Event Horizon

Volume 33, Number 4
February 2026

From The Editor

Welcome to the February 2026 Event Horizon Newsletter!

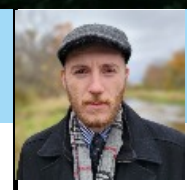
Thank you to those who contributed content for this and every month!

Enjoy!

Bob Christmas,

Editor

editor 'AT' amateurastronomy.org



Chair's Report by Kevin Salwach

Snow, snow, snow and more snow. What a crazy winter we've had so far. Here's hoping the warmer weather arrives sooner rather than later, and this cold and cloudy stretch we've had lets up this month!

As we start nearing spring, activity will start picking up for the HAA quickly, but this month we have back-to-back events coming up over Family Day weekend, and I hope you can all make both.

On Friday the 13th we have out regular monthly meeting at St. Matthew's, featuring two guest speakers. Our main speaker is astrophotographer *Keith Mombrouquette*, will be joining us via Zoom to give a talk on how to automate your astroimaging to get some rest and relaxation while your equipment does all the work. Our second speaker is the HAA's very own *Fiza Mehfil*, who is working on a very exciting project with her team for the CANSAT Design Challenge. Fiza will be speaking to the club during the second half

(Continued on page 2)

IN THIS ISSUE:

Chair's Report (continued)

of our meeting outlining the work her team is doing to build a small "CanSat" satellite which will be launched from Lethbridge, Alberta this spring, so make sure you stick around for the second half to hear about her work on this really cool and innovative project.

On Saturday the 14th we have our "Winter Astronomy Workshop" at Valley Park Library. Along the lines of our regular telescope clinics, this event will also feature a few presentations from club members for the public on different topics of beginner astronomy, as well as lunar observing to coincide with the Artemis II mission slated to launch early this month. I invite you all to join at Valley Park from 1-5PM, and bring out your scopes and equipment to show members of the public (and other club members) and enjoy great day of gear and conversation.

Paula Owen has stepped down from Council due to personal reasons, and will no longer be in the position of Communication Team Director. She is however staying on as Webmaster, running and updating our club website. A huge thanks to Paula for the work she has done and continues to do for the club.

The Communication Team Director is in charge of club digital platforms and social media – and is responsible for advertising and broadcasting club events, activities, and outreach across various forms of media (mainly online – that's the way it goes nowadays). Not all the responsibility falls on the Director of course. Our Webmaster runs the site, our EH editor does our newsletter, etc. etc. It is simply the Director's role to keep up to date with communications, advise Council with new ideas, and try and come up with cool new ways to increase the club's reach and audience. If you feel adept with social media, and have some good ideas on how the club can increase its reach, please contact me at chair@amateurastronomy.org to volunteer!

In other upcoming events, our March speaker will be Dr. Allison Sills of McMaster University. The HAA is hosting a joint event with the Hamilton Naturalist's Club on March 28th, we are planning an International Astronomy Day event on April 25th, and you can look forward to a silent auction for all of the club's unused gear at our April monthly meeting on April 10th. Keep an eye out in the March EH for more details on all these events.

I hope to see you all out on the 13th and 14th, and as always, clear skies and happy observing!

HAA Helps Hamilton

The H.A.A. is accepting and collecting donations from our members and guests for local food banks at our general meetings. The H.A.A. has always valued its relationships with food banks in the community, particularly Hamilton Food Share.

If you can't make an in-person meeting, you can make a donation directly to your local food bank.

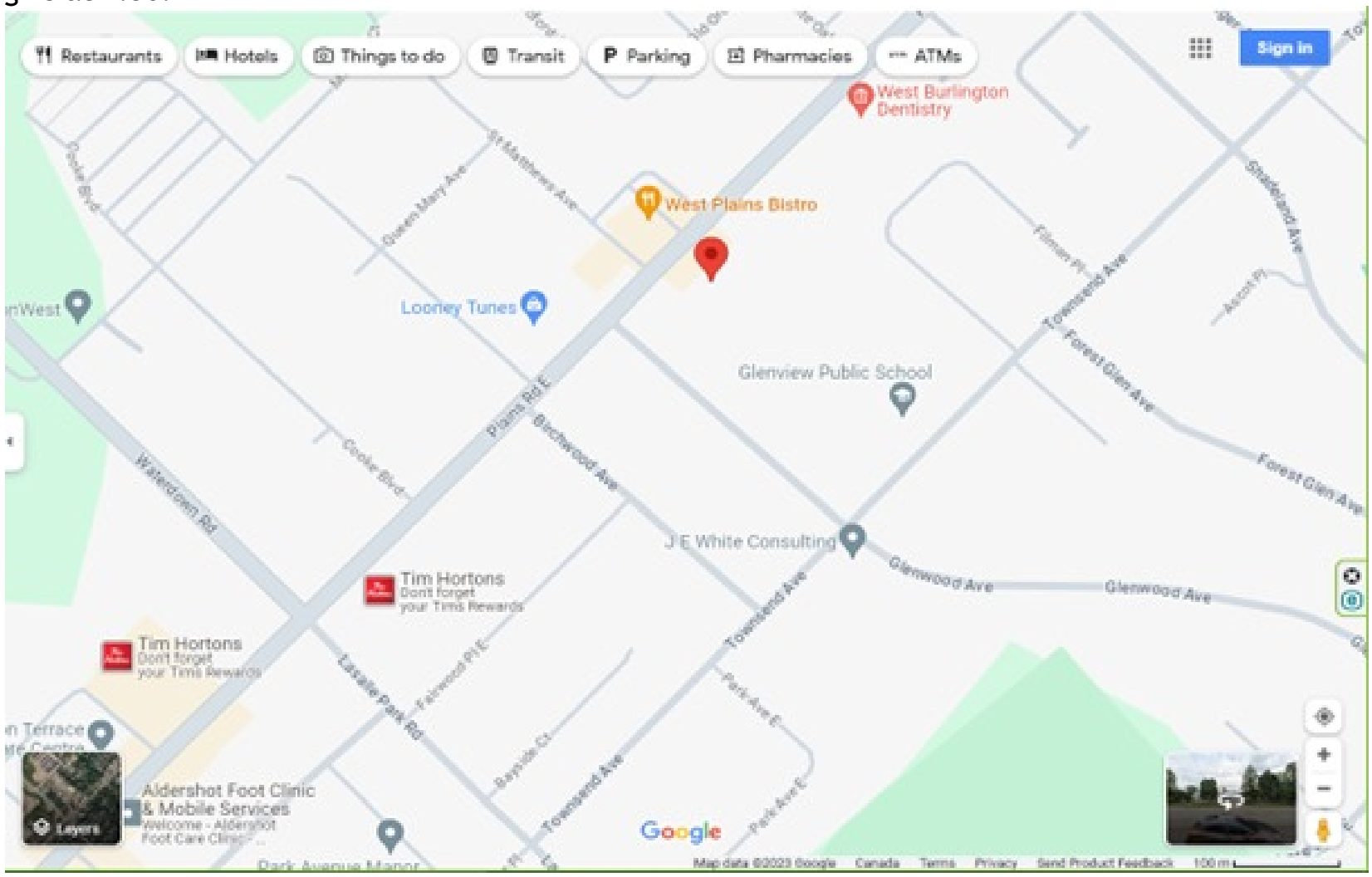
Hamilton Food Share
Hunger. It's just unacceptable.

Masthead Photo: *The Northern Lights over Lake Ontario*, by *Mitchell Brown*.

Taken from Grimsby, ON, with his Nikon Z6 DSLR camera and Nikon 14-30mm lens.

Meeting Location

Our upcoming meeting is scheduled for *February 13th, 2026*, at St. Matthew on-the-Plains Anglican Church. St. Matthew's is located at 126 Plains Road East, Burlington, Ontario. Doors open at 7:00 and the meeting begins at 7:30.



St Matthew on-the-Plains Anglican Church (indicated with red locator)
Image generated using Google Maps

2025-2026 Event Dates

Friday Feb. 13, 2026	Monthly Meeting Speakers: Keith Momberquette: Astrophotography; Fiza Mehfil	St. Matthew on-the-Plains Anglican Church, 126 Plains Rd, Burlington
Saturday Feb. 14, 2026	Winter Astronomy Workshop	Valley Park Library, Stoney Creek
Friday Mar. 13, 2026	Monthly Meeting Speaker: Dr. Allison Sills	St. Matthew on-the-Plains Anglican Church, 126 Plains Rd, Burlington
Friday Apr. 10, 2026	Monthly Meeting Speaker: TBD	St. Matthew on-the-Plains Anglican Church, 126 Plains Rd, Burlington
Friday May 8, 2026	Monthly Meeting Speaker: TBD	St. Matthew on-the-Plains Anglican Church, 126 Plains Rd, Burlington
Friday Jun. 12 2026	Monthly Meeting Speaker: TBD	St. Matthew on-the-Plains Anglican Church, 126 Plains Rd, Burlington

View The Moon & Winter Astronomy Workshop

Location: Valley Park Library Program Room, 970 Paramount Drive, Stoney Creek, ON L8J 1L8

Date & Time: Saturday, February 14th 1:00-5:00PM (members have access from 12:00 to set up equipment)

Speaking Program (approximately 20min each):

- 1:30: *Chris Szaban* – Observing the Lunar Landing Sites
- 2:30: *Matthew Mannering* – Introduction to Telescopes
- 3:30: *John Gauvreau* – Introduction to the Night Sky
- 4:00: *Kevin Salwach* – The Sky This Winter

We invite club members to come join and set up their equipment to show with other members and the public who will be in attendance and looking for information on telescopes, gear and stargazing in general. As usual with our telescope clinics, this workshop will be a "come and go" style workshop in between the schedule presentations for those with questions regarding amateur astronomy equipment and the hobby itself. It is a great opportunity for new members to come out, chat with other members, ask any questions they might have, and see what sort of telescope and gear they might need as they get into the hobby!

Astro 101 – The club's beginner group!

Don't know a black hole from a white dwarf? How about a planet from a planetary nebula? Wondering which end of the telescope to look through? Wondering which end is even supposed to point at the sky? Then Astro 101 is for you!

Astro 101 is a series of fun, friendly, casual (and interactive!) online sessions aimed at the absolute beginner, who might be new to the club or new to the hobby.

Every year the HAA hosts Astro 101, where we talk about things like how to use a telescope, what is in the sky to look at and how to find them. The sessions are interactive and casual. This means that some experienced club members will guide us through some interesting topics, but everyone is encouraged to participate, ask questions, offer input and just talk! This is a great way to get to know the hobby and your fellow club members. Or maybe you have some insight to share with your fellow club members. Let me know and we can schedule it in. Beginners can learn a lot from other beginners.

We will begin in February and we get together online about once every two weeks. Maybe we can even get together in person sometime (ooh, hands-on show-and-tell!) We will have enough sessions to get us through to late spring, and then we hope to finish with an observing session!

If this sounds like something you would like to participate in just get in touch (email secretary@amateurastronomy.org) and we will put you on the list. Then you will get emails with links to the online sessions.

Please feel free to get in touch if you have any questions or suggestions (yes, if there is a topic you want to talk about, just let me know and we will do our best).

Hope to see you there.

John Gauvreau

HAA Members only

Silent Auction

Items in the auction are donations of astronomy equipment that are not needed for the loaner scope program.
Money raised will support HAA's charitable activities.

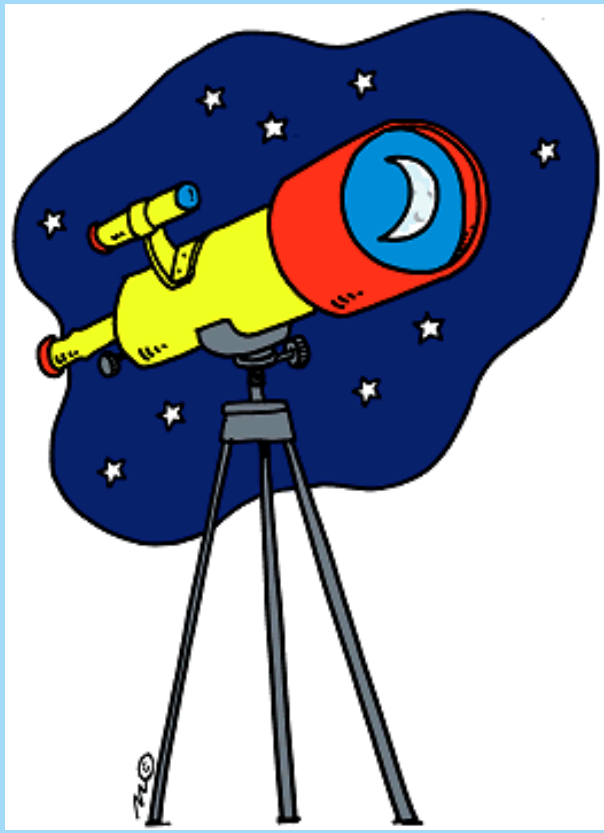
Friday April 10, 2026

St. Matthew on-the-Plains Anglican Church Hall

6:45 pm to view items In-Person ONLY 7:05 pm auction begins

Watch your email for more details

HAA's Loaner Scope Program



The HAA Loaner Scope Program is back!

It allows members who don't own a telescope to get more up close with the night sky, and it allows members to explore different types of telescopes! Paid members are welcome to borrow a telescope for one month.

We have telescopes of varying expertise levels, as well as various accessories, including various eyepieces.

Please visit the HAA website for more information: https://amateurastronomy.org/telescope-loaner-program/

If you are interested in borrowing a scope, please contact Jeff Parsons at

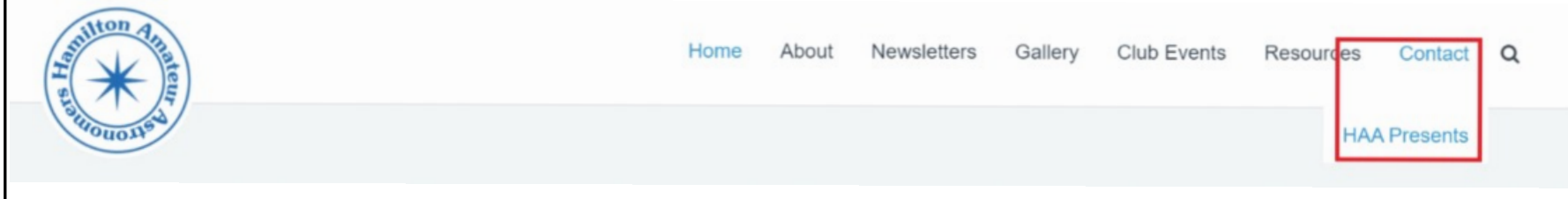
loanerscope@amateurastronomy.org.

Telescopes are loaned out on a first come basis.

"HAA Presents"

Members of the public of any age in the GTHA can now request an in-person or virtual presentation from the HAA directly on our website.

Simply navigate to www.amateurastronomy.org and select "Contact" from the top menu bar and then click on "HAA Presents" (see image below). You will be presented with a request form and once all required fields are entered, click on the "Submit" button and you will see a confirmation message that your request has been successfully submitted.



Once received, our Public Education Director, Jo Ann Salci, will respond to your request within 5 business days to discuss next steps. If you have any questions, feel free to send an email to: haapresents@amateurastronomy.org.

HAA Explorers 2.0 --- Exploring the Skies: Our CanSat Design Challenge Team by Fiza Mehfil

Hey, HAA Explorers!

Engineering is an important endeavour in exploring our universe. It is important to encourage technological and engineering pursuits so we can reach other solar systems and galaxies. Another important aspect of astronomy is encouraging an interest in STEM among youth (which is a main objective of my column!)

As a high school junior, I am thrilled to be participating in this year's ***CanSat Design Challenge***, an exciting competition that allows students to design, build, and launch a small satellite housed within a soda-can-sized container. This challenge not only tests our technical and engineering skills but also encourages teamwork and problem-solving.

The CanSat challenge requires participants to develop a satellite that can perform specific tasks during its flight and landing. This includes integrating sensors, collecting and transmitting data, and ensuring a safe descent. For our mission, we are focusing on GPS tracking to detect lost objects. Our team is called Aphelion V and its team members consist of Arnav Govil, Jash Desai, Aishani Behl, Megh Patel, and I. Each member of our team brings unique strengths to the project, allowing us to solve problems from different perspectives.

To make our vision a reality, we are seeking funding to purchase the necessary components and materials. Our project requires sensors, microcontrollers, batteries, and other important components. With your support, we can ensure that our CanSat submission meets all competition requirements, functions reliably during flight, and provides meaningful data for analysis.

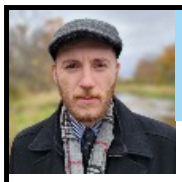
Supporting our team is an investment in innovation and STEM education. Your contribution will help us gain hands-on experience in aerospace engineering, strengthen our teamwork skills, and inspire us to pursue future careers in science, technology, engineering, and mathematics. We are eager to represent HAA with a well-designed, fully functional CanSat, and with your help, we can make our project a success.

We are presenting more information about our project and the CanSat Design Challenge on February 13th at the monthly HAA meeting. Please tune in to learn more!

We appreciate your consideration and hope you will join us in supporting the next generation of aerospace innovators.

Education Director's Note: Fiza and her team will be travelling to Lethbridge, Alberta this April to compete with teams from across Canada! The winner of this contest will compete in the European Space Agency Competition. This is a BIG deal and our club is very proud and excited to support these students with this project! GO APHELION V !!!!

Image Courtesy of www.educations.com



The Sky This Month for February 2026 by Kevin Salwach

As I mentioned above, here's hoping the skies clear up this month for some good observing, it's been a while. I've only gotten a handful of clear nights since the fall, and like all of you I'm itching to finally get out there for more than just a quick fleeting hour or two to get some sights in. February will be a pretty good month for us amateur astronomers, so let's get to it.

Beginning with the naked eye sky, looking west a few hours after sunset in the middle of the month, we can see our fall constellations setting by around 9:00. Cetus, Pisces, Pegasus and Eridanus are all hitting the horizon well before midnight, with Andromeda, Triangulum and Aries close behind them. Up at zenith, Gemini and Auriga dominate the sky right above you, with Jupiter about as high up above the horizon as it gets. Around them Cancer, Taurus, Perseus and Orion are all at good altitude and well placed for observing their many deep sky objects. To the east, Leo is fully risen by 9:00, with Hydra and Coma Berenices poling up above the horizon. Bootes, Virgo and the other spring constellations follow a few hours behind them. Over in the south, Canis Major completely clears the horizon while in the north Cepheus and the Big Dipper bracket Polaris to the east and west.

(Continued on page 9)

The night sky looking west at 9:00PM on Friday, February 13th. Image generated using Stellarium

The Sky This Month for February 2026 (continued)

The night sky looking towards zenith at 9:00PM on Friday, February 13th.

The night sky looking east at 9:00PM on Friday, February 13th. *Images generated using Stellarium*

(Continued on page 10)

The Sky This Month for February 2026 (continued)

The Moon

We start off the month with a Full Moon on the 1st, Last Quarter on the 9th, New Moon on the 17th, and First Quarter on the 24th. The 14th to the 21st is a good long week this month to get moonless or near moonless skies, should the weather cooperate. Some notable Lunar events in February:

- The Moon occults Regulus in Leo on the night of the 2nd from 8:48-9:50 PM (!!!)
- A couple of degrees away from Spica in the early morning on the 7th
- A degree away from Mercury just after sunset on the 18th
- A couple of degrees away from Saturn and above Mercury along the western horizon on the evening of the 19th
- A partial occultation of M45, The Pleiades, on the night of the 23rd (!!!)
- A couple of degrees away from Jupiter on the night of the 26th

The Planets

The planets this month put on a better show for us than they did in January, with a full display happening towards the end of the month. ***Mercury*** becomes fleetingly visible right after sunset around the 8th, before reaching greatest elongation on the evening of the 19th and then turning back towards the Sun. For the week or so around the 19th it will be visible low in the west for about an hour after sunset before disappearing again at the end of February. ***Venus*** meanwhile replaces Mercury, poking out of the twilight

The Moon and Regulus at 9:50PM on the evening of the 2nd. Image generated using Stellarium

(Continued on page 11)

glow extremely low on the western horizon and then rising higher and higher each night into March. ***Mars*** is the only planet not visible in February, being too close to the Sun to see. ***Jupiter*** is visible high in Gemini all night long, being halfway up over the horizon by sunset and setting around 4AM. Another full month to view it and its Galilean Moons with ease. At the beginning of the month ***Saturn*** is still visible for a couple of hours after sunset in the west, but by March it will start sinking too low into the twilight glow for any good viewing. In the last few days of February however, turn your eye over to that western horizon. For a few days after the 22nd, with a clear horizon, you will see Saturn, Venus and Mercury just after sunset in the twilight. Right behind Saturn is ***Neptune*** (though not visible to the naked eye), meanwhile Jupiter will be high over in the east towards zenith, with ***Uranus*** just under the Pleiades high in the sky in Taurus. That's 6 of the 7 visible planets you will be able to see in one night in the last week of this month. The Moon also joins them a couple of times, so head out there during the week around 6PM with your binoculars and a small scope and see if you cant manage to pick them all out.

Deep Sky Objects

Finally, heading out into our deep sky, let's take a look at some lesser known but bright and beautiful beginner and intermediate objects in the midwinter sky. Here's a list of some great deep sky objects for a small scope which seem to never make the lists of the winter's best DSOs:

M48 – Mag. 5.8 – This big bright open cluster in Hydra is off the beaten track of the winter Milky Way, but from very, very dark skies it's visible to the naked eye. In a small scope, at low power, dozens of stars are resolved giving this cluster a nice, loose "sprinkled" look.

M67 – Mag. 6.2 – Overshadowed by the bigger and brighter M44 in Cancer, this open cluster is a gem in a small telescope nonetheless. At medium power hundreds of faint and evenly distributed stars are resolved, giving it an even, dense and rich appearance.

NGC 3242 "The Ghost of Jupiter" – Mag. 7.8 – This small planetary in Hydra is surprisingly easy to find and spot in a small scope. At higher magnification, it appears as a compact, bright and bluish green disk, and if seeing allows, craning up the magnification shows you a distinct planetary shape and hints of its inner structure.

NGC 2169 "The 37 Cluster" – Mag 5.9 – This loose open cluster in Orion is an asterism which as the name suggests, takes the shape of the number 37. In a small scope at low power you can easily see its stars arranged in two distinct groups – the "3" and the "7". At first you might not notice it, but once you see it, you can't unsee it!

NGC 2903 – Mag. 8.9 – This barred spiral galaxy in Leo is overshadowed by its more famous Messier rivals, but even in a small scope at medium to high magnification, it is an easy, bright elongated glow with a noticeable inner core. If you have a larger scope over 6 inches, on a dark, steady night with high power you might even be able to start picking out its barred spiral arms.

NGC 2420 – Mag, 8.3 – An open cluster in Gemini, this dense but slightly fainter object is great for a small scope. At medium power, you begin to resolve dozens of compact stars, giving it a rich, almost globular appearance.

NGC 2175 – Mag, 6.8 – This mix of open cluster and nebulosity in Orion is a good challenge for beginners and good training for the eye. A loose open cluster surrounded by faint nebulosity, in medium power in a 4-6" scope and clear dark skies, try using different filters like an O-III or UHC, and with averted vision

(Continued on page 12)

The Sky This Month for February 2026 (continued)

you'll begin to pick out wisps of this nebulous region around the cluster. Great practice for training your eye to start noticing and picking out faint fuzzies you wouldn't immediately notice.

145 Canis Majoris "Winter Alberio" – Mag. 4.8 – A bright, easy, beautiful double star in Canis Major, this one is easy to split in a small telescope, and its appearance is reminiscent of Alberio, its summer counterpart – a brighter, red primary and slightly fainter blue secondary – a real treat in a nice refractor at medium power.

Challenge Object: NGC 2247 – Mag. 8.0

This small reflection nebula in Monoceros is a good challenge for beginners with a 6-8" scope. Located in the nebulous region around Dreyer's Nebula, it is a small and compact target. With dark skies, medium power, a nebula filter and some averted vision, you should be able to pick out the nebulosity and maybe even see some of its shape.

Clear skies and happy observing!

HAA Outreach Presentations with Vulnerable Sectors

The HAA executive has created a policy for any HAA member who wishes to do outreach presentations to vulnerable sectors, which includes children under 18 years of age and vulnerable adults. This does not include our general club outreach activities.

Presentations include in-person or virtual sessions where parents/guardians may not be present. **As it is not always possible to anticipate caregiver attendance at outreach activities for children under the age of 18, or vulnerable adults, it is therefore a requirement for HAA member-volunteers who work with these vulnerable populations to complete a Police Vulnerable Sector Check**.

These can be obtained only in your region of residency. Costs vary from one area to another. They will be kept on file by the HAA Education Director. No details regarding the findings of the check will be made in any way public or viewed beyond the HAA Education Director.

The HAA will reimburse any member who wishes to do outreach presentations to vulnerable individuals, provided a receipt is submitted.

Please contact Jo Ann Salci if you have any questions about this policy and/or if you wish to put your name forward to help with outreach activities to young people!

Eye Candy the Members' Image Gallery

The Crescent Nebula (NGC 6888) in Cygnus, by **Bruce Cornelius**
Imaged with an Equinox 120ED and an ASI294MM camera on an Ioptron CEM40 mount.
Imaged in narrowband (Ha, O and S).

The Seagull Nebula (IC 2177) on the Monoceros/Canis Major Border, by **Chris Szaban**
Imaged with NIKKOR 300F ED lens and a ZWO ASI294MC Pro on an alt-az mount, using a wedge.
18 X 180s Ha/OIII + 21 X 180s Optolong Quad filter = 117 minutes total integration time.

Eye Candy the Members' Image Gallery

Galaxy NGC 6946/Caldwell 12, in Perseus, by **Bob Christmas**
Imaged through a Seestar S50 smartscope, in equatorial mode.
14 minutes of 10-second subs taken in Barry's Bay on October 13, 2025.

The Christmas Tree Cluster & Nebulas (IC 5146) in Monoceros, by **Chris Szaban**
Imaged with NIKKOR 300F ED lens and ASI294MC Pro on a Celestron SLT mount, using a wedge.
18 X 180s Ha/OIII + 16 X 180s Optolong Quad filter = 102 minutes total integration time.

IC 1311, Open Star Cluster and Nebula Complex in Cygnus, by **Kerry-Ann Lecky Hepburn**

Imaged through a Astrotech 8in RC scope with an SBIG 8300 M camera on a Sky-Watcher EQ6 pro mount.

Exposure details:
Red: 12 × 10 min
Green: 10 × 10 min
Blue: 7 × 10 min
H-Alpha 8 × 10 min

Eye Candy the Members' Image Gallery

The Flaming Star Nebula (IC 405) and the Tadpoles Nebula (IC 410), by **Rich and Rosemary Kelsch**
Imaged through a Celestron 8" RASA telescope from Arizona

William J. McCallion Planetarium

McMASTER UNIVERSITY, HAMILTON, ONTARIO

- **Public transit available directly to McMaster campus**
- **Tickets $10 per person; private group shows $226**
- **Upcoming shows:**

  - **Feb 4:** Introductory Astronomy for Kids — Galaxies
  - **Feb 11:** Any ETs Phoning Home? The Search for Alien Life
  - **Feb 18:** Moon Madness
  - **Feb 21:** Introductory Astronomy for Kids — Constellations
  - **Feb 25:** Written in the Stars: Love Stories in the Sky
  - **Mar 4:** Introductory Astronomy for Kids — Solar System

- **For show times and further details, visit https://planetarium.physics.mcmaster.ca**

UPCOMING EVENTS

February 13, 2026 - 7:30 pm — H.A.A. Meeting at St. Matthew's Anglican Church. Our main speaker will be *Keith Momberquette*, who will talk about astrophotography. Also, the HAA's *Fiza Mehfil* will talk about the CanSat project. Past meetings can be viewed on our YouTube channel.

February 14, 2026 - 1pm to 4pm — H.A.A. Winter Astronomy Workshop & Telescope Clinic at Valley Park Library in Hamilton.

March 13, 2026 - 7:30 pm — H.A.A. Meeting at St. Matthew's Anglican Church.

2025-2026 Council

Chair	Kevin Salwach
Secretary	John Gauvreau
Treasurer	Marcus Freeman
Second Chair	Chris Szaban
Membership Director	Ed Smith
Communications Team Director	vacant
Members Service Director	vacant
Education Team Director	Jo Ann Salci
Observing Team Director	Kevin Salwach

Check out the H.A.A. **Website**
www.amateurastronomy.org

Follow us!

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editor@amateurastronomy.org

Digital Platforms Director:
webmaster@amateurastronomy.org

All active HAA members have the privilege of access to an exclusive HAA members only dark sky location.

Be on the lookout for e-mails with dark sky observing details. Space is limited.

The Harvey Garden HAA Portable Library

Contact Information

E-mail: library@amateurastronomy.org