



Regulus

May - June 1995

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



M42 Orion Nebula

Photo taken by Kingston Centre member Frank Hitchens with 10" SCT
for 40 min at f/6 with Konica 3200 ASA film. More photos on page 5

29 June - 02 July 1995
1995 General Assembly
Windsor , Ontario
Have you Registered?
Kingston in 97?

This Issue

The Centre.....	2
Astronomy Day	3
From The Desk of	3
RASC Web Site	3
Quest for New Moon.....	4
Astro Gallery.....	5
For Sale	6
Editor Rumbling.....	6
Star Party.....	6

The Centre

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Education	Denise Sabatini	(000) 000-0000
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Observing	Steven Manders	(000) 000-0000
Light Pollution	Bill Broderick	(000) 000-0000
GA Bid	Peggy Torney	(000) 000-0000

Meetings and Events

May 12	“The Boltwood Observatory” - Paul Boltwood, RASC Ottawa Centre
June 9	“Through the Glass Clearly: Getting the Most Out of Your Telescope” - Peter Ceravolo, RASC 2nd VP
July 14	TBA - John Gauvreau, RASC Hamilton Centre
Aug 11	“Skies Over Parinacota: Eclipse Trip November 1994” - Rob Dick, President RASC Ottawa Centre
Sept 8	“Members’ Night” Our annual “What I did during my (astronomical) summer vacation” meeting! Bring your slides, etc. to show at the meeting.
Oct 13	“How to Observe Meteors” - Cathy Hall Kingston Centre Annual Meeting

Centre Address

RASC - Kingston Centre
P.O. Box 1793
Kingston, Ontario
K7L 5J6

Meetings

Regular Meetings of the Kingston Centre, RASC are held on the **second Friday** of each month (unless noted otherwise) at 8 p.m., in Room B-201, ***Mackintosh-Corry Hall, Queen’s University***. Non-members are welcome. Executive meetings are at 7:30 p.m.

Regulus is published six times per year. Views and opinions expressed herein do not necessarily represent the official position of The Royal Astronomical Society of Canada or its officers and members unless so indicated.

SUBSCRIPTIONS: Members of the Centre receive REGULUS as a benefit of membership. Non-members may subscribe for \$10 per year.

ADVERTISING: Classified advertisements re items to sell, buy or trade are free to members of the centre. Commercial advertising is \$25 per half page \$50 for full page. Commercial advertisers must supply clean camera-ready copy.

CONTRIBUTIONS INVITED articles, notes on observation, humour, poetry artwork, anything on astronomy or related topics are invited. Submitted material may be edited for brevity or clarity.

Deadline for receipt of material is the 15th of the month prior to Publication.

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ASTRONOMY DAY AT QUINTE MALL

Cathy Hall

Saturday May 6th started very clear and very early for Astronomy Day 1995. This year, R.A.S.C. Kingston decided to organize a display for the public at Quinte Mall in Belleville, in addition to the usual local display.

It was a great success! Walter MacDonald, President of the Kingston Centre, even surfaced before noon for it! We coordinated our efforts with the Belleville Astronomy Club, with the help of Dan Rombough, their president.

Bill Broderick brought his large freestanding display on light pollution, and his AstroPhysics Star12 refractor. We were amazed at the number of people that stopped and really read through the display!

Joanne Burns brought her Celestron telescope. Joe Shields, of the Belleville club, brought his 13" Odyssey dobsonian - bright red, and very eye-catching. It was sometimes difficult to keep all the kids' arms out of it!

Walter brought a large display showing examples of astrophotography. I brought a number of display boards, specifically done up to catch the public's attention. We had a cropped version of the R.A.S.C. poster, with the R.A.S.C. crest overlapped onto it. We had bright posters showing comets and galaxies. On the light pollution theme, we had the 'Earth at Night' poster. Many people stopped to examine it and figure out where they were! Lastly, I had a very colourful collage of space objects planets, spaceships with 'Space' in big letters at the top. It caught the attention of the kids from a distance!

For table displays, we had a minimum of items, but colourful things. The star globe lent to us by Peggy Torney was a hit. All the kids loved to make the moon go around. My inflatable globe with the

mythical constellation figures was handled by all! You should have seen all the little kids crying 'ball' with their arms reaching out!

Both Astronomy magazine and Sky & Telescope sent large care packages of handout material for the public, on getting started in astronomy. It was wonderful. We also managed to come up with large numbers of 'Fifty Five Plus', with the article on Terry Dickinson. Most people also took both the information sheets on the R.A.S.C. and the Belleville club. I even had one person from Ottawa that wanted to know who to contact up there!

The mall was busy all day, with a peak probably around 2.00 p.m.. There was a constant flow of people asking us questions about the clubs, about telescopes, and about what you can see in the sky. A lot of people took handout material for friends or relatives that were interested in astronomy. I think we should get a number of new members from our efforts!

All in all, it was a great day, with colourful displays, lots of people, and lots of good questions!

Thanks go out to the Belleville Astronomy Club, who helped out in a major way, and who also ran an evening observing session at one of the local parks. We hope to see more of them at some of

RASC WEB SITE

Kevin Kell

It looks like someone has put up a national RASC Web home page at:
<http://www.astro.utoronto.ca/rasc.html>

Pretty basic, pretty nice and a damned good idea... Here's hoping it doesn't get stomped on. I was actually thinking along the same lines for our local Centre once I get a web server up and running.

FROM THE DESK OF THE SECRETARY

Ruth Hicks

The Kingston Centre astronomy Day featured a Mall Display at the Catarqui Town Centre. Members who worked, provided displays and/or visited were Denise Sabatini, Leo Enright, Peter Kirk, David Stokes, Steve Manders, Terry and Ruth Hicks, Jean and Hein Van Asperen, Jim Towgnod, Kevin Kell, Ian Levstein, Tom Dean, Christine Kulyk.

Peggy Torney, assistant convenor, brought a man-sized cut-out of a Star Trek character who wore a wooley RASC cap and held up a poster about the Star Party. This was held at Kingston Field, Queen's University. It was a lovely clear evening weatherwise, but smoke from a marsh fire created a nuisance.

The Mall display featured telescopes, an astroscan, astrophotos, information handouts, and a computer showing various planets. A lot of these scopes were in use at the Star Party, as well as one with Judith Irwin and Dieter Brueckner. We viewed the moon, Mercury and Mars, as well as Vega rising and checked out some of the constellations.

Thanks to all who helped make it a very successful Astronomy Day

A vote of thanks is due those members and others who brought telescopes, astroscans, computers, and binoculars etc to the RASC April Workshop.

They made an impressive display and helped to further kindle our enthusiasm for things celestial. Some of those involved were Peggy Torney, Cathy Hall, Leo Enright, Kevin Kell, Walter MacDonald and Christine Kulyk as convenor of the workshop

**THE QUEST FOR THE YOUNG MOON
SUCCESS ON THE LAST DAY OF MARCH**

Leo Enright

A fascination with the attempt to observe as young a moon as possible has challenged astronomers and others for many years. About once a year the conditions for such a quest present themselves. It generally happens in the spring when the celestial alignments are most favourable, when the ecliptic, as seen in the western sky at the time of sunset, is most steeply inclined to the horizon. The moon in its monthly orbit is always on, or within five degrees of, the ecliptic in its orbit around the earth, and in the springtime it climbs quickly from night to night so that a thin crescent is then generally noticed by most people much sooner than at other times of the year.

Occasionally in March or early April there is a genuine chance to see what can be called a very young moon. Such conditions prevail if sunset in the local area occurs about 18 to 24 hours after the precise time of new moon. If the new moon is much younger than that, the lunar crescent will probably be too slender to see and the moon will probably first appear when it is only a couple of degrees or so above the western horizon when the sun is a few degrees below the horizon. If the moon is much more than 24 hours old, the quest is not as exciting because of the number of observers who have mastered it, and if the moon is thirty hours old or more, the challenge is not rigorous enough to entice many observers who wish to put their observing abilities to a genuine test.

With this in mind, I had looked forward for a week or more to what would take place on Friday, March 31, at the time of the second new moon of that month. I knew that the moon would be about 21 hours old at about the time of

sunset in the local area. With that general knowledge, I did not even check precisely the age of the moon, because I knew that there was one condition that was more important than anything else. All the calculations in the world about azimuths, times and elongations would go for nothing unless there were very clear conditions in the western sky in the hour after sunset on that Friday night.

Late Friday afternoon the weather conditions did not seem particularly promising. Fairly heavy clouds persisted in many parts of the sky, even though they allowed me to complete a solar observation at 3:20 p.m. E.S.T., Nevertheless, I decided to take a chance. A check of my schedule of solar and lunar times told me that sunset at my location would be at 6:31 p.m. E.S.T. and moonset would be at 7:26. I expected that the ideal time to catch a glimpse of the tiny crescent moon, if everything (particularly the weather) cooperated would be at about 6:50 to 7:00 p.m.. With binoculars and camera and tripod, Denise and I set out for the observing site that has become my favorite for those occasions when a perfect view of the western horizon is demanded. At the eastern end of Silver Lake a rocky ledge provides an unhindered view to the west across two kilometers of water.

Arriving there at 6:40, nine minutes after sunset we were cautiously pleased to note that the western sky, up to about ten or twelve degrees was very clear, other parts of the northern and high western sky were also clear, but the southern, eastern and most of the southwestern sky were heavily overcast. It just might be possible, we thought, but we were far from sure, that clear conditions would prevail long enough for us to be successful. As the glow of twilight began to fade, we scanned the west very carefully with our 9X63 and 10X50 binoculars. At 6:55 p.m., Denise shouted, "I have it, just above that tree! It's really thin!" I was scanning an area about two or three degrees south of

the field in which she saw it. I soon saw it and was amazed at how thin it was. The horns of the crescent did not seem to form a half-circle, as is usually the case. It was something like a third of a circle. The crescent was five degrees above the horizon. We followed its movement downward and to the right for 20 minutes, until 7:15. At about 7:05, by taking her eyes from the binoculars and concentrating on the right spot, Denise was able to say that she saw the crescent naked-eye "for about three seconds only". I tried but could not be absolutely certain of seeing it in that way, at least, not certain enough to record that I had done so. We agreed that, without the binoculars, we would not have seen it at all that night. What we both noticed was that during the 20 minutes of observation, the middle section of the crescent seemed to become brighter, as the surrounding twilight faded slightly. At 7:15 the right-hand portion of the crescent went behind a very distant tree, one that to the unaided eye appeared as only a speck on the horizon. By then the moon was only one degree, or less, above the horizon.

When we left the site five minutes later, and walked to the car, it was with a sense that for once Murphy's Law had not prevailed. Numerous stars were starting to appear in the northern sky, and twilight in the west would end in a more than half an hour, but thick clouds still persisted in the east and in the south. Sometimes one does get lucky, and sometimes the weather does cooperate for amateur astronomers who take a chance on making observations such as these.

Later at home on referring to the Observer's Handbook I found out that New Moon had occurred at 02:09 UT, and our observation at 23:55 UT meant that we had seen a moon whose age was 21 hours 46 minutes. My personal record had been broken by a couple of hours.

The quest for a very young moon is a genuine challenge, one that requires some planning in addition to cooperation from the forces of nature. If you have the chance, pursue the quest! It is well worth the effort.

ASTRO GALLERY



A pair of photos by Frank Hitchens. Above is a 20 minute exposure of M27, the Dumbbell Nebula and below a 40 minute exposure of M51, the Whirlpool Galaxy. The pictures were taken with Konica 3200 through a 10" SCT at f/6.



**RUMBLIN'S FROM THE
EDITOR
Peter Kirk**

This being the third newsletter that I have produced, I felt that it was high time I wrote a short article on how its going.

Other than not having alot of time to work on the newsletter due to the new job I am doing where I work, I enjoy the process of creating the bimonthly publication.

Unfortunately, I'm only going to be able to do this for a year, as I have been told that I will be leaving next summer, so in October, a new editor will be required.

When I took over as the editor of Regulus, I had plans of doing a paper and an electronic version. But due to job commitments and my family life(two small boys to entertain), I don't believe that I will be able to get an electronic version out. The problem lies in being able to produce a version that anyone can view, but is not just an ascii dump of the paper version. So at present, I can't apply the time. Maybe if I had another year to work on it.

If you have photos that you would like to see in Regulus then by all means, send them to me. I have access to a colour scanner so you can send me your snapshots and I can scan them into a file for inclusion into the newsletter.

After the last meeting, Frank Hitchens sent me a set of seven pictures that he had taken , and I have published three of the seven. Unfortunately, the printing and copying of the newsletter doesn't do the photos justice. The photos in any judgement are excellent and I am more than happy to present them here.

End of June is the General Assembly, and although I am unable to attend, I'll be rooting for Kingston to get the G.A. for 1997. Hopefully, between all the events, those that are able to go will do

articles for Regulus, as the next issue will be out at the July meeting following the G.A. I also hope to have some pictures from Astronomy Day for the next issue, as I know Peggy was snapping away with the 35mm that Cathy supplied.

If you do not receive an issue of Regulus, please don't hesitate to get in touch with me and I'll look into the cause and get a copy to you. I can be reached at the number on page two or by e-mail at the following:

Internet: kirkp@xxxxxxxxxxxxxxxxxx
Fidonet: 1:249/109.4

Well that's about all I have to say for now, as this was also written to help fill some space here on the back page of the newsletter. Clear skies.

Upcoming Events

- May 26 - Celestial Tent Star Party
London, Ontario - see next column for details
- 16 June - Terence Dickenson - 20:00
Queens Univ.
- 29 June - 1995 General Assembly
Windsor Ontario - runs till July 02
- Aug 25 - StarFest
Mount Forest Ontario

FOR SALE

Celestron Classic 8
Comes with finder, wedge, 25mm Keller, 13.8 mm Super wide, worm drive.
Asking \$1350 OBO
Contact: Matt Dunn, 000-0000

Celestron 14
Comes with tripod, wedge, fork arms, and drive base. Comes with heavy duty drive corrector, JMI digital encoders on RA and Dec axes.
Best offer.
Call Doug Sheldrake, 000/000-0000.

**CELESTIAL TENT SPRING
STAR PARTY
Dave London, RASC London**

All Southwestern Ontario Amateur Astronomers are invited.

Date: Friday MAY 26-27 Cloud date May 27-28

Time: 19:00 (7:00pm EST) to Sun Up or later

Cost: FREE

Location: Derek Hitchens' country estate, just across the road from the A.W. Cambell Conservation Area, north of Alvinston. From the Toronto-Hamilton area, travel the 401 or 403 to London and take the 402 highway to exit 82 to Mount Bridges, then continue through the lights southwest on County Road 14 to Glencoe. Go right onto Hwy 80 and northwest to Alvinston, then right onto Hwy 79, go north and then take Shilo Line east, also signed for the A.W. Campbell C.A. OR stay on Hwy 402 to exit 44 and go south to Watford, continue past county road 4 to Shilo Line east to A.W. Campbell CA. Derek's white dome is on the left on lot #8444 just before the turn into the Conservation Area.

Accommodations: Several bedrooms are available, and a large grassy area is available for tents. Inside washrooms are available, as is outside running water and electricity for those clock drives. Bring your own camp stove, dishes, drinking mug, food, folding table, extension cord and power bar, etc. Hot chocolate, tea, coffee and good company will be available all night, no charge.

If you are interested in attending, please leave a message for Dave McCarter on the BBS or call me at 000-000-0000

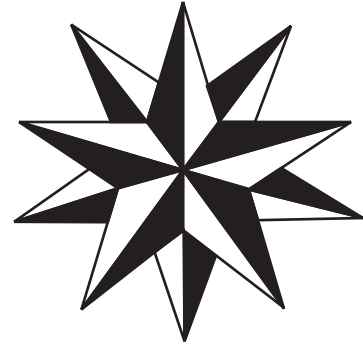
Dave. London RASC.

Clear Skies, Grind Glass, or solder Accessories.

The Observatory BBS (000) 000-0000, London, Ont. Canada

R.A.S.C. KINGSTON MEMBERS!

EVENT: ASTRONOMY DAY 1995



WHEN: SATURDAY MAY 6, 1995

- WHERE:
1. CATARAQUI TOWN CENTRE, Kingston - Mall Display
9.30 am - 6.00 pm
Setup time for displays: 8.00 - 9.15 am
Location: in front of Walters Jewellers
Door to bring displays in: near Bank of Montreal
 2. QUINTE MALL, Belleville - Mall Display
9.30 am - 6.00 pm
Setup time for displays: 8.00 - 9.15 am
Location: in front of Crossings store
Door to bring displays in: behind Toys R Us, near dumpsters.
 3. JOINT RASC/QUEEN'S UNIVERSITY - Observing
Evening of Saturday May 6, 8.30 - 11.00 pm
Location: Kingston Field, corner of Stuart St. and University Avenue, in front of Grant Hall, Queen's University.

WHO: All members are invited to attend, help out, or just drop by and admire our displays! Wear your astronomical attire! We would like members to take photos of our Astronomy Day activities so that we can include them in our article for the new RASC publication.

For more information, contact:
Cathy Hall at 000-000-0000 or
Peggy Torney at 000-000-0000.

On Astronomy Day itself, Peggy Torney will be supervising the actual setup at Cataraqui, and Cathy Hall will be supervising at Quinte.



DETAILS:

Mall Displays:

Display boards - on easels

Table displays - sky globes, books, atlases, model of solar system

Computer - showing Dance of the Planets

Handouts - RASC info

Special handouts - from Sky & Telescope

- from Astronomy magazine

- from National Museum of Science and Technology

Sale items - Beginners Observing Guides

Display telescopes - 4 at Cataraqui, 2 at Quinte

Life-like model wearing RASC clothing!

Evening Observing:

6 telescopes confirmed to date

Joint Participation:

Kingston - joint with Queen's for evening observing.

Belleville - promotional material for Belleville Astronomy Club to be available.