for that area of the sky:

- the number of starts of each magnitude,
- the variable stars (name, type, mag. range if known, and magnitude at time of observation),
- the double and multiple stars,
- the planets (if any; remember that at some time Uranus or Neptune may possibly be there)
- asteroids, or comets, or even meteors seen in the area,
- any special named stars, or historically important stars, or historical novae,
- any Messier objects, or Hershel objects, or NGC objects.
- any galaxies, clusters, nebulae, dark nebulae, or quasars.

The Nova Search Areas of the Sky

Area	Area of sky		Constellation(s)
	R.A. (h)	Dec (deg.)	
1.	20 - 21	0 – -10	Aqr/Aql/Cap
2.	21 - 22	0 – -10	Aqr/Cap
3.	22 - 23	0 – -10	Aqr/Psc
4.	23 - 0	0 – -10	Psc/Aqr/Cet
5.	0 - 1	0 – -10	Psc/Cet
6.	1 - 2	0 – -10	Cet
7.	20 - 21	0 – +10	Del/Aql/Aqr/Equ
8.	21 - 22	0 – +10	Equ/Aqr/Peg
9.	22 - 23	0 – +10	Peg/Aqr/Psc
10.	23 - 0	0 – +10	Psc/Peg
11.	0 - 1	0 – +10	Psc/Cet

12.	1 - 2	0 – +10	Psc/Cet
13.	20 - 21	-10 – -20	Cap/Sag/Aqr
14.	21 - 22	-10 – -20	Cap/Aqr
15.	22 - 23	-10 – -20	Aqr/
16.	23 - 0	-10 – -20	Aqr/Cet
17.	0 - 1	-10 – -20	Cet
18.	1 - 2	-10 – -20	Cet
19.	20 - 21	+10 – +20	Del/Aql/Sge/Vul
20.	21 - 22	+10 – +20	Peg/Equ/Del
21.	22 - 23	+10 – +20	Peg
22.	23 - 0	+10 – +20	Peg/Psc
23.	0 - 1	+10 – +20	Psc/Peg
24.	1 - 2	+10 – +20	Psc/Ari
25.	20 - 21	+20 – +30	Vul/Del/Sge/Cyg
26.	21 - 22	+20 – +30	Peg/Vul/Cyg
27.	22 - 23	+20 – +30	Peg
28.	23 - 0	+20 – +30	Peg
29.	0 - 1	+20 – +30	And/Peg/Psc
30.	1 - 2	+20 – +30	Psc/Tri/Ari

Notes:
(1) In the Constellation column, all the constellations are included, even if only a very tiny segment of the named constellation is included in that area of the sky.
(2) Negative declinations indicate areas south of the Celestial equator.

When I explained my intention to revise this program to our Honorary President, the reply from David Levy was immediate and enthusiastic. Here is the exact text of the e-mail he sent me.

Hi Leo,
Wonderful program, very well written, and conceived. I like your aims.
Herein are the aims of my comet hunt program, CN3, as originally defined on December 17, 1965, the night I started.
When my comet hunting program began on the night of December 18, 1965, I did not list the actual finding of a comet as the program's primary aim. In the program log that night I wrote instead that I hoped:
1. To become very familiar with the sky through searching for comets and/or novae.
2. To discover either a comet or a nova.
3. To learn as much as possible about comets and/or novae through a research program.
I would like to ask for AREA 25 (20 - 21h, +20 - +30). Will you be preparing additional areas for next season?
Thanks, Leo! This sounds like fun. I am so glad you are getting Kingston to reintroduce this program. I LOVE THIS!

All the best,
David
[Participants may contact Leo (tcorbor (at) frontenac (dot) net) regarding the AREAS they have chosen.]

Members Observing Schedule

Ken Kingdon

October - *Mars Observing at Lemoine Point Conservation Area*
During all of this week, Mars is at its closest approach for the next 13 years. Don't miss this fine opportunity for a few hours after supper... its dark now!
Floating Period: the first clear night beginning Mon., Oct.24 through to Sunday Oct.30.
Meet: at 7pm local time in the south parking lot of Lemoine Point C.A.
Directions: proceed south on Bayridge Drive to its very end at Front Road. Turn west (right) onto Front Road, and proceed past the Airport almost 1 km. At the very end of Front Road, slow to turn right into the Conservation Area, and proceed 400m to the South Parking Lot.

November - *Deep-Sky Observing at Lemoine Point Conservation Area*
Deep-sky highlights, learn some star-hopping, plus Mars continues. Don't miss this fine opportunity for a few hours observing after supper and then home to bed.
Floating Period: the first clear night beginning Wed., Nov.23 through to Sunday Dec. 4th.
Meet: at 7pm in the South Parking Lot of Lemoine Point Conservation Area.
Directions: proceed south on Bayridge Drive to

its very end at Front Road. Turn west (right) onto Front Road, and proceed past the Airport almost 1 km. At the very end of Front Road, slow to turn right into the Conservation Area, and proceed 400m to the south parking lot.

Member's Trip to Nirvana

Ken Kingdon

The RASC-Kingston trip to Nirvana (90 minutes NW of Kingston) was a resounding success. We returned from Heaven on Monday morning, Sep. 5th - flushed with big, fat, Cheshire Cat grins, from ear-to-ear. Eight (8) RASC Kingston members visited the Inving Airfield observing site, just north of Bon Echo park. Most observed Sunday through to the wee hours of Monday, September 5th. A dozen people from Ottawa and Montreal also joined us. We had amenities too - dining and use of the facilities at the Moosehorn Restaurant, just 3 km away. Kingston had the largest crew. Participants set-up a total of 17 instruments, as large as 25-inch aperture. Visitors included master telescope-maker Normand Fullum of Stellafane fame, who had to leave early, plus Jan Wisniewski who brought his 12-inch truss-Dob masterpiece that won two awards at Stellafane this summer, including fabrication of the best mirror. Congratulations to Jan - its been 26 years since a RASC Kingston member (Mr. David Levy) won a grand ATM award at this prestigious starparty in Vermont.

The skies were pristine, and the visual limiting magnitude was 7.1, and I recall that the darkometer instrument read 21.64 magnitudes per sq. arcsec. It was so clear that we could not detect any strobe-light reflections from a cell-tower hidden over a hill. Yet, we were just a short drive from home, in our own backyard so to speak. Everyone seemed comfortably dressed for the night air, and mosquitoes were absent. One beginner had a field day bagging 31 new targets using just an 80mm refractor without goto!

The Milky Way, with its vast dust lanes, hung overhead in all its glory, ominously looking as if ready to drop right on top of us. This illusion of sudden approach is the result of seeing ALL of the Milky Way... it's actually up to 50-degrees wide seen from Nirvana skies, compared to just 10-degrees as typically seen from Kingston's light-polluted skies. The naked-eye view alone made the whole trip worthwhile! Just look up... then get rewarded or overwhelmed deciding where to explore next. Seeing was good as the night "aged"... by bedtime, I could resolve the E and F stars in the Trapezium of M42 Orion Nebula, plus the dark narrow melt-line around the polar cap of Mars.

Here's a "sampler" of some of the highlights that I recall observing...

- The Bridle Veil Nebula in Cygnus was spectacular.
- Remember Dr. Sun Kwok's talk on Planetary Nebulae that often appear round, but in fact have mostly unseen "Cosmic Butterfly" shapes? Well M76 is the best visible one of all, and a high power view, in such a dark sky, beautifully displayed the classic butterfly shape. Also, the planetary M27 Dumbbell Nebula was about as awesome as it possibly can get.
- Barnard's Dark Nebula, the "Ink Spot" (B86), is very good here. The Cocoon Nebula attached to the long "dark snake" was an intriguing target... thanks again Jan.
- a host of fine open clusters and many globular clusters - M30 in Capricornus was my favourite with out-reaching star-chains that made it look like an Octopus.
- the wide nebulosity around the bright stars of the Pleiades is rarely seen so well, and was beautiful in a range of instruments.
- NGC 253, The Silver Dollar Galaxy, culminated late for early sleepers, but gosh... bright, eyepiece-filling, and one of the most mottled dust lanes you will ever see. This showpiece is low in the south, and was Messier's major miss; otherwise it would be much better known.

To encourage folks to stay up longer, we enjoy saving a "show stopper" to the very end... this time we selected the galaxy M33 in Triangulum. Being face-on, it simply cannot be enjoyed if attempted

anywhere near light pollution, so Nirvana is THE place. M33 is, without any doubt, my favourite galaxy. Seen under dark skies, it is strikingly gorgeous because it is so near, and is one of only 3 galaxies where bright spiral arms are EASILY seen in amateur scopes (its other rivals M51 and M101 are 10x further away, and dimmer). Its spiraling arms display several bright nebulous star-forming regions, and the brightest H-II region, named NGC 604, even revealed details within itself! Our delicious large-aperture view was as good as a CCD image. WOW!!! Those who stayed up late voted, and M33 won hands-down for "The Best of the Night". M33 really rewards careful observation on a clear night.

Thank goodness that Kingston astronomers live the closest to the best dark-sky site accessible within Eastern North America. In Buddhism, the word "Nirvana" means bliss in heaven. This time Nirvana really earned its name.

David Levy's Latest 41: A List Of The Deep Sky Objects That He Picked Up While Observing In Bolivia

Leo Enright and David Levy

[In early September, our Honorary President, David Levy, spent a week in Bolivia, under superbly pristine skies. I asked him what he wanted me to report from him during the Observing Reports section of our September meeting - other than the fact that the Milky Way overhead was bright enough to read the Montreal Gazette with his sunglasses on. Here is the text of his reply. L.E.]

Dear Leo,
Yes! Please do make this report. The Milky Way was not quite bright enough to read the Gazette with sunglasses, but it was bright enough to cast a shadow. Here is a list of the new objects I picked up while comet hunting. They should appear in my new "Levy List" book to appear in November.
All the best
David

L338	NGC1042 07/03/2005	02 40.4 -08 26	LSB galaxy in Cetus, involved with nearby NGC1035.
L339	NGC891 07/03/2005	02 22.6 +42 21	Extremely elongated galaxy in Andromeda
L340	NGC1134 07/05/2005	02 53.6 +13 00	Aries round galaxy, low surface brightness.
L341	NGC755 07/08/2005	01 56.4 -09 04	Cetus elongated galaxy, found at low power despite being at magnitude 12.6.
L342P	NGC91 07/14/2005	00 21.8 +22 25	Galaxy in Andromeda, part of gorgeous cluster of galaxies.
L343	NGC6438 08/28/2005	18 26.0 -85 25	round galaxy in Octans. Near the pole.
L344	NGC1313 08/28/2005	03 18.3 -66 30	Beautiful barred spiral in Reticulum, in which a burst of star formation is taking place. Striking even through a 6-inch telescope.
L345	NGC2031 08/28/2005	05 33.7 -70 59	Mensa open cluster with nebulosity, in the Large Magellanic Cloud (LMC).
L346	NGC2103 08/28/2005	05 41.6 -71 20	fainter Mensa open cluster in LMC.
L347	NGC2060 08/28/2005	05:37.6 -69 10	Open cluster with nebulosity and dust, associated with Tarantula nebula in LMC.
L348	NGC1866 08/28/32005	05 13.5 -65 28	Open cluster in Dorado, in LMC.
L349	NGC2547 08/28/2005	08 10.7 -49 16	"Bow and arrow" open cluster in Vela. Distance 2000 light years. Sharply resembles a bow and arrow!
L350	NGC4372 08/28/2005	12 25.8 -72 40	Globular cluster in Musca. Distance 19,000 light years. Loosely concentrated.
L351	NGC6752 08/28/2005	19 10.9 -59 59	The great cluster in Pavo. Distance 13,000 light years.
L352	NGC6397 08/28/2005	17 40.7 -53 40	The great cluster in Ara. Very large globular, because it is only 7,200 light years away. It is only slightly farther away than M4, the closest. Stretches beautifully through high power field of view of 6-inch f/4. These last two were introduced to me by Lance Humphreys and later picked up during comet sweep.
L353	Wendee's fishhook asterism with IC2944 and IC2948	11:36.6 -63 02	Joined to NGC3766 (see Levy 101) by a string of stars consisting of HIP (for Hipparcos) 56556, NGC 3766, HIP 56754, 56986, 57175, 57211, 57108, 56897, IC2948, IC2944, HIP 56726, and Lambda Centauri. Wendee found this string in April 2005 and described it as a "reversed J" or "fishhook."

	08/29/2005		Through binoculars, loops of dark nebulae stretching out from Eta Carinae reach this asterism. NGC 3766 is at the eye of the hook; the two IC nebulae are at the bend near the barb, and the bright star Lambda Centauri is at the point. IC 2948 is a rich star-forming region with a plethora of Bok globules.
*L354	NGC5927 08/29/2005	15 28.0 -50 40	Globular cluster, resembles a faint comet in 6-inch f/4. Distance 25,000 light years.
L355	Proxima Cen 08/29/2005	14 30.2 -62 42	The nearest star to the Sun. It is near an isosceles triangle of stars (TYC 9010-1420-1, 9010-1732-1, and 9010-1860-1). Draw a line from 1420 to 1860 (the base of the triangle) and extend it about 4 times til you reach a reddish 10.8 magnitude star in the midst of a field of Milky Way stars.
L356	Barnard 263 08/29/2005	17 26.9 -42 37	A stunningly black nebula, optically very thick and blocking out virtually all the stars behind it. Noticeable even in 6-inch f/4 at low power.
L357	NGC6281 08/29/2005	17 04.8 -37 54	"A-frame" open cluster (with nebulosity) in Scorpius
L358	NGC6231 08/29/2005	16 54.0 -41 48	The "Big Arch" open cluster with nebulosity in Scorpius. Faintly visible naked eye.
L359	NGC1566 08/29/2005	04 20.0 -54 56	Spiral galaxy in Dorado. Distance about 44 million light years. Beautifully symmetrical spiral arms.
L360	NGC6684 08/30/2005	18 49.0 -65 11	Round galaxy in Pavo
L361	NGC1763 08/30/2005	04 56.8 -66 24	Dorado nebula with dust and cluster, in LMC
L362	NGC1734 08/30/2005	04 53.3 -68 47	Dorado open cluster in LMC
L363	NGC1433 08/30/2005	03 42.0 -47 13	Horologium elongated galaxy
*L364	NGC1527 08/30/2005	04 08.4 -47 53	Horologium very elongated galaxy with bright core. Nice to see this in 6-inch f/4.
*L365	NGC1512 08/30/2005	04 03.9 -43 21	Horologium round galaxy.
*L366	NGC1808 08/30/2005	05 07.7 -37 31	Columba very elongated galaxy, brighter core.
L367	NGC613 08/31/2005	01 34.3 -29 25	Sculptor spiral galaxy, includes some bright knots.
*L368	NGC1448 08/31/2005	03 44.5 -44 39	Horologium edge-on galaxy. It appeared at the very edge of the field. When I brought the galaxy to the center of the 6-inch, it was a lovely, faint string of fuzzy light.
L369	IC2177 08/31/2005	07 05.1 -10 42	Reflection nebula in Monoceros. Long and beautiful, cutting across the field beneath an open cluster like stranded rope.
*L370	NGC5643 09/01/2005	14 32.7 -44 10	Lupus round galaxy
L371	NGC1617 09/01/2005	04 31.7 -54 36	Dorado elongated galaxy
L372	NGC2025 09/01/2005	05 33.1 -71 44	Mensa Open cluster in LMC.
L373	NGC6362 09/02/05	17 31.9 -67 03	Ara globular cluster, distance 17,000 light years, easy to resolve.
L374	NGC6744 09/02/2005	19 09.8 -63 51	Pavo round galaxy
L375	NGC5189 09/03/2005	13 33.5 -65 59	Oddly shaped planetary nebula in Musca. Through 6-inch f/4 looked like a star cluster in nebulosity, but not stars. Highly irregular shape in small telescope, spiral in larger instruments. Distance about 3000 light years.
L376	X TrA 09/03/2005	15 4.3 –70 05	Strikingly red carbon star. Range 5.0-6.4, irregular.
*L377	NGC6300 09/03/2005	17 17.0 -62 49	Ara low surface brightness galaxy, large, like a faint comet in small telescope.
*L378	IC5267 09/03/2005	22 57.2 -43 24	Round galaxy, bright core.

Elections

Kim Hay and Doug Angle

Election night is November 11. Our bylaws state that all positions have one year terms, so every elected position is position is open. Please consider helping to run your centre by standing for one of these positions (descriptions from the bylaws):

The **President** shall preside at all meetings at which he or she is present; if the President is absent the Vice-President shall preside and in the absence of these Officers, the meeting shall appoint a chairman. (*Kim Hay is the current President*)

The **Vice-President** shall, in the absence of the President, preside at the meetings, and in other ways assist when possible with the management of the Centre. This has been expanded to include booking and handling speakers for meetings throughout the year. (*Norm Wellbanks is the current VP*)

The **Secretary** shall keep accurate minutes of all regular Centre meetings and the meetings of the Executive Council and other activities of the Centre, conduct the correspondence of the Centre, and work with the Newsletter Editor to see that members are informed about meetings.

The Secretary shall submit to the Annual Meeting a report on membership, meetings, and other Centre activities for the preceding year. After the report has been approved by the Executive Council, it will be sent by the Secretary to the Secretary of the R.A.S.C. before the 15th day of January in each year.
(*Steve Hart is the current Secretary*)

The **Treasurer** shall keep accurate records of all subscription fees and other monies received, pay bills as sanctioned by the Executive Council, and submit to the Annual Meeting a report on membership, meetings, and other Centre activities for the preceding year including a statement of revenues and expenses and a statement of assets and liabilities. These statements shall, after being approved by the Annual Meeting of the Centre, be forwarded by the Treasurer of the Centre to the Treasurer of the R.A.S.C. before the 15th day of January in each year. On the 15th day of January , April, July and October of each year, the Treasurer of the Centre shall submit to the Treasurer of the R.A.S.C. the required 60% of all membership fees received during the quarter-year ended on the last day of the preceding month along with a report listing the names of the members who paid their fees during the said quarter-year, the amounts paid by each of them and other pertinent information.
(*Kevin Kell is the current Treasurer*)

The **Newsletter Editor** shall be responsible for the production at regular intervals of the Centre's Newsletter. This has been expanded to include all centre editing/publishing. (*Doug Angle is the current Newsletter Editor*)

The **Librarian** shall be responsible for maintaining the Centre's library of books, periodicals, newsletters and other material. An inventory of holdings should be completed every year. Given limited space we have material stored at the Librarian's home and subject to loan by arrangement. (*Dave Maguire is the current Librarian*)

The **National Council Representative** shall be responsible for attending meetings of the National Council of the RASC and reporting back to the membership. National bylaws limit this person to a two consecutive year term.
(*John Hurley is the current NCR*)

If you have an interest in joining the team to help make the Centre run, you can do so by sending a note to Kingston (at) rasc (dot) ca

The Kingston Centre of the RASC

Newsletter Submission Info:
I can take most common formats, although I prefer plain text. Pictures should be sent as image files in attachments separate from the articles.
E-mail: angle (at) personainternet (dot) com
Post: Doug Angle,
xxxx.
RR#1, Sydenham Ontario Canada
K0H 2T0
Deadline for the November issue is **October 21**

Subscriptions: Members of the Kingston Centre receive Regulus as a benefit of membership. Advertisements are free to members of the Centre. Commercial advertising is $20/quarter, $40/half page, $100/ full page and should be in electronic format.

Contributions are more than welcome. submitted material may be edited for brevity or clarity.

Kingston Cosmic &Events Calendar

October & November 2005

By Kim Hay

For more detailed information, please refer to the RASC 2005 Calendar**, and the** RASC 2005 Observers Handbook**. Available fromKevin Kell or from National Office, http://www.rasc.ca/kingston**

Date & Time	Events
Sept 30- Oct 2 Friday-Sunday	 *Fall'N' Stars 2005* **Star Party hosted by RASC Kingston & Belleville Centre's see www.rascbelleville.ca/fallnstars**
Oct 3 Monday	**New Moon 6:28**
Oct 4 Tuesday	**Observational Astronomy for Novice Course 7:00 pm Ellis Hall Room 323**
Oct 8 Saturday	**KAON Observing Session**- Ellis Hall Queen's Observatory **7:30 – 9:30 p.m.** for more information visit http://members.kingston.net/rasc/pubobs.htm
Oct 8 Saturday	**Draconid Meteor Peak 1 pm www.imo.net for more info**
Oct 10 Monday	 **Happy Thanksgiving**
Oct 10 Monday	**First Quarter Moon 15:01**
Oct 11 Tuesday	**Observational Astronomy for Novice Course 7:00 pm Ellis Hall Room 323**
Oct 14 Friday	**Regular Meeting** Stirling Hall Theatre D **7:30** p.m. Guest Speaker **Ken Kingdon** "Mars- A closes approach"
Oct 17 Monday	**Full Moon 8:14** **Partial Lunar Eclipse** visible in all of North America except East
Oct 18 Tuesday	**Observational Astronomy for Novice Course 7:00 pm Ellis Hall Room 323**
Oct 19 Wednesday	**Moon 1.0º S of the Pleiades 9:00 pm**
Oct 21 Friday	**Orionid Meteor Peak 5:00 am www.imo.net for more info**
Oct 24 Monday	**Last Quarter Moon 21:17**
Oct 24- Oct 30	**Floating Period for Members Observing at Lemoine Point**
Oct 25 Tuesday	**Observational Astronomy for Novice Course 7:00 pm Ellis Hall **Room 224****
Oct 28 Friday	**Astro Yak** at the home of Kevin Kell & Kim Hay visit **http://members.kingston/~rasc/indexsec.htm** for directions
Oct 29 Saturday	 **Mars closest approach**
Oct 29 Saturday	National Council Meeting **10:00 am-5:00 pm- hosted by the Hamilton Centre**
Oct 30 Sunday	**Daylight Saving Time Ends 2:00 pm**
Oct 31 Monday	 **Halloween & Zodiacal Light visible- East in morning next 2 weeks**
Nov 1 Tuesday	**New Moon 20:25**
Nov 1 Tuesday	**Observational Astronomy for Novice Course 7:00 pm Ellis Hall Room 323**
Nov 3 Thursday	**Mercury at greatest elongation (not easily seen) * A challenge object E 24° Venus at greatest elongation E 47°**
Nov 5 Saturday	**S.Taurid Meteor peak 5:00 am**
Nov 7 Monday	**Mars at opposition**
Nov 8 Tuesday	**Observational Astronomy for Novice Course 7:00 pm Ellis Hall- Observatory 4th floor- Observing night ** Last Class Night** It's been Great!!! First Quarter Moon 20:57**
Nov 11 Friday	**Regular Meeting Stirling Hall Theatre D 7:30 p.m. Election Night-All positions Open Guest Speaker TBA**
Nov 12 Saturday	**KAON Observing Session- Ellis Hall Queen's Observatory 7:30 – 9:30 p.m. for more information visit http://members.kingston.net/rasc/pubobs.htm**
Nov 12 Saturday	**N.Taurid meteor peak 4:00 am**
Nov 15 Tuesday	**Full Moon 19:57 Mars 2.5° S of Moon**
Nov 16 Wednesday	**Moon 0.7° S of the Pleiades 8:00 am *Challenge Object**
Nov 17 Thursday	**Leonid Meteor Peak 10:00 am**
Nov 18 Friday	**Astro Yak** at the home of Kevin Kell & Kim Hay visit **http://members.kingston/~rasc/indexsec.htm** for directions
Nov 23 Wednesday	Last Quarter Moon 17:11
Nov 25 Friday	**RASC-KC Awards Banquet at the Holiday Inn, for more information and tickets visit http://members.kingston.net/rasc/Banquet.htm**
Nov 23- Dec 4	**Floating Period for Members Observing at Lemoine Point-**

WebSite Passwords for Member-only areas: