Regulus

Newsletter of the RASC Kingston Centre

Vol. 53 No. 7 September, 2026

In this issue:

Centre Events for September 2026:

Sep 2: Zoom Social at 7pm.

Sep 9: Pre-meeting get together at the Portsmouth Tavern, 96 Yonge Street, Kingston

Sep 9: Monthly Public meeting 7pm at Queens Room 226, Ellis Hall, 58 University Avenue, Kingston

Sep 11->13: Fall'n'Stars 2026 Star Party Johnson's RV Park, 3235 County Road 13, Picton (South Bay), ON

Sep 16: Zoom Social at 7pm.

Sep 23: Zoom Social at 7pm.

Sep 30: Zoom Social at 7pm.

Members' Night — Wednesday, Sept. 9

Our first meeting of the month is a members' night. This one belongs to you: if you were out under the sky over the summer, bring a thumb drive and show us what you were up to. Images, sketches, a project you finally finished, a night that did not go to plan - all of it is welcome, and none of it needs to be polished. I suspect Roger will turn up with something interesting ;)

Fall'N'Stars — Friday, Sept. 11

Fall'N'Stars returns to Johnson's RV Park in Prince Edward County, with the Centre again among the organizers. Pizza, salad, a swap table, door prizes and the usual good company. If you have never been, it is an easy one to start with. Camping in the fall is so much nicer than mid-summer, the nights are cool and the days are getting shorter. We hope to see you there!

General Assembly 2027

Planning for the General Assembly continues, and there is a great deal still to do. Volunteers are welcome - there is room for whatever time you can give, whether that is helping plan through the winter or lending a hand on the weekend itself. If you would like to be part of it, please get in touch with me. Our next planning meeting is on September 7 at 7pm by zoom. Send me a note if you would like to join in.

Astronomy Quiz from the RASC-KC OAFTN course in 2005 Part 2

Section 3: Maps and Brightness

What is a planisphere?
☆ A. a device to smooth wooden spheres
☆ B. A moving starchart that can be set for specific locations but not time or date
☆ C. a moving starchart that can be set for dates, times and locations
☆ D. a fixed starchart that you can hold up in the direction you are facing

Section 4: Telescope Types

What is a useful rule of thumb for how much magnification a telescope can use?
☆ A. 10x per inch of aperture
☆ B. 100x per inch of aperture
☆ C. 50x per inch of aperture
☆ D. 625x per inch of aperture

Which of the following is NOT a property of a Newtonian telescope on a Dobsonian mount?
☆ A. Generally less expensive than a Schmidt-Cass telescope (SCT) of equivalent size
☆ B. Generally larger in physical size than an SCT of equivalent size
☆ C. Can track the moving sky better than an SCT on an equatorial mount
☆ D. Faster to setup in the field than an SCT

If the focal length of your telescope is 2000mm, your shoe size is 9 and you are using a 50mm eyepiece to look at the moon, what is the magnification?
☆ A. 4x
☆ B. 40x
☆ C. 400x
☆ D. 625X

Section 5: Stars, RA/Dec, Deep Sky Objects

In general, in what order are the Greek alphabet designations of the three brightest stars in a constellation?
☆ A. Alpha, beta, gamma
☆ B. gamma, delta, alpha
☆ C. beta, gamma, alpha
☆ D. alpha, beta, epsilon

Which of the following is NOT a deep sky object?
☆ A. Pluto
☆ B. M31
☆ C. The Double Cluster in Perseus
☆ D. The Globular Cluster M14

You were in your dark sky backyard last night observing and saw a naked eye deep sky object high overhead in the north around midnight. What was it?
☆ A. M57 the Ring Nebula
☆ B. M31 the Andromeda Galaxy
☆ C. Mars
☆ D. Ceres

The Editor's Keyboard

Roger Hill

My new telescope has finally arrived, and, to quote Mark Kaye, it's a beast!

I had been in contact with the great people of Astronomy Plus over the last few weeks, so I was aware that it would likely be shipped from iOptron's warehouse near Boston, Mass. in the last week of August. I did not know if it would be held up in customs, if they use a broker, or how long it would take to get it to their facility in Granby, PQ.

And then on Friday, August 28, I saw this picture on their Facebook page with the message "Deux clients qui seront TRÈS heureux bientôt!" which Google Translated to: Two clients who will be VERY happy soon!

Seconds afterwards, I received an email confirming that the big box held my new telescope (the other big box held a new C14).

Emails were exchanged, and the invoice was paid. Negotiations occurred with my wife, because Saturday afternoon was the Annual End of Summer BBQ for her Optimist club, and being the President, we were hosting it. With people scheduled to arrive at 3pm, I promised to be back by 1pm. I figured that if I left at 7:30am, I would arrive at 10am when they opened, and I could then be home around 1pm, giving me a couple of hours for me to help her with any final preparation for the BBQ.

With a big YETI mug filled with a Flat White coffee, I set off at 7:25am. My GPS said I would arrive a few minutes early. Traffic around Montreal can be remarkably fickle, and so it proved. Thoughtlessly, a couple of drivers decided to crash their vehicles together just to slow me down enough that I arrived a few minutes after 10am. I rang the doorbell, introduced myself, and chatted with the two guys who were there while I had a look inside the box to make sure the 'scope was in the minimum number of pieces. They gave me a hand loading it into the back of my SUV, and after grabbing a Dark Roast from Timmies, I was on my way home.

Traffic was much better going back and with a quick stop for gas once I crossed into Ontario, I arrived home with 5 minutes to spare. This was good, because people were actually arriving at 2pm!

I wish I could say that I enjoyed myself at the BBQ, but all I could think about was the big box in the back of the SUV. Still, the burgers were good, the hot dogs properly cooked, and by the time everyone had left, it was going dark.

Some weeks earlier, Mark Kaye had very kindly offered to help me put the scope on the mount. Les Nagy also said he wanted to be there, too. Mike Hanes also offered to help, and Rick Wagner did the same.

On Sunday morning, I removed all the power supplies, USB cables, dew heater cables, power supplies etc. I took off the Barska 80mm APO Triplet, the guide scope and finally, the 12" SCT Optical Tube Assembly.

I was able to gently manhandle to box out of the SUV and into the house.

Mark arrived and with the help of my Jonathan, my son, we got the box open and removed the scope from the box and put it on the dining room table.

It was briefly inspected and admired while we waited for the rain to hopefully subside enough that we could take it the 100 metres down to the observatory.

When this happened, it went back into the box, and with a couple of tie down straps, Mark, Jonathan and I got it down to the empty SkyShed POD.

It took a couple false starts, but the beast was finally put on the mount.

It just barely fit, but after Mark left, I moved the dome about 300mm south, which helped a lot. This meant that I had to re-route all the wiring under the floor, drill a couple more holes, and put the wiring back. Oh, and I balanced it.

Around 11pm, there was a nice big sucker hole in the clouds, so I went down to the observatory, and found out that the USB cables weren't properly connected, so I grabbed a 2" Diagonal and a 25mm eyepiece, and looked at the Moon and Saturn.

I've still got several hours of work to do to put the electric focuser on, redo the wiring, and lots of other things, but that's a lot of the fun, isn't it, now that the waiting is over!

Clear skies to you!
Roger Hill

A rhyme tor the children

Strong sky no cloud, in dusk so calm;
A star, a world, it brings me home,
In brilliance, not unlike a dome
In darkness just before the dawn.

Mars calls and often asks me why
In voice so soft and yet so clear
So far away and yet so near
It beckons me from eastern sky.

It summons the folks, both young and old;
To gaze, to peer, to look, to learn
With open hearts and minds that earn
A lifelong wonder, tough and bold.

A child looks up, eyes agape
With wonder, query, answers naught
But problems, questions, nothing bought;
But ever. wonder, as dawn does break.

Grow up, dear child, and find your time,
Business, doctor, lawyer, mold

But let your avocation hold
To love the sky, its mood sublime.

Each star is there, it is your friend.
It shines upon you every night,
Its light does twinkle from the height
And down to you, nor e'er to bend.

On summer nights, Vega does rule.
Its soft blue light, its youth beguiles
A nascent system of worlds and styles,
This star all night will never fool.

With Deneb and Altair, those stars three
A Summer triangle all the night
Makes this season's sky so bright,
And friendly they will always be.

Triangle, encasing the Milky Way
A road that straddles the inky sky
With stars and clouds each evening nigh
And wander through it every day.

Sixteen hundred light years hung
Deneb still delights us all.
But Altair, sixteen light years call
Towards Vega, twenty-six years flung.

These three light up the nightly sky
Like lamps to cheer our wounded nest
And show us what they see as best
A trio of joy, as night falls by.

The stars for children are defined
To study, love, and never fear;
But ever to look, or hold so dear
On every night, we are not blind.

The sky is meant for every child.
Explore, befriend, and even speak
The gracious stars and worlds not weak
To furnish lovely dreams, so mild.

A child's eyes look up high
Some will remember, most will not,
But for all in life's unfairness caught
Please gaze to the stars, a heavenly sky.

Immortal sky, forever stars
But even they are gone one day
Even the triangle will not stay
Just as they die, and so will Mars.

But somehow children will always be
To gaze, and look, their eyes to dream
Of happy times, of stars that seem
Forever young, forever free.

A wonderful shooting star, a meteor, scratches the sky. It comes from the Geminid meteor shower, which reaches its maximum in December.

The Sky This Month: Rick Wagner

Any night of the week offers up a broad range of viewing wonders. A Past President of the Kingston Centre, Rick Wagner keeps an eye on the sky each month, sharing some of the best viewing opportunities as well as timings to catch your favourite night sky target at its best.

Astronomy This Month – September 2026

08 Sep – daytime occultation of Jupiter (mag -1.8) by the Moon – disappearance 14:50EDT, reappearance 15:50EDT

09 Sep – zodiacal light visible in east before morning twilight for next two weeks

10 Sep – New Moon (23:37EDT)

12 Sep – (456) Abnoba (mag 13.5) occults TYC 0494-01908-1 (mag 10.7) for 6.1s over Elgin and Athens (2205EDT)

15 Sep – (19643) Jacobrucker (mag 18.9) occults UCAC4 420-148610 (mag 10.8) for 0.6s over Kingston, Cardinal, Morrisburg (01:45EDT)

16 Sep – (32526) 2001 OD98 (mag 18.5) occults HIP 88857 (mag 7.6) for 0.7s over Kingston (2120EDT)

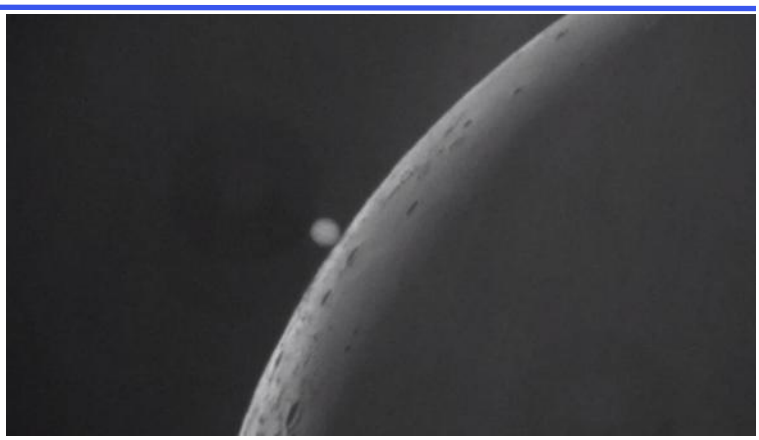
18 Sep – First Quarter Moon

18 Sep – Venus at greatest illuminated extent (mag -4.8)

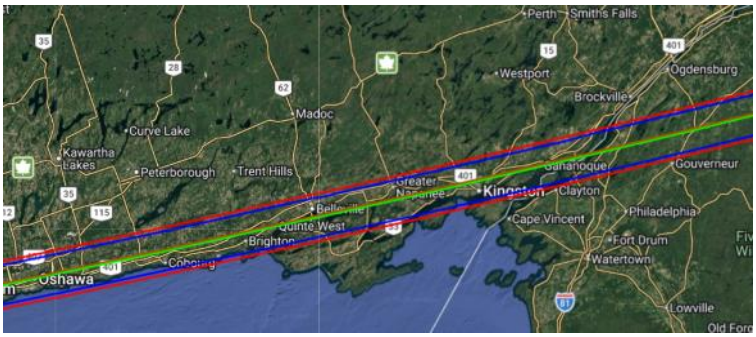
22 Sep – Autumn equinox – Sun is directly over the equator, autumn begins in the northern hemisphere (20:05EDT)

25 Sep – Neptune (mag 7.8) at opposition (22:00EDT); Neptune 6.5º right of Moon, Saturn (mag 0.4) 6.5º below Moon

26 Sep – Full Moon (12:49EDT)



Jupiter Occultation from 2023-05-17—Daytime event recorded using an infra-red filter.



Images above are visibility maps of the asteroid occultation events listed, and are presented in the order in which they occur.

Targets for Tonight: Sagittarius

Susan Gagnon

There are no bits of sky as busy as Sagittarius. This makes sense as we are looking toward the heart of our galaxy, placed somewhere between the tip of the teapot spout and the border with Ophiuchus. Highlighted sections within the list, gray or yellow, are used to show groupings that may be of help in planning an observing session. Two exceptions are M75 and M55 which are comparatively isolated. Messier list items are obvious but I have added if they are also in the ETU list. There are no Double Star targets for this constellation.

If you wish to be schooled in what a globular cluster looks like you've come to the right constellation. M22 is a particularly large GC, some 10 minutes larger in diameter than the well known M13. While the number of stars in each is several hundred thousand stars, and the distance to M22 is half that of M13, one wonders if we have been robbed of a more spectacular view due to the crowded sightline to the galactic centre where gas and dust abound.

M8 or the Lagoon nebula is named for the dark channel dividing it in half. It features an emission nebula associated with an open cluster(NGC 6530). 9Sgr, an O star was once thought to be the single source of radiation fueling the emissions but now is known to be part of a spectroscopic binary system, with a second O star as its companion. The sole galaxy in our lists is the irregular barred dwarf, Barnard's Galaxy or NGC 6822. Our ability to spot this galaxy is enhanced by it being just outside of the Milky Way's more crowded main corridor. Only a Moon diameter away is NGC 6818, a planetary nebula also called The Little Gem Nebula described as bright turquoise. The star at the centre is thought to be at the start of the 'recombination phase', where protons recapture electrons in the process of forming a white dwarf. There are many objects each with their own interesting characteristics and stories. I hope this preliminary effort at an observing plan inspires you to get out and take a look toward the heart of our Milky Way.

Object(NGC or M)	Description	Mag	RA hr, min	Dec degree, min
6822 (DSC)	Barnard's Galaxy	18	19 44	-14 48
6818 (Finest NGC)	PN	9.3	19 44	-14 09
M75	GC	8.6	20 06	-12 55
M55	GC	6.3	19 40	-30 57
M54	GC	7.7	18 55	-30 28
M70	GC	7.8	18 43	-32 18
M69	GC	7.7	18 31	-32 21
NUNKI (ETU)	Star			
6638 (Levy)	GC	10.8	18 31	-25 30
M22 (ETU)	GC	5.2	18 36	-23 54
M28	GC	6.9	18 24	-24 52
6528 (This pr. make	GC	12.1	18 05	-30 03
6522 Levy279)	GC	10.7	18 04	-30 02
6520 (Finest NGC)	OC	7.6	18 03	-27 54
6553 (Levy)	GC	9.1	18 09	-25 54
M8 (ETU)	Nebula w/OC	4.6	18 03	-24 23
M20	Nebula w/OC	6.3	18 02	-23 02
M21	OC	5.9	18 04	-22 30
M23 (ETU)	OC	5.5	17.56	-19 01
6445 (Finest NGC)	PN	11.2	17 49	-20 01
6440 (Levy)	GC	12.0	17 49	-20 22
M24 (ETU)	Star cloud	4.6	18.17	-18 36
6603 (ETU)	Small open cluster within M24			
M25 (ETU)	OC	4.6	18 31	-19 07
M18	OC	6.9	18 20	-17 06
M17 (ETU)	Emission w/OC	6.0	18 21	-16 11

Questar Equipment donation

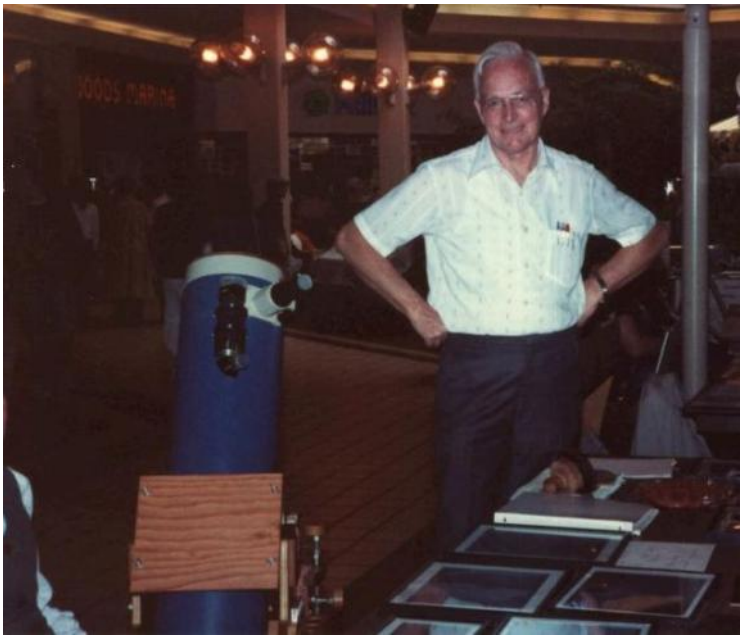
Earlier this summer, a Questar 3.5" catadioptric apochromatic telescope was donated to the Centre from the family of Hein van Asperen, a longtime member of the RASC-Kingston Centre. Hein joined the Centre in 1984 and remained a member for decades as well as participating in many Astronomy Day Outreach events and our monthly meetings. In this image he is with his homebuilt 20cm Dobsonian telescope, which we will talk about in the next issue of Regulus.

The telescope comes with wooden box case, and its specs are:
visual D=3.5" FL=50.5" F=14.4
visual D=89mm FL=1281mm F=14.4
electric RA drive 2.7W 120vac 60Hz
weighed in at 8.5 lbs (4kg) with legs and eyepiece only

Hein van Asperen, 4 days before his 100th birthday, lately of Kingston, formerly a long time resident of Brockville, died peacefully at his home in Amherstview with his loving wife, Regina, by his side on February 21st, 2019.

He was born on February 25th, 1919 in Tjepoe, Indonesia, returning to the Netherlands when he was four years old. He became an electrical engineer and during the occupation worked at Philips Holland. Upon Liberation by Canadian forces, he married Regina Rypkema and in 1954, along with their first child, the family moved to Canada, shortly thereafter becoming Canadian citizens.

In Brockville, he worked at Phillips Cables until his retirement in 1984. He was an avid photographer, was a member of the RASC and built his own telescope with which he would track sunspots.



The answers to the astronomy quiz are at the bottom of the page:
https://kingston.rasc.ca/leo-enright-prize-in-astronomy/

Elgin Days

Richard Wagner

On the second weekend of July the town of Elgin in Rideau Lakes celebrates Elgin Days. It officially extends from Thursday through Sunday but the bulk of activity is on the Saturday. Bingo, yard sales, a silent auction, pancake breakfasts, bake sales, face painting, live music in several locations, chain saw carving, and a parade are among the attractions. Best of all though is the chance to look at the Sun safely through a telescope.

For about 10 years now I've been showing up next to the Red Brick Schoolhouse with a telescope and white light filter to show people the Sun. Over the years I've experimented with a few different set-ups and added some things to improve the viewing. I started by choosing a nice location on the edge of the park where I can sit in the shade when there are no customers but have the scopes in the sunshine nearby. Unfortunately it means I have to shift the scopes a few times over the ~5 hours I'm there as the shadows of the trees move. A small price to pay for relief from certain heat stress as it has been baking hot every year except one rainy year.

For equipment I've tried my 20cm Dob – terrific views but it moves too easily so frequently gets bumped or leaned on and needs to be repointed. I've tried 80 and 90mm refractors on a little Vixen-style alt-az mount on a tripod. They are much more stable but require frequent repointing as the Sun moves across the sky. This can be fiddly as I don't have a solar finder. And the tripod is too high for smaller children so I've added a short observing ladder. The last few years I've been using a semi-apo 80mm refractor with 90° diagonal on an iOptron iEq45 mount, powered by a large lithium ion battery pack. It tracks the Sun (not very well because my daytime polar alignment is necessarily rather coarse) and is very stable. With the Baader solar film at 40X it gives very nice views. It also means I don't have to disassemble the astrophotography setup on my other apo refractor. A few years ago I added a sheet of paper with information on solar observing safety (copied from Attilla Danko's similar warning sheet.)

New additions this year included upgrading the safety sheet to a much more attractive, effective and sturdy laminated sheet (see image.) I borrowed the Kingston Centre PST H-alpha telescope and had it on the alt-az mount. The PST is much harder to look through than the white light scope so I would only offer views through it to people who were particularly interested and/or seemed somewhat proficient in looking through the other scope. I used a small 'tally counter' from Staples to keep track of the number of people looking through the scopes.

The event this year was a great success. The weather was perfect, not a cloud in the sky and, while hot, not unbearably so and with an occasionally cooling breeze. 62 people of ages from ~4 to ~84 looked through the white light scope. Probably 25 of them, the ones who seemed proficient enough, got to look through the PST. Everybody is really thankful for the views. But every year there are those few who are really excited (interestingly, mostly women) and they are the ones that really make the effort worthwhile.

For future years I'd like to add a poster or two to help draw people over. I will make a small solar finder or two to help with finding the Sun. If anybody has suggestions or ideas that would help to improve this event I would love to hear from them.

This month, all the naked eye visible planets can be seen all month. Mercury and Venus are very low in the W and WSW during evening twilight. Mars will be high in the E in the morning sky. Jupiter will rise before 4 AM in the ENE and be in the E by dawn. Saturn will be in the E during the evening (after 8 PM), transit around 2 AM and be in the SSW by dawn. Finding the planets and watching how they change can be quite interesting. With binoculars the Galilean Moons of Jupiter are visible along with Saturn's Rings. If the season is right, you might see clouds on Mars and the Inner planets go through phases, similar to our Moon. Watching this interplay can make you feel in rhythm with Nature.

The Aurigids Meteor Shower should be visible in the Pre-Dawn of September 1. They will look like they started in Auriga, near the brightest star, Capella. The constellation is considered a charioteer in Roman mythology and it is recognized by its pentagram shape. This shower was identified in 1935 and has not been seen every year. It is visible from August 26 to September 5 with the peak September 1. There should be 6 per hour and they are moving around 65 km/s (faster than the Perseids but not as many). This shower is the dust from P/Comet Kiess. This comet is on an orbit of 2000 to 2100 years!

September 2 has Venus very close to the bright star Spica. The fourth is Last Quarter Moon and the lunar X is visible on the 5th. On the 6th Mars will be 3 degrees S of the Moon and the Moon is at Perigee (closest to Earth). Zodiacal light may be visible from the 9th in the E until after Equinox in dark skies. New Moon is on the 10th and the Old Moon may be visible in the morning sky before Sun rise. Look for a very thin crescent of the New Moon close to sunset. On the14th, Venus will be 0.5 degrees S of the Moon. The 18th is First Quarter Moon with the Moon at Apogee (furthest from Earth) and Venus will appear most illuminated. The straight wall is visible on the 19th along with two shadow crossings of Jupiter's Moons. From the 20th to 26th, try following Capella, unaided, into the daylight. Equinox is on the 22nd. The Mate Calling Full Moon is on the 26th along with two shadows crossing Jupiter. The 30th is the National Day for Truth and Reconciliation.

As Equinox (literally equal night) approaches, the sky darkens earlier. As it is not too cold as well, it makes a good time to introduce younger children to the sky. Finding the Moon might be a good start. Did they notice that the pattern of craters doesn't change? As it is tidally locked with Earth it shows us the same side. The Sun lights one side of the Moon, but how much of that is seen from the Earth is known as the Phase of the Moon.

Waxing and Waning describes whether the lit part of the Moon was getting larger (waxing) or smaller (waning). At New Moon the Moon is between the Earth and the Sun so none of the Moon's lit side shows. A waxing crescent is the next phase. When half of what we see from Earth is lit, that is First Quarter (as the Moon is a sphere, and it's now a quarter of the way through its cycle), next is a waxing Gibbous, Full (the Earth is between the Moon and the Sun —this is when lunar eclipses can happen). Waning Gibbous, Third Quarter (three quarters of the way from new Moon to New Moon) and waning Crescent. When the Moon is Waxing, the lit side is on the right (looking like a D). Waning is on the left and looks like a C. See if you can follow the pattern for a few months. If you observe with a telescope, avoid Full Moon as it is very bright. Following the terminator does give some texture to the surface. The longer you watch, you can see the sunlight starting to touch the tops of the mountains.

Clear skies.

The Iterative Method of Polar Aligning

Michael Covington

The Meade LX200 manual describes the following technique for improving the polar alignment of a computerized telescope:

1. With the telescope roughly polar-aligned, go to one star high in the sky and sync on it, or do a one-star initialization. (One-star initialization is the only kind offered by the LX200; it is also available on the ETX. The following technique is not usable on a telescope that has been initialized on two stars in order to compensate for polar alignment errors, such as the Celestron NexStar.)
2. Tell the telescope to go to Polaris. Then adjust the mount (without slewing the telescope) so that Polaris is actually centered. (Or move part of this distance; see below.)
3. Tell the telescope to go back to the alignment star, center it in the telescope by slewing (without adjusting the mount), and sync on it again.

Repeat steps (2) and (3) until you can go from each star to the other without further adjustment. If using a camera, use Live Mode.

Brief recommendations: Choose an alignment star whose R.A. is well away from that of Polaris (2h30m) and correct about 2/3 of the error, not the whole error, when recentring Polaris by adjusting the mount each time. Contrary to Meade's instructions, there is no need to wait 15 minutes between iterations.

Polaris, the alignment star, and the false pole.

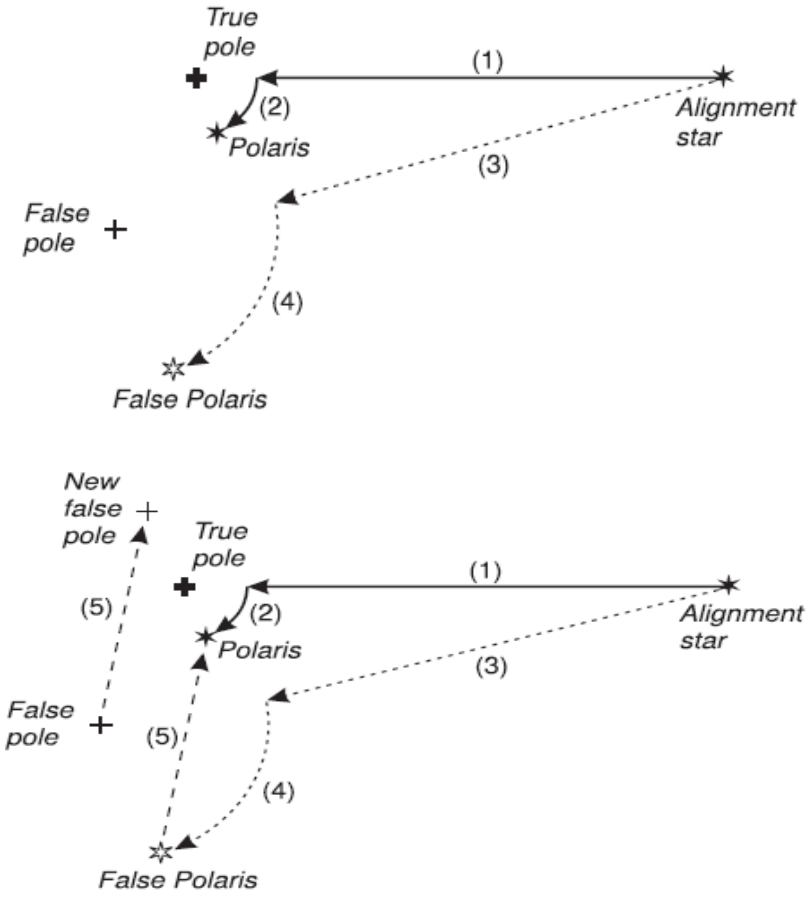
By "false pole" I mean the point on the celestial sphere to which the telescope's polar axis is actually directed. By "false Polaris" I mean the position to which the telescope slews when told to go to Polaris.

Here is a typical situation:

When synced on the alignment star and then told to go to Polaris, the telescope should perform movements (1) and (2), first slewing in declination and then revolving in right ascension about the true pole.

But in fact, because the polar alignment is incorrect, the telescope performs movements (3) and (4) instead. Note that movement (3) is exactly the same 2 length as movement (1); that is, the distance of movement in declination is the same. That is because the rotary encoders in the telescope measure relative movement, not absolute position.

Note also that movement (4) is the correct angular revolution, but it is part of a circle around the false pole instead of the true pole. Then the user adjusts the mount, performing movement (5): This movement superimposes the false Polaris on the true Polaris. It also moves the false pole closer to the true pole, which is the object of the game.



Minutes of the June Public meeting

Elena Zanetti

Wednesday, June 10, 2026
Minutes of the RASC-KC Regular Monthly Meeting

Macintosh-Corry Hall Rm B201, Queen's University, Kingston instead of Ellis Hall, Room 226, due to renovations.

The meeting began at 19:10 EDT with 27 in attendance. Malcolm welcomed Kingston Centre members and guests.

RASC Kingston Centre acknowledges that we are on the traditional homeland of the Anishinaabe, Haudenosaunee, and the Huron-Wendat, and we thank these nations for their care and stewardship over these lands.

Our Centre's donation of the Attilla Danko 25" f/4 Obsession Dobsonian Telescope to the Lennox & Addington Dark Sky Viewing Area will have 'first light' on Saturday, June 11, at 9 pm. All are welcome. A new storage facility, 'The Attilla Danko Deep Space Port', will soon be completed and will house the telescope during prime stargazing months, April through October. Both the telescope and the shed are generous donations from the estate of Attilla Danko.

Our guest speaker: Andrea Girones, 'First Principles of Astrophotography'. Andrea was Imager of the year at Starfest 2023 and is an accomplished landscape, planetary, and deep sky photographer. Andrea encourages new people to venture into the world of astrophotography with minimal investment and using the equipment they have on hand. These first prinicples apply to cell phone shots, Seestar images, wide angle landscape astrophotography with regular DSLR and DSLM cameras, using tripod trackers and equatorial mounts. Andrea's talk begins at 11:25 minutes into our YouTube recording.

Rick Wagner: What's Up In The Sky – Astronomy This Summer – Jun-Aug 2026

Rick Wagner: What's Up in the Sky
Astronomy This Month June to August, 2026
Local Events
13 Jun – Queen's Observatory Open House – cancelled
BAA Events
10 Jul – RAZoom – The Transient Array Radio Telescope: An open-source aperture synthesis imaging radio telescope
Lennox and Addington Dark Sky Viewing Area
12-13 Jun – laser guided sky tour
04 Jul – astrophotographers assemble
10-11 Jul – laser guided sky tour
18 Jul – dark sky triple feature
25 Jul – up close with the Moon
8 Aug – astrophotographer assemble
North Frontenac Astronomy Park
19-20 Jul – Crescent Moon & Milky Way
12 Aug – Perseid Meteor Shower
Sky Events – June
14 Jun – extremely thin crescent Moon with earthshine (<24hr before new) very low in NE before sunrise
14 Jun – New Moon (22:54EDT)
15 Jun – Mercury (mag 0.5) at greatest elongation east low in the WNW during evening twilight
15 Jun – very thin crescent Moon with earthshine (about 27hr old) very low in NW after sunset
16 Jun – Venus (mag -4.0), Jupiter (mag -1.8), Mercury (mag 0.6), crescent Moon, Castor, and Pollux form compact triangle low in W after sunset
17 Jun – crescent Moon occults Venus (mag -4.0) during daylight (15:40-16:58EDT)
17 Jun – crescent Moon transits M44 (Beehive Cluster) during dusk
19 Jun – Venus (mag -4.9) on N edge of the Beehive
19 Jun – Moon, Regulus, Venus, Jupiter, Mercury in 44 degree line low in W after sunset
21 Jun – Summer Solstice (04:25EDT)
21 Jun – First Quarter Moon
29 Jun – Full Moon (19:57EDT)
Sky Events – July
04 Jul – Uranus (mag 5.8) 6 degrees N of Mars (mag 1.4)
07 Jul – Last Quarter Moon
14 Jul – New Moon (05:44EDT)
21 Jul – First Quarter Moon
27 Jul – Pluto (mag 14.4) at opposition
29 Jul – S Delta Aqr meteor shower
29 Jul – Full Moon (10:36EDT)
Sky Events – August
02 Aug – Mercury (mag 0.1) GEW
06 Aug – Last Quarter Moon
07 Aug – Moon in Pleiades
12 Aug – New Moon (13:17EDT) Partial Solar Eclipse!!
12 Aug – Perseid meteor shower peaks
15 Aug – Venus GEE
20 Aug – First Quarter Moon
28 Aug – Full Moon (00:18EDT) Partial Lunar Eclipse!!
Sky Events – September
04 Sep – Last Quarter Moon
08 Sep – Moon occults Jupiter!!

Exoplanets
10 Jun – TOI-1516 b transit 03:31-06:17UT
12 Jun – TOI- 1516 b transit 04:51-07:38UT
15 Jun – WASP-69 b transit 05:29-07:40UT
23 Jun – HD 189733 b transit 03:51-05:40UT
04 Jul – HD 189733 b transit 06:04-07:53UT
T CrB
Up 'all' night and still faint
Major Planets
Mercury (mag -0.8) very low in W after sunset
Jupiter (mag -1.9) low in W at dusk
Venus (mag -3.9) low in W after sunset
Neptune (mag 7.9) & Saturn low in SE before sunrise
Mars (mag 1.3) & Uranus (mag 5.8) low in morning sky
Small Bodies
14 Jun – minor planet (3428) Roberts (mag 15.7) occults UCAC4 371-077582 (mag 11.5) through Sharbot Lake, Westport and Elgin (23:46EDT)
15 Jun – minor planet (14) Irene (mag 9.4) at opposition
30 Jun – (8622) Mayimbialik (mag 17.7) occults UCAC4 341-089984 (mag 11.1) for Sharbot Lake, Westport and Athens (00:41EDT)
30 Jun – (33107) 1997 YL16 (mag 16.8) occults TYC 6322-00966-1 (mag 10.1) FOR BATTERSEA (03:14EDT)
09 Jul – 8 Flora (mag 9.0) at opposition
09 Jul – 18 Melpomene (mag 9.0) at opposition
26 Jul – 3 Juno (mag 9.2) at opposition
28 Aug – 9 Metis (mag 9.3) at opposition

Rick had the opportunity to use the centre's new Seestar S30 Pro which will be a part of the telescope loan program. Specs: 30mm aperture x 160mm focal length, IMX585 4K chip, and a 3.4mm aperture x 6mm focal length wide angle camera, IMX586 8K chip binned 2x2, and alt-az or equatorial mode. Uses your phone or tablet app, Station Mode (connects to your home network), and has an ASCOM Mode. Rick shared other features and images taken and will help with questions you may have. Malcolm has donated a Coronado PST to the Centre for the Telescope Loan program. Contact Kevin K. to place your name on the list for loan.

Laurie's Seestar S50 Trial: Laurie shared images taken at Spring by the Bay at Johnston RV Park with the Belleville club. Experimenting with exposure time, stacking and resolution, Laurie was very happy with many of the images.

Bruce Elliott: Liam Desre, a strong candidate for our Leo Enright Award at the Kingston Frontenac Lennox & Addington Science Fair this spring, has won the Best Project Award – Discovery at the 2026 Canada-Wide Science Fair in Edmonton. Congratulations, Liam! Bruce shared images of the Sun, Moon, Jupiter and its moons, among others taken with his newly purchased Seestar 30 Pro.

One of the speakers at Starfest will be Past President Rick Wagner on Siril. Malcolm, President, will be present and the keynote speaker will be our Honourary President, David Levy. Malcolm encourages all to attend this enjoyable event. August 13 – 16.

The RASC Kingston Centre June edition of the monthly newsletter Regulus is available, thank you to our editor Roger Hill. It can be found on the RASC Kingston Centre website Kingston.rasc.ca.

Other than meeting nights, we host Wednesday night Zoom Socials, with an invitation posted to the Centre's email list. On Facebook we are @RASC Kingston Centre, YouTube channel @RASC Kingston Centre. Join our group at secure.rasc.ca/membership. July 8th and August 12th at 4 pm picnics at Lake Ontario Park and BBQ at Michael and Elena's on July 22nd on Amherst Island.

Malcolm thanked all for attending and the meeting ended at 21:26 EDT.
Elena Zanetti, Secretary.

About Us

The Royal Astronomical Society of Canada
The RASC is a national, non-profit, charitable organization devoted to the advancement of astronomy and related sciences. Founded in 1868, The Royal Astronomical Society of Canada is Canada's leading astronomy organization, bringing together over 5000 enthusiastic amateurs, educators, and professionals. In addition to many national services, our 30 Centres offer local programs across Canada.

The RASC Kingston Centre
We are Kingston's Astronomy Club, a local centre of The Royal Astronomical Society of Canada, that was founded on June 2nd, 1961. We hold monthly meetings, on the 2nd Wednesday of each month from September to December and March to June via zoom videoconferencing and in person, from 7:00-9:00pm Eastern Time. Meetings are held in January and February, but are available by Zoom only.

- We do public outreach programs in the form of helping the Cubs and Guides, teachers, Science Fairs and many public Education and Public Outreach events.
- We help our members with questions in astronomy and equipment use.
- We hold private observing sessions.
- We hold public sessions with Queen's University Observatory Open House, on the third Saturday of each month, at Ellis Hall, Queen's University. Details can be found at https://www.queensu.ca/observatory/
- We support the local Frontenac, Lennox & Addington County Science Fair (FLASF) with a prize in astronomy.
- We are happy to answer your questions on astronomy.

Directors for 2025-2026**:**
Laurie Graham, Roger Hill, John Hurley, Kevin Kell, Bruce Murray, Malcolm Park, Elena Zanetti

Officers for 2025-2026**:**

President	Malcolm Park
Vice President	Laurie Graham
Treasurer	Bruce Murray
Regulus Editor	Roger Hill
NC Rep	John Hurley
Equipment Coordinator	Kevin Kell
Secretary	Elena Zanetti
Librarian	Kim Hay
Equipment coordinator	Kevin Kell
Science Rendezvous/FLASF	Bruce Elliott
Annual Member Image Gallery	Brian McCracken
Queen's Open House coord	Laurie Graham
Web Team	Kevin Kell and Walter McDonald Malcolm Park
Social Convenor	Mike Hanes
Email Chat List Moderator	Kim Hay
Facebook Team	Kim Hay
Membership Coordinator:	Kim Hay
Fall'N'Stars KC coordinator	Mike Hanes
Honourary President:	David H. Levy

The **Royal Astronomical Society of Canada Kingston Centre** was provincially incorporated as a Not-For-Profit Corporation in September 2005 and has been a registered Charity with the Canada Revenue Agency since September 2006. Our CRA Registration: 827905720RR0001

Benefits of Membership:
RASC benefits:
- Annual edition of the Observers Handbook
- Bi-monthly RASC Journal (digital)
- Monthly Bulletin of the RASC (digital)

Kingston Centre benefits:
- Monthly Centre Newsletter – Regulus
- Weekly social videoconference chat for members and invited guests.
- On the 2nd Wednesday evening of the month, there are meetings are open to the public: In-person in March to June and September to December at Queens, July and August outdoors at Lake Ontario Park; and two in January and February that are video-conference only.
- Equipment loan program