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## NCRAL CHAIR'S MESSAGE

Ever since becoming your chairman, I have had the intention of visiting clubs and getting to know folks around the North Central Region. My in-person visits have been detailed in past issues of this newsletter.

Here in the Quad Cities, we had a particularly brutal January. We had two back-to-back snowstorms that dumped 25" of snow. This put a damper on my enthusiasm to do much traveling. As a result, I have focused more on attending various club Zoom meetings.

Many of you now have hybrid meetings, which have both in-person and Zoom components. Doing visits remotely is not as good as attending and meeting face-to-face, but I have found this to be an effective alternative to getting to know a few more North Central Region affiliates. Particularly at a time of the year that is typically not a good time for traveling, this has been the method I have been using.

During January and early February, I attended several club meetings:

On January 8, I attended the Popular Astronomy Club meeting. Because this is my home club, I did manage to attend in person, but PAC's meetings also feature a Zoom component for speakers and visitors to attend remotely. This meeting featured Prof. Andy Bruno from Northern Illinois University, who gave a very interesting talk on the Tunguska Event about the massive meteor explosion over Siberia in 1908.

On January 12, Skokie Valley Astronomers featured Professor Shane Larson from Northwestern University, who gave a talk titled *Solitude in the Cosmos: Looking For Friends in the Great Cosmic Dark*.

On January 13, Cedar Amateur Astronomers hosted Prof. L. Rudnick, University of Minnesota Professor Emeritus, who gave a talk titled *Odd Radio Circles, And Even Odder Radio Cubes*.

On January 26, Northwest Suburban Astronomers had NSA member Leon Fasano give a talk titled *Restoration of a Convertible f/4 to f/16 Cassegrain-Newtonian OTA and Its Vintage Starliner German Equatorial Mount*.

On February 1, the Minnesota Astronomical Society had their "budget meeting". Budget meetings can be somewhat boring, but they do provide a good way to learn about everything a club is doing in the community. I am very impressed with everything the Minnesota Astronomical Society is doing. With 700 members in their club, this is an amazing organization with a far-reaching impact in the Twin City area.

As I attempted to log onto MAS's business meeting, member Mark Job showed a stunning, hauntingly beautiful image of the Drunken Dragon nebula he acquired from his remote observatory. (See this image later in this issue of our newsletter) Experiences like this keep me interested in attending club meetings and reinforce my enthusiasm for the talent we have in the Region.

On February 12<sup>th</sup>, I attended the Popular Astronomy Club's general membership meeting at Butterworth Center in Moline, IL. The meeting was attended in person by 21 PAC members and guests, with another 18 joining the meeting via Zoom. Because PAC is my home club, I attended in person. The speaker was Brother Guy Consolmagno, Director of the Vatican Observatory and President of the Vatican Observatory Foundation, who

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joined via Zoom. Brother Guy's feature presentation was *Discarded Worlds: Astronomical Ideas That Were Almost Correct*. This was a very interesting and entertaining talk that was well received by attendees.

On February 13<sup>th</sup>, I attended the Door Peninsula Astronomical Society meeting via Zoom. There were approximately 25 in-person attendees and 7 by Zoom. DPAS member Cory Gorski gave an excellent talk using a combination of PowerPoint slides and equipment demonstration. This was an excellent overview of how to do amateur astrophotography and was well received by all attendees.

Another way I have been learning about clubs in the Region is by reading newsletters. There are many high-quality newsletters. Below is a list of the newsletters that I have found or that have been sent to me. These newsletters contain a wealth of information about club activities and the science of astronomy. If I did nothing more than read these newsletters, I would be well-informed about what's happening in the hobby and the world of astronomy.

## NCRAL Newsletters

| Affiliate                            | Newsletter                    |
|--------------------------------------|-------------------------------|
| Minnesota Astronomical Society       | <i>Gemini</i>                 |
| Rochester Astronomical Club          | <i>Rochester Skies</i>        |
| Cedar Amateur Astronomers            | <i>The Prime Focus</i>        |
| Des Moines Astronomical Society      | <i>Starlight Journal</i>      |
| Door Peninsula Astronomical Society  | <i>The Blue Moon Observer</i> |
| Milwaukee Astronomical Society       | <i>Focal Point</i>            |
| Neville Public Museum Astronomy Club | <i>The Eyepiece</i>           |
| Northern Cross Science Foundation    | <i>Spectrum</i>               |

Champaign-Urbana Astronomical Society  
Naperville Astronomical Association  
Northwest Suburban Astronomers  
Peoria Astronomical Society  
Planetary Studies Foundation  
Popular Astronomy Club  
River Bend Astronomy Club  
Skokie Valley Astronomers  
Twin City Amateur Astronomers

*Clear Skies*  
*The Focal Plane*  
*Celestial Log*  
*Starlight*  
*PSF News*  
*Reflections*  
*Current Astronomy*  
*The Star Gazette*  
*The Observer*

If you have not yet done so, I encourage you to read your club's newsletter or one of those on this list if your club doesn't have a newsletter. My apologies if I missed including your club's newsletter here. If so, please let me know and send me a recent copy of that newsletter.

As I am writing this piece in early February, spring has sprung. The weatherman says it will be 60°F today. I'm afraid it may be too soon to count out Old Man Winter. According to Punxsutawney Phil, spring will arrive early this year. I would be happy to be done with winter and return to observing more instead of shoveling.

I would also like to resume visiting more affiliates around the Region. I plan to make a trip to Green Bay for NCRAL 2024. The Neville Public Museum Astronomical Society has an excellent program planned for this year's [convention](#). You may [register here](#). I urge you all to consider joining me there.

See you in Green Bay. Keep looking up! Al.

*Alan Sheidler*  
NCRAL Chair

## NCRAL 2024 CONVENTION, MAY 17-18, DE PERE, WISCONSIN

Welcome to NCRAL 2024. The convention will be held on May 17<sup>th</sup> and 18<sup>th</sup> this year. Your host is the Neville Public Museum Astronomical Society (NPMAS). It will be held at the Bemis Center on the campus of St. Norbert College in De Pere, Wisconsin. The theme of the convention is *UNIVERSE IN COLOR*. The convention hotel is the Kress Inn, located right across the street from the conference location. It has plenty of parking space.

We have a great convention lined up for you. Beginning on Friday, there will be tours of the Parmentier Observatory, then a display area where you can display your favorite astronomy equipment, books, homemade gadgets, and club materials. Then, we will have a swap-and-sell meet where you can bring items to sell or trade. Along with this timeframe, we will have a social time between 6:00 and 8:00 PM. Weather permitting, we will have viewing through the Parmentier 30" scope or the 6" Astro-Physics.

Saturday, our lineup of speakers includes a presentation on 3-D printing and how to use it in astronomy. Following that

is a talk about the 30" telescope Richard Jacobsen built. A presentation on sketching will be before lunch. Following lunch is a presentation on multi-wavelength astronomy by Alison Klesman. Following that is a talk on deep-sky imaging. We will have plenty of great door prizes to give away throughout the day. You need to be present to win. We will also have an astrophotography contest.



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At 3:30 PM, we will have the Council and Business meetings with more door prizes.

Social hour will begin at 6:30 PM, and the banquet dinner will start at 7:30 PM. Bob King will be our presenter. His presentation will be, "WHAT CAUSES THE AURORA'S DIFFERENT COLORS AND WHY ARE THEY SO DIFFICULT TO SEE?" We will conclude the night with awards and door prizes.

You can find all the details on registration, hotel reservations, program schedule, activities, ordering apparel, astrophotography contest, display area, and the sponsors of the door prizes on the NPMAS [website](#). You may [register here](#).

Registration is \$120 per person, which includes the banquet. After April 1<sup>st</sup>, the price increases to \$150 per person. The hotel is \$104 per night, which includes a continental breakfast.

We will see you there.

*Gerry Kocken*  
Convention Chair

## NCRAL TREASURER'S REPORT 01 JULY 2023 - 29 FEBRUARY 2024

| Check #    | Date      | Description                           | Check Amount | Deposit | Daily Balance | Monthly Balance |           |
|------------|-----------|---------------------------------------|--------------|---------|---------------|-----------------|-----------|
|            | 1-Jul-23  |                                       |              |         |               | \$8,877.48      | July      |
|            | 31-Jul-23 |                                       |              |         |               | \$8,877.48      | July      |
|            | 31-Aug-23 |                                       |              |         |               | \$8,877.48      | August    |
| 1031       | 9-Sep-23  | Al Sheidler (attend Alcon Convention) | \$250.00     |         | \$8,627.48    | \$8,627.48      |           |
|            | 30-Sep-23 |                                       |              |         |               | \$8,627.48      | September |
|            | 31-Oct-23 |                                       |              |         |               | \$8,627.48      | October   |
|            | 30-Nov-23 |                                       |              |         |               | \$8,627.48      | November  |
|            | 31-Dec-23 |                                       |              |         |               | \$8,627.48      | December  |
|            | 31-Jan-24 |                                       |              |         |               | \$8,627.48      | January   |
|            | 29-Feb-24 |                                       |              |         |               | \$8,627.48      | February  |
| Net Change |           |                                       |              |         |               | (\$250.00)      |           |

## OFFICIAL NOTICE: PROPOSALS FOR NCRAL BYLAWS AMENDMENTS

The Astronomical League's bylaws were revised recently. As a result, your NCRAL leadership team has looked at the Region's bylaws. It proposes several amendments to bring the two into compliance and clarify our document. A proposed draft of [NCRAL's amended bylaws my be downloaded from our server by clicking on this link](#).

We would like affiliate members to examine the proposed changes and let us know if there are any questions or suggestions relating to the proposed amendments. You may email the Regional Chairman at [adsheidler@gmail.com](mailto:adsheidler@gmail.com) with your comments. The NCRAL 2024 convention in De Pere will also be an excellent opportunity for attendees to bring up questions or suggestions in person with the leadership. In addition, a limited amount of time will be included in the business meeting agenda for public comment. Leadership will formally reply to comments and make further revisions as necessary after the convention. A vote on the bylaw amendments will occur after the convention, following any final revisions. A formal vote will be taken on an affiliate-by-affiliate basis after that.

I want to especially thank Vice Chair Bill Davidson for supervising the efforts to amend the bylaws and the rest of the leadership team for supporting this effort. After this year's conference, the bylaws will be amended in compliance with the amendments section of the current bylaws.



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## NCRAL LEADERSHIP MEETING MINUTES

January 24, 2024, 7:00 PM, ZOOM

*Present: Alan Sheidler, Bill Davidson, Roy Gustafson, John Attewell, and Carl Wenning*

Bylaws revisions– Continuing the work from the last NCRAL leadership meeting on November 29<sup>th</sup>, the leadership team reviewed new amendments to be proposed for the NCRAL bylaws in light of changes in the national bylaws. Carl suggested a few changes to clarify some of the statements. He and Bill will finish making the changes.

Streaming NCRAL conference talks – A discussion was held about the pros and cons of streaming the conference or recording specific talks for later playback. Al will check with the NCRAL 2024 convention hosts about the feasibility of streaming or recording.

Distribution list for *Northern Lights* – Carl has cleaned up the NCRAL newsletter email list. There are 433 active email accounts. Al said he had cleaned up the contact list of Presidents and ALCORs receiving the *NCRAL blotter*, and there

are 69 entries. Al will send the list to the Board. Al will also encourage the “group of 69” to subscribe to the newsletter email list if they have not yet done so.

Awards – Nominations for Regional awards are due on March 31. So far, we have one nominee. We will encourage nominations in the Spring 2024 newsletter and the February Blotter. Applications for mini grants are due at the same time. Details will appear in *Northern Lights*.

The next meeting of the NCRAL leadership will be on March 20, 2024, at 7 pm over ZOOM.

The meeting was adjourned at 9:00 pm.

*Roy Gustafson*  
Secretary/Treasurer

# ALCON 2024

## GOING TO KANSAS CITY FOR STARS AND ALL THAT JAZZ!

### SPEAKERS INCLUDE

- ★ Stephon Alexander, theoretical physicist, cosmologist, jazz saxophonist and author of *The Jazz of Physics*, a book that discusses the link between music and the structure of the universe
- ★ David Levy, comet hunter, amateur astronomer and science writer
- ★ Keivan Stassun, Professor of Physics and Astronomy, Vanderbilt University
- ★ Tim Russ, actor, musician screenwriter, director and amateur astronomer



### EVENING EVENTS

- ★ Gottlieb Planetarium
- ★ Linda Hall Library, Rare Books Room
- ★ StarBQ at Overland Park Arboretum
- ★ Powell Observatory
- ★ Awards Banquet

### VENDORS INCLUDE

- ★ DayStar Filters
- ★ Explore Scientific

## JULY 17–20, 2024

### DOUBLETREE BY HILTON, OVERLAND PARK, KANSAS

Hosted by



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## SPEAKERS BUREAU

The leadership of the North Central Region proudly announces the beginning of this new service. The brainchild of NCRAL Chair Alan Sheidler, the NCRAL Speakers Bureau will facilitate the acquisition of professional speakers for meetings and other events for our Region's affiliates. Many individuals have indicated a willingness to serve as speakers. Most speakers are available for presentations over Zoom, though some might also be willing to attend club meetings and other events. To arrange for a speaker, please contact the speaker directly through our [NCRAL Speakers Bureau listing](#). Speak with them frankly about arrangements, including accommodations, meals, travel expenses, and honorarium, if any.

## ASTROBITS

Here are some news notes that readers might find of interest or helpful. Items appear here as bullet points because they are too short to merit separate articles. If readers have something to share and want it to appear here, email this newsletter's editor at [carlwenning@gmail.com](mailto:carlwenning@gmail.com).

- ★ NCRAL Webmaster Jeff Setzer kept busy over the winter holidays updating the Region's website for 2024. There have been several additions and numerous updates. Check out the website at <https://ncral.wordpress.com/>
- ★ A revised **Northern Lights Index Of Key Feature Articles (2016-2024)** can now be found on the NCRAL website. See the [newsletter archive](#) for details.
- ★ **NCRAL blotter** is published monthly by the Regional leadership. It conveys to affiliate presidents, ALCors, and newsletter editors important information and reminders that are too important to wait for the quarterly issue of **Northern Lights**. Any member or the Region can access NCRAL blotter on the Region's website. Presidents, ALCors, and newsletter editors who are not already receiving this publication may ask to be added to the subscriber's list. Please contact editor Carl Wenning ([carlwenning@gmail.com](mailto:carlwenning@gmail.com)) to be added to our listing.
- ★ Please share this information with your astronomy club friends: Only 433 of 2,295 NCRAL members (19% or about one-fifth) are receiving direct emails about the availability of our **Northern Lights** newsletter. Members can go to the following case-sensitive URL to add their name and email address to our database at <https://tinyurl.com/NCRAL>. This way they won't miss future newsletters, convention announcements, and other important communications.
- ★ On a recent visit to the home of NCRAL's immediate past Chair Carl Wenning, Chuck Allen, Vice President of the Astronomical League, mentioned how inspirational the North Central Region has been to the rest of the League. Chuck mentioned that our Region is one of two that has a lot going on. He noted with interest our annual conventions, our **Northern Lights** newsletter and **NCRAL blotter** publications, our observing programs and awards, and our mini grants. It appears that the national office might implement some of our activities in the not too distant future.
- ★ Don't forget that ALCON 2024 is coming upon July 17-20 in Kansas City. The program is still being fleshed out, so be sure to keep an eye on the [national convention website](#) which will soon have the details.
- ★ Did you know that the Astronomical League has just published a 15-page narrative history? You can find it on the Astronomical League website under the [About Us heading](#).

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## IMPORTANT NOTE FROM THE ASTRONOMICAL LEAGUE OFFICE

To Our Valued Societies,

Astronomical League society membership dues are increasing. While we know that a dues increase is a topic no one wants to discuss, it has been an extremely long 18 years since dues were last increased in 2006.

The costs of operating the League have increased substantially in that time. Observing programs and publications, award programs, website improvements, the Library Telescope program, office space, insurance, and contractor costs have all increased. Printing, paper, and postage have more than doubled. The US Inflation Calculator shows that over the last 18 years, the overall average cost of goods and services has increased 51%. The increase in AL dues falls far below this inflation rate.

The League has always strived to provide big value for limited cost to its members. We have a vast array of observing programs, youth and national awards, the Library Telescope program, website improvements, outreach support materials, and many other programs to support our members.

Even though the costs of operating these programs have gone up, the new dues rates are still very low compared to just about anything else you can get! The Astronomical League strives to bring all its members a value far in excess of our low dues rates.

The new dues rates for clubs starting with the 2024-2025 membership year will be as follows:

- The flat club fee of \$10 per club per year is unchanged.
- The per-member rate for clubs that have all members participating in the AL will be \$6.00 per member per year.
- The per-member rate for those clubs that have less than 95% of their members participating in the AL will be \$9 per member per year.

These rates are in effect for the upcoming 2024-2025 membership year.

Thank you for making note of this. The new rates will be listed on the dues bills that go out in approximately April.

Mitch Glaze, Office Manager  
Astronomical League

## CALL FOR 2024 NCRAL NOMINATIONS & APPLICATIONS

### SECRETARY-TREASURER/REGION AWARD/NEWSLETTER EDITOR AWARD/MINI-GRANTS

The current term of NCRAL's Secretary-Treasurer ends with the close of the Regional Business Meeting on May 17<sup>th</sup>. Roy Gustafson is nearing the end of his third two-year term but is willing to continue in office if that is what the Region wants. Still, others interested in this leadership position are more than welcome to stand for election. Please contact one of the existing leaders if you'd like to self-nominate or nominate someone else to fill this position.

It's never too early to start thinking about nominations for the NCRAL Region Award. Do you know someone who has dedicated his or her time and energy to promoting astronomy? Wouldn't you like to let them know they are appreciated for their arduous work? This is your chance! This award recognizes exceptional individual effort and meritorious service to amateur astronomy through the member's local astronomy club, public outreach, the NCRAL, or the Astronomical League.

The Region award will be presented in a ceremony concluding the dinner banquet of the next Regional convention. The rules for Region Award nominations are as follows:

1. The nomination must be made using the [official NCRAL Region Award nomination form](#) which is an interactive PDF that must be completed in its entirety prior to submission.
2. The individual must be a member in good standing, either through an AL/NCRAL-affiliated club, association, or society or as a current member-at-large in the North Central Region.
3. The three current regional officers and the regional representative are NOT eligible for this award. Past winners are also ineligible for this award.



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4. The regional officers are the voters and will base their decision on the information provided. Past winners of this award will be asked to assist in the case of a tie vote. Each member votes independently and will use his/her best judgment. All decisions are final.
5. The winner will be contacted not less than 21 days in advance of the NCRAL meeting at which the award will be presented. The winner will not be publicly revealed until the time of the presentation. Those nominated but not selected will not be revealed.
6. All non-winning nominations will be kept on file for two years after the initial submission. After such time, a new nomination needs to be competed. Nominations for the 2023 Region Award MUST BE RECEIVED by March 31<sup>st</sup>. Any nominations received after this date will be kept on file for 2025.
7. All nominations must be sent via email to Bill Davidson, NCRAL Vice Chair, at [rochesterskies@outlook.com](mailto:rochesterskies@outlook.com)

Let's not forget about the **NCRAL Newsletter Editor Award**. It is expected that the next award will be conferred at the NCRAL 2024 meeting. Submission Guidelines: The president of the club/society/association should email a copy

of the designated issue of the associated newsletter in Adobe Acrobat pdf file format to NCRAL Vice Chair Bill Davidson ([rochesterskies@outlook.com](mailto:rochesterskies@outlook.com)), along with a cover letter of recommendation in the same file format. In addition, complete contact information of the editor must be included. A photo of the newsletter editor, preferably in an astronomical-type setting, must be received electronically in jpg format to the same email address by **March 31<sup>st</sup>**.

Lastly, don't forget about our two **NCRAL mini grants**. A mini grant will be awarded following a successful written proposal originating with the president of an NCRAL affiliate. The focus of a mini-grant must be oriented to an increase in either: (1) an affiliate's membership whose mini-grant proposal must focus on both recruitment and retention (Member Recruitment & Retention Mini-grant), or (2) an increase in the number of A.L.-affiliated clubs, societies, or associations within the North Central Region (Non-affiliate Recruitment Mini-grant). Applications for 2024 (interactive PDFs) can be found at <https://ncral.wordpress.com/awards/>. The application deadline for all mini-grants is **March 31<sup>st</sup>**. Mini-grants, if approved, will be announced following the NCRAL 2024 banquet.

## NCRAL BY THE NUMBERS

The Astronomical League home office provides data in relation to our Region from time to time. The following information came to us from membership rosters for 2023.

- The total number of members in North Central Regional affiliates is 2,251 (which includes 86 affiliation-unknown or out-of-Region members)
- The number of independent Regional members (At-large, Life, and Patron) is 44.
- The combine NCRAL membership count is 2,295.
- There are 36 registered affiliates in NCRAL.

- Below are the numbers of affiliates and members by state:

| State           | Affiliates | Memberships |
|-----------------|------------|-------------|
| Illinois        | 15         | 809         |
| Wisconsin       | 11         | 417         |
| Iowa            | 5          | 336         |
| Minnesota       | 4          | 750         |
| Michigan (U.P.) | 1          | 17          |
| North Dakota    | 0          | 5           |
| South Dakota    | 0          | 3           |

## NCRAL SEEKING FUTURE CONVENTION HOSTS

During NCRAL's annual business meeting, the Region receives offers for hosting future conventions. We are now looking for hosts for NCRAL 2025 beyond. It's never too early to start planning to host an NCRAL Regional convention.

Whether or not your club has ever hosted an NCRAL Regional convention, please consider doing so. While hosting a Regional convention is a considerable amount of work, it can be quite rewarding – even fun. It provides an opportunity to highlight your group's facilities and accomplishments, build club camaraderie, and to get to personally know interesting guest speakers. You can also use such an event to grow your club's membership.

Remember, NCRAL has its own **Convention Planning Guide**. To download the most recent version of the Guide (last updated November 30, 2023), visit the following URL: <https://ncral.wordpress.com/conventions/>. Look for the link at the bottom of the page. Please contact the NCRAL Chair Alan Sheidler at [adsheidler@gmail.com](mailto:adsheidler@gmail.com) should you have any questions or wish to toss your affiliate's hat into the ring for hosting a future NCRAL convention.

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## ANNUAL MESSIER MARATHON ALERT!

Don't forget that NCRAL now has an officially approved **Messier Marathon Award**. March is the best time to see all 110 Messier objects in a single dusk to dawn interval, so take this as a reminder to get your observations started as soon as possible. You need not view all 110 objects in one night. For some of us in the norther tier, that's simply not possible. However, awards are available for partial completion: Gold (a minimum of 103 M-objects, unassisted), Silver (a minimum of 103 M-objects, assisted), and bronze (a minimum of 70 M-objects either assisted and/or unassisted). To see our guidelines and learn more, visit our observing programs page at <https://ncral.wordpress.com/observing/>. There you will also find information about our seasonal Mini Messier Marathons where only 27 or 28 observations are required during a given night.



## NOTEWORTHY!

The following NCRAL members have completed the following Astronomical League observing and award programs in recent months and have been recognized in the most recent issue of **Reflector**. Congratulations to all!

### Asterism Observing Program:

*Stephen Pavela*, LaCrosse Area Astronomical Society

### Bright Nebula Observing Program:

*Dave Tosteson*, Advanced, Minnesota Astro. Society

### Constellation Hunter Northern Skies Observing Program:

*John Zimtisch*, Minnesota Astronomical Society

*Lisa Wentzel*, Twin City Amateur Astronomers

### International Observe the Moon Night Observing Challenge:

*Douglas Slauson*, Cedar Amateur Astronomers

### Messier Observing Program:

*John Zimtisch*, Honorary, Minnesota Astro. Society

*Stephen Koehler*, Regular, Minnesota Astro. Society

### Meteor Observing Program:

*Dave Tosteson*, Honorary, Minnesota Astro. Society

### Open Cluster Observing Program:

*Alan Sheidler*, Popular Astronomy Club

### Outreach Award:

*John Zimtisch*, Stellar, Minnesota Astro. Society

### Solar Eclipse Observing Challenge – Annular 2023:

*Joseph Kubal*, Silver, Naperville Astronomical Assn.

### Solar Neighborhood Observing Program:

*Stephen Pavela*, Binocular, LaCrosse Area Astro. Soc.

### Solar System Observing Program:

*Lisa Wentzel*, Twin City Amateur Astronomers

### Sunspotter Observing Program:

*Brian Chopp*, Neville Public Museum Astro. Society

### Universe Sampler Observing Program:

*Dave Tosteson*, Minnesota Astronomical Society

### Master Observer Progression - Observer Award:

*Lisa Wentzel*, Twin City Amateur Astronomers

*John Zimtisch*, Minnesota Astronomical Society

### Master Observer Progression – Master Observer Award:

*Lisa Wentzel*, Twin City Amateur Astronomers

**Congratulations** to *Dave Tosteson* for having his article *Changing-Look Quasars: Beacons of Stability that Aren't*, published in the Spring 2024 issue of **Reflector**.

Note: Details about all of these observing programs and awards can be found on the Astronomical League's website at <https://www.astroleague.org/observing.html>

## NCRAL SEASONAL MINI MESSIER MARATHON AWARDS

- *Megan Warren*, Popular Astronomy Club, Winter, Certificate #16, Unassisted
- *James VandeBerg*, Des Moines Astronomical Society, Spring, Certificate #20, Assisted



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## WHY NOVICE AMATEUR ASTRONOMERS FAIL TO FLEDGE

by Carl J. Wenning, Twin City Amateur Astronomers

**fledge**, verb. 'flej. fledged; fledging. intransitive verb. of a young bird: to acquire the feathers necessary for flight or independent activity.

Long-time amateur astronomers have seen all too frequently how novice sky watchers who have joined our affiliates fail to transition as experienced observers capable of working independently. After a period of time, most newbies simply drop out of a club without even getting around to developing adequate skills or forming many, if any, meaningful relationships.

We should have all learned from prior experiences such as this that we can't expect new members to transition as expert sky watchers just because they have paid dues in our clubs and then hang around. Rarely do they learn the hobby simply by osmosis.

This expectation of osmosis, more than anything else, is the principal reason astronomy clubs fail to retain new members in my considered opinion. This problem can be overcome by socializing and educating new members, which does require intentional activity, effective leadership, and concerted efforts by the members of a club.<sup>1</sup> Another of the big problems with retention is that clubs often don't give new members what they expect to receive as a benefit of membership.<sup>2</sup>

This failure-to-retain problem, however, is more complex than just this. After considerable reflection on recruitment and retention difficulties, I have realized that part of the problem rests on the shoulders of amateur astronomer wannabes. That is, the fault rest not entirely on the shoulders of club members. Before advancing solutions to this aspect of the problem, allow me to define the wannabe problem more thoroughly.

As I've mentioned in several of my prior writings, it's unreasonable to advance solutions to a problem until that problem has been clearly identified and defined. After doing so, I will suggest some actions that we, as club members, might take to help novice amateur astronomers become full-fledged amateur astronomers.

**What are the reasons for failure to retain that relate directly to the wannabe, and what can we do about it?**

As I see it, there are five primary reasons why novice sky watchers fail to spread their wings and fly high with the rest of the more experienced amateur astronomers. They are the following:

### Reason 1: Novices don't understand the nature of a hobby.

I have addressed this problem at considerable length in TCAA Guide #3: *Astronomy as a Hobby*.<sup>3</sup> As I mentioned in this Guide, "A hobby is a regular activity in one's leisure time for pleasure. Hobbies – if they are genuinely hobbies and not merely passing interests – are time-consuming and often result in considerable expenditures." After explaining this, I describe the many benefits of having a meaningful hobby such as amateur astronomy. I then address what it takes to become an experienced amateur astronomer.

Before we start pushing guides, books, binoculars, and telescopes upon the wannabe, perhaps we should gently lead them through the metacognitive process of knowing what it takes to become an experienced amateur astronomer. After that, that's where the first of our TCAA Guides comes into play. Introducing new TCAA members to the hobby through the aforementioned Guide, we follow up with an introduction to visual astronomy.

As part of this process, we encourage reading TCAA Guide #1: *Introduction to Amateur Astronomy*.<sup>4</sup> Even better, we usher novices through a three-month course in amateur astronomy that provides them with a basic understanding of the equipment of our hobby. We also introduce them to another Guide, TCAA Guide #4: *The Art of Sky Interpretation*,<sup>5</sup> which gives a good overview of the heavens and what we do and should know as amateur astronomers.

### Reason 2: Novices don't give themselves enough time.

It takes considerable time to develop the necessary knowledge and skills of an advanced amateur astronomer. Today, many people are more than willing to throw money at a hobby without putting in the time required to learn the subject matter and how to use equipment effectively. This

<sup>1</sup> Wenning, C. J., *Northern Lights*, Club Leadership for Our Time, Vol. 5, No. 3, pp. 8-10, [Winter 2021](#).

<sup>2</sup> Wenning, C. J., What do Members Want from an Astronomy Club? *Northern Lights*, Vol. 4, No. 3, pp. 5-6, [Winter 2020](#).

<sup>3</sup> Wenning, C. J., TCAA Guide #3, *Astronomy as a Hobby*, [https://tcaa-content-2923.s3.us-east-2.amazonaws.com/guides/Astronomy\\_as\\_a\\_Hobby.pdf](https://tcaa-content-2923.s3.us-east-2.amazonaws.com/guides/Astronomy_as_a_Hobby.pdf)

<sup>4</sup> Wenning, C. J., TCAA Guide #1, *Introduction to Amateur Astronomy*, [https://tcaa-content-2923.s3.us-east-2.amazonaws.com/guides/Intro\\_to\\_Amateur\\_Astronomy.pdf](https://tcaa-content-2923.s3.us-east-2.amazonaws.com/guides/Intro_to_Amateur_Astronomy.pdf)

<sup>5</sup> Wenning, C. J., TCAA Guide #4, *The Art of Sky Interpretation*, [https://tcaa-content.s3.us-east-2.amazonaws.com/guides/The\\_Art\\_of\\_Sky\\_Interpretation.pdf](https://tcaa-content.s3.us-east-2.amazonaws.com/guides/The_Art_of_Sky_Interpretation.pdf)

# NORTHERN LIGHTS

equipment might have acquired or gained access to by affiliating with a club. That is, they think the only thing required to be an amateur astronomer is lots of expensive equipment. Unfortunately, having fancy equipment does not an amateur astronomer make!

Again, advanced amateurs need to help novices plot the path to becoming accomplished amateur astronomers. They should point out necessary education, provide direct instruction in classes and planetarium work, encourage attendance at public viewing sessions, and mentoring through one-on-one field experiences. Depending on a club's resources, clubs might want to generate a set of official guidelines showing new members how to advance themselves. They must then be both invited and encouraged to participate in these activities.

### **Reason 3: Novices fail to plan, or their goals are too general.**

Most novices don't have a clue about how to go about becoming an amateur astronomer. As a result, they just let each day take care of itself. They don't have a plan, though they might have a purpose. *A failure to plan is a plan for failure.* While a club might provide general guidance and a vast array of resources, new members don't know what to ask for and are frequently too shy to ask for advice or assistance. They must be encouraged to overcome this reluctance by being told that "the squeaky wheel gets the grease." Once members ask for help, they should be set up with a mentor who can provide the requisite one-on-one instruction with a purpose.

For instance, one high school member of the TCAA's *Introduction to Amateur Astronomy* course was successfully mentored by one of our members last summer. The wannabe wanted to learn how to operate the club's observatory telescopes and made his desires known, explicitly requesting help. Within six months, he had learned how to capably operate our 11" CPC telescope at Sugar Grove Observatory and our 20" PlaneWave telescope at Waynesville Observatory, along with its image intensifier and filter systems. He subsequently earned our trust, his keys, and unfettered access to our facilities, housing a considerable amount of expensive equipment. This new member is only 17 years old and is well on his way toward becoming an accomplished amateur astronomer.

### **Reason 4: Novices have unreasonable expectations.**

Many people will peer through the eyepiece of a telescope expecting to see Hubble-quality images. The Orion Nebula and such garner impressions of awe, but when they

view the faint fuzzies known as galaxies, they often become disappointed, disillusioned, and back away from the hobby.

We need to help novice observers understand that many joys of amateur astronomy don't come only from the end of a telescope.<sup>6</sup> Yes, we need to help them appreciate the many varieties and subtle differences among the things they are observing. We also need to help them overcome any disappointment by introducing new members to other aspects of amateur astronomy, such as constellation study, Astronomical League observing programs, promoting astronomy via social media, naked-eye observations, night vision technology, astrophotography, and so forth.

### **Reason 5: Novices make excuses.**

How often have you heard it said that new members don't want to go observing because it's too hot, too cold, too far, too early, too late, too bright, and so forth? Perhaps they are too busy, overcommitted, or interested in other things. People will give many excuses – *not reasons* – for not getting out under the stars. (We also hear these complaints from many, if not most, of our established members.)

To become good at anything, one must commit time and effort. I've often said that I'd love to play a musical instrument, but I have never been willing to commit to the time and effort required to master a musical instrument. As a result, I'm not a musician. So it is with nearly every other area of life. Expertise comes at a price of time and effort. If one is unwilling to put in the time and effort, forget about the expertise. Experts are justifiably rewarded for their commitment.

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In the past few years since the advent of COVID-19, the TCAA membership has grown from about 30 households to more than 75 today. If one were to tally the individual members, we would probably exceed 100. That's not a bad number given the fact that the Twin Cities of Bloomington and Normal, Illinois, total only about 100,000 citizens, including some 22,000 transient students enrolled at two universities. Other clubs might do as well following our approaches.

So, there you have it – some additional perspectives on recruitment and retention problems, this time focusing on the wannabes themselves. To better understand the conundrum that we all face – members, new and old – I encourage everyone to read or review the references to this article. The "leaky bucket" problem of recruitment and retention requires attention to both filling the bucket and stopping leaks in the membership bucket if we are going to make progress in raising its level.

*Carl*

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<sup>6</sup> Wenning, C.J., *Northern Lights*, The Joys of Amateur Astronomy, Vol. 5, No. 1, pp 10-13, [Summer 2020](#).

# NORTHERN LIGHTS

## NORTHERN LIGHTS INDEX OF FEATURE ARTICLES (2016-2024)

The editor of *Northern Lights* has created a listing of articles he considers of considerable interest and lasting value. This listing will increase both the ease of finding and the likelihood that these articles will be read and re-read. Please review these article titles and see what you have missed since the current series of newsletters was established in 2016. This information (recently revised and updated to include articles through Winter 2024) can now be found on the NCRA website's newsletter archive page: <https://ncral.wordpress.com/newsletter-archive/>

### AL & NCRA OBSERVING PROGRAMS

by Alan Sheidler, NCRA Chair

As you might know, I am a real fan of the Astronomical League observing programs. Over the past few years, I have completed the AL's *Double Star*, *Messier*, *Planetary Nebulae*, *Globular Cluster*, *Carbon Star*, and *Open Cluster* observing programs. I am now working on the AL's *Two in the View* program, which I described in the last issue of *Northern Lights*. I have found these programs provide me with a purpose for my observing. The lists of objects in these programs give an excellent compilation of objects, many of which have been selected for inclusion to highlight the range of diversity of objects.

The AL currently sponsors over 75 observing programs. For those new to the hobby, these AL programs are a great way to learn about different kinds of objects and how to find your way around the sky. There are also more advanced programs for more experienced observers with access to specialized telescopes and imaging technology. There are also programs for visual observers and even for naked-eye and binocular observing.

I believe the Astronomical League has successfully provided purpose and structure to observing and appropriately recognizing observers for their efforts. The observed programs' stated goal is to *offer encouragement and certificates of accomplishment for demonstrating observing skills with various instruments and objects*. The success of the Astronomical League's observing programs and awards is but just one of the many benefits to its member clubs and societies.

The Astronomical League also emphasizes public outreach and has an Outreach Award, which encourages and recognizes the work of individuals who promote the hobby of astronomy. There is a program for everyone. You can find an alphabetical listing of the AL programs here: <https://www.astroleague.org/alphabeticoobserving/>

I want to call your attention to the NCRA seasonal *Messier Marathon* observing program. Though this program is not designed to qualify observers for the AL *Messier Observing Program Award*, it promotes getting participants to observe periodically. The goal of the NCRA program is to quickly observe and essentially check off each object from

four seasonal lists of Messier objects. Each list has 27 or 28 Messier objects organized by season, so observing them in the early evening for approximately two hours is possible.

The NCRA *Seasonal Messier* program is easy and provides a good reason for members to get out and observe together in a relaxed way. It is a great way to start the hobby and motivate members. Some clubs have used this as a group observing activity.

For those of you wanting to challenge yourselves, there is also an NCRA *103 Messier Marathon Program*. This program encourages members to observe as many 110 Messier objects as possible in one night. It is much more physically demanding and has gold, silver, and bronze star award levels corresponding to the difficulty level. A gold star is earned for observing at least 103 objects using unassisted means (no goto scope). Using assisted means, a silver star is earned for bagging at least 103 objects. A bronze star is earned by observing 70 objects using any combination of assisted or unassisted means. The rules can be found at the following link: <https://ncral.wordpress.com/observing/>

The AL and NCRA have observing programs for everyone. These programs are among the many benefits of AL membership. These programs are not only educational but also fun. Many observing programs can be carried out individually, but I have found that doing them in a group setting can be helpful and enjoyable. Confirming your observations with other observers using different scopes can be exciting and educational. If you haven't tried one of these observing programs, why not try it?

Keep Looking Up.

*Al*



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|  |                |               |   |
|--|----------------|---------------|---|
| Object: Beta Cygni (abiso)   | Date: 10/10/15 | Time: 7:50 PM | N |
| Instrument: 6" F12 Refractor   | Seeing: poor   | Power: 35X    | W |
| Description: Blue & Gold pair, easily separated<br>Gold one being the brighter |                |               |   |
| Object: 57 Aquilae   | Date: 10/10/15 | Time: 8:20 PM | N |
| Instrument: 6" F12 Refractor   | Seeing: AVE    | Power: 73X    |   |
| Description: Equal pair of white stars, dimmer than albirio, but nice          |                |               |   |
| Object: Theta Serpentis  | Date: 10/10/15 | Time: 8:30    | N |
| Instrument: 6" F12 Refractor   | Seeing:        | Power: 73X    |   |
| Description: Equal white pair, very nice                                       |                |               |   |
| Object: Alpha Capricornus  | Date: 10/10/15 | Time: 9:05    | N |
| Instrument: 6" F12 Refractor   | Seeing: poor   | Power: 35X    |   |
| Description: Very wide double, actually looks good in the finder scope         |                |               |   |
| Object: Beta Capricornus   | Date: 10/10/15 | Time: 9:12    | N |
| Instrument: 6" F12 Refractor   | Seeing: poor   | Power: 35X    |   |
| Description: Bright yellow primary, dimmer blue companion, very wide           |                |               |   |
| Object: Gamma Delphinus  | Date: 10/10/15 | Time: 9:20    | N |
| Instrument: 6" F12 Ref   | Seeing: poor   | Power: 73X    |   |
| Description: Nice close pair of yellowish-white stars one slightly brighter    |                |               |   |

An example of my observation notes used for the AL Double Star Program. Double stars can be observed during evenings of poor seeing or a full moon.



U Hydrae is one of the carbon stars in the AL Carbon Star Observing Program. Many carbon stars are deep red or orange, making them easily recognizable. I found photographing them with a DSLR very helpful by comparing the surrounding field star patterns to those shown by software programs such as Stellarium or Starry Night.

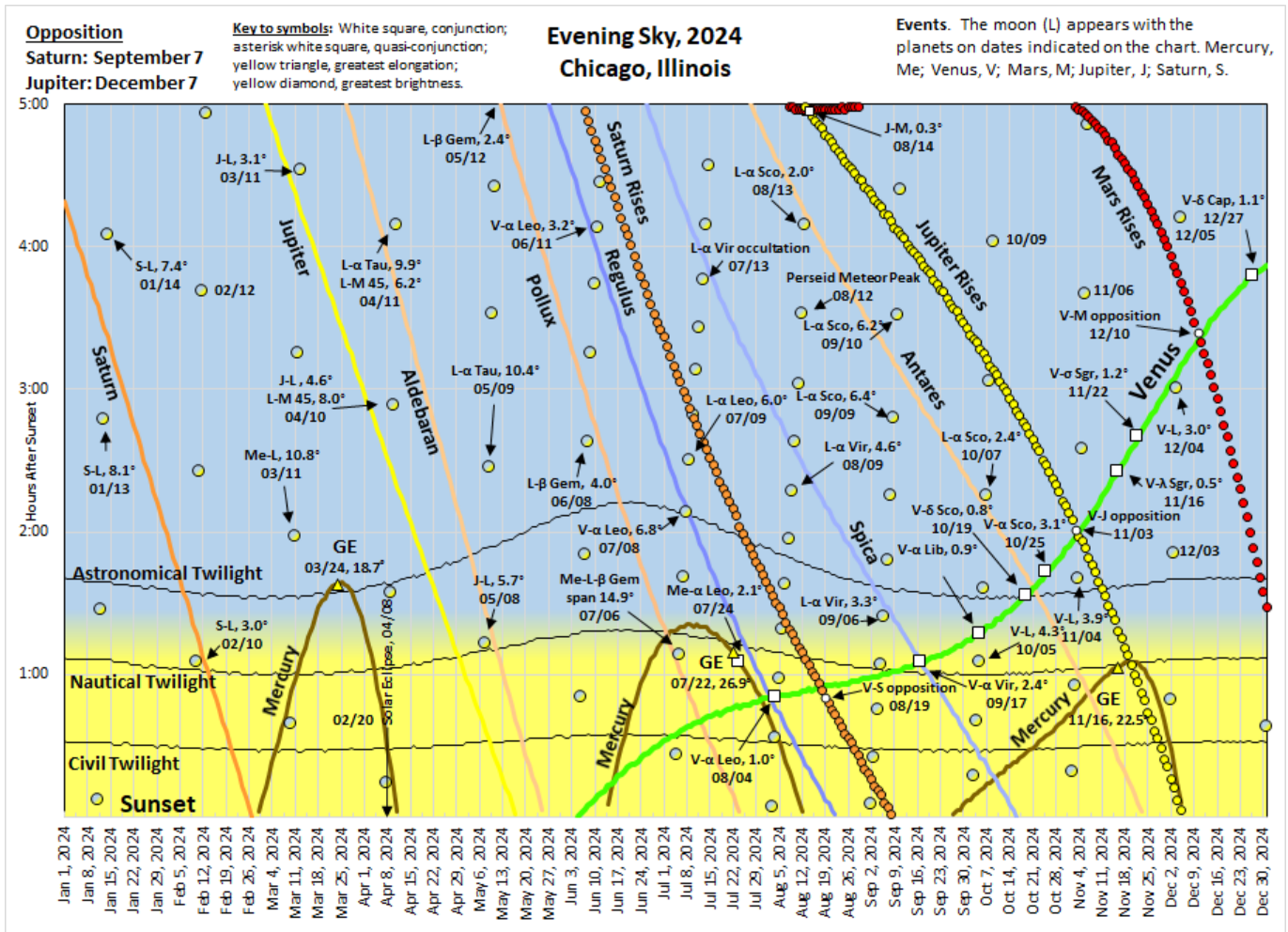


Here are examples of some of the planetary nebulae in the AL's Planetary Nebula Observing Program. Planetary nebulae come in a wide variety of shapes and colors. Some are rings, and some are small "robin eggs."

# NORTHERN LIGHTS

## SPRING SKIES, 2024

~ by Jeffrey L. Hunt ~



This chart shows the setting time intervals of the planets, bright stars and the moon compared to sunset during 2024. Conjunctions and gatherings are indicated by their dates. Data from the Naval Observatory.

The **Sun** is eclipsed by the moon, April 8, 2024. By now readers have their plans for the Great American Solar Eclipse of 2024. Have a great day and let's hope for clear weather along the eclipse path. For those staying home and not participating in the solar eclipse migration, the event promises considerable darkness across the region along the penumbral shadow's path. For example, in Chicago, the sun reaches maximum eclipse, 94%, at 2:07 p.m. CDT. I am hoping to see some fine photos of the eclipse and eclipse projections on NCRA's Facebook page.

Spring begins when the sun's apparent path on the celestial sphere reaches the origin point on the equatorial and ecliptic coordinate systems on March 19 at 10:06 p.m. CDT. The imbalance of the civil year's length and Earth's revolution needs to be reset every four years. The equinox occurs later

by an average of five hours, forty-eight minutes during the next few years. Since the seasons are culturally tied to the names of the month, remember those classroom bulletin boards with umbrellas during April and snowmen during January, the leap day is added every four years – with certain exceptions – to tie the months and the seasons.

Spring's midpoint occurs May 5<sup>th</sup> at 6:58 a.m. CDT. May Day, the 1<sup>st</sup>, is a traditional celebration, marking the season's halfway or cross-quarter point.

As a prelude to the solar eclipse, the **Moon** passes through Earth's penumbra on March 25<sup>th</sup>.

(article continues next page)

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| 2024         | New | First | Full | Last   |
|--------------|-----|-------|------|--------|
| <b>March</b> | 10  | 16    | 25   | 3      |
| <b>April</b> | 8   | 15    | 23   | 1      |
| <b>May</b>   | 7   | 15    | 23   | 1 & 30 |
| <b>June</b>  | 6   | 14    | 21   | 28     |

## Morning Planets

### March

The morning sky is free of bright planets that are easy to see. **Venus**, a pretty spectacle throughout the fall and early winter, is moving toward superior conjunction. It loses 26 minutes of rising time compared to daybreak, appearing 30 minutes before sunrise at month's end.

**Mars** continues its painfully slow emergence from bright twilight. At the equinox, the Red Planet ( $m = 1.2$ ) rises 68 minutes before the sun. At 40 minutes before sunrise, it is visible through a binocular low in the east-southeast

**Saturn** is immersed in bright sunlight and not visible during the month. Venus passes by on the 21<sup>st</sup>, but the planets are in bright morning twilight.

Look for the moon before sunrise near Zubenelgenubi ( $\alpha$  Lib,  $m = 2.8$ ) on the 28<sup>th</sup> and Antares on the 30<sup>th</sup>.

### April

**Mercury** passes inferior conjunction on the 11<sup>th</sup>, heading for a very unfavorable morning appearance. Reaching its morning (or eastern) greatest elongation (26.4°) on May 19<sup>th</sup>, it rises only 52 minutes before sunrise, after Nautical Twilight.

**Venus** continues to rise closer to daybreak with the approaching superior conjunction during early June. On the 15<sup>th</sup>, it rises only 23 minutes before the sun.

On the 7<sup>th</sup>, when Venus is 15° west of the sun, the moon occults it during daylight before noon. From Chicago the occultation begins at 11:44 a.m. and lasts about 30 minutes.

**Mars** continues its long reappearance in a dark sky. On April 1<sup>st</sup>, the Red Planet ( $m = 1.2$ ) rises 72 minutes before the sun and gains only one to two minutes of rising time every three to four days. By month's end, it rises only 18 minutes earlier. It passes 0.5° from Saturn on the 10<sup>th</sup>. Use a binocular. Five days before the conjunction, the moon appears in a gathering with Saturn and Mars, stretching nearly 15°.

Compared to **Saturn**, Mars moves eastward along the ecliptic about 0.5° each day, while the Ringed Wonder moves eastward 0.9° for the entire month. With an ecliptic with a low inclination and a somewhat fast eastward motion, Mars' entry into a darker sky has taken longer than we might expect. In contrast, Saturn's appearance somewhat resembles the westward annual march of the bright stars and constellations. From conjunction to rising at the beginning of morning

twilight, Saturn takes 60 days. Mars' interval is 162 days, but this is prolonged by the longer twilight periods during spring.

By month's end at one hour before sunrise, Saturn ( $m = 1.2$ ) is over 10° above the east-southeast horizon and nearly 15° to Mars' ( $m = 1.1$ ) upper right.

Before daybreak, spot the moon above the spout of the Teapot of Sagittarius on the 1<sup>st</sup>; west of Antares and near Pi Scorpii ( $\pi$  Sco,  $m = 2.9$ ) on the 26<sup>th</sup>; east of Antares, 27<sup>th</sup>; and in the Teapot's handle, 29<sup>th</sup>.

### May

As summarized in the April notes above, **Mercury's** morning appearance is disappointing. At its greatest elongation on May 19<sup>th</sup>, the planet ( $m = 0.0$ ) stands less than 4° above the east horizon at 30 minutes before sunup.

**Venus** continues its slide into bright twilight in advance of its superior conjunction on June 4<sup>th</sup>. It rises less than 30 minutes before daybreak on May Day. There is a close conjunction (0.2°) with Jupiter – what I call a proximate conjunction – on the 24<sup>th</sup>, although this very close to the sun.

(I have named close Venus-Jupiter conjunctions, 0.5° or less, proximate conjunctions. We have great conjunctions of Jupiter and Saturn, and the press follows "supermoons" with a passion. A proximate conjunction is usually easy to see, but not this one. Their next conjunction (0.5°) is proximate and occurs August 12, 2025, before sunrise.

I do not recommend the following observation: At local noon on conjunction day, Venus appears nearly 3° west of the sun and nearly 1.4° east of Jupiter.

**Mars** continues a slow march into the eastern morning sky. At midmonth it rises 105 minutes before the sun. At one hour before sunup, the Red Planet ( $m = 1.1$ ) is nearly 10° up in the east, over 20° to **Saturn's** ( $m = 1.2$ ) lower left. At the beginning of May, the gap between them is nearly 15°. This opens to nearly 35° by month's end. In an eyepiece, Saturn's rings are inclined about 3°.

**Uranus** is at solar conjunction on the 13<sup>th</sup> and begins its morning appearance.

Look for the **moon** west of Saturn on the 3<sup>rd</sup>; between Saturn and Mars, 4<sup>th</sup>; and east of Mars, 5<sup>th</sup>. The moon is in the same binocular field as Neptune on the 4<sup>th</sup>, but this occurs during morning twilight. On the 23<sup>rd</sup>, the moon is near  $\pi$  Sco and Antares, 24<sup>th</sup>; inside the Teapot, 26<sup>th</sup>; and near Saturn, 31<sup>st</sup>.

### June

**Venus** passes superior conjunction on the 4<sup>th</sup> and moves east of the sun and begins to set after sundown. While Venus leaves, **Jupiter** enters.

**Mars**, marching eastward toward an opposition early next year, begins the month nearly 40° to the west of Jupiter



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that is less than 10° west of the sun. The gap is over 20° by month's end.

**Jupiter** moves eastward in front of Taurus. As the month closes, the Jovian Giant is low in the east-northeast one hour before sunrise. It appears in the same binocular field with Aldebaran and the Hyades.

## Evening Planets

### March

**Mercury** ( $m = -0.1$ ) reaches greatest elongation (18.7°), over 20° to the lower right of **Jupiter** ( $m = -2.1$ ), on the 24th for its best evening appearance of the year. It brightly emerges from sunlight and is easily visible about a week before the largest elongation. Follow it during the remainder of the month. While subsequent evening elongations (July 22, 26.9°; December 16, 22.5°) are larger, the ecliptic is highly inclined to the western horizon during spring months. At 45 minutes after sundown, find the speedy planet nearly 10° above the horizon.

**Jupiter** shines brightly from the western sky after sunset. The planet sets earlier each evening, losing over two hours of setting time compared to sunset. By month's end it sets three hours, two minutes after sundown.

Approximately March 7<sup>th</sup>, Jupiter moves into the same binocular field with **Uranus**. Watch Jupiter slowly close the gap to the more-distant planet as it passes Omicron Arietis ( $\sigma$  Ari,  $m = 5.8$ ) and Sigma Arietis ( $\sigma$  Ari,  $m = 5.5$ ) on the way.

Look for the crescent **moon** with Jupiter on the 13<sup>th</sup>, when the pair fits into the same binocular field with **Uranus** ( $m = 5.8$ ). As the moon moves eastward it passes the Pleiades on the 14<sup>th</sup>; Aldebaran, 15<sup>th</sup>; Elnath ( $\beta$  Tauri), 16<sup>th</sup>; Pollux, 18<sup>th</sup>; Regulus, 21<sup>st</sup>; and Spica, 26<sup>th</sup>.

**Neptune** is at solar conjunction on the 17<sup>th</sup>. It reaches opposition September 17<sup>th</sup>. Begin looking for the planet during July when it is over 30° above the southeast horizon before the beginning of morning twilight.

### April

**Jupiter** ( $m = -2.0$ ) sets earlier each evening. On the 1<sup>st</sup>, it is 20° up in the west at one hour after sundown. While moving eastward in front of Aries and 3.3° below **Uranus** ( $m = 5.8$ ), the Jovian Giant sets four minutes earlier each night. On the 27<sup>th</sup> it sets at the end of evening twilight.

Jupiter passes 0.5° to the lower left of Uranus on the 20<sup>th</sup>, but the pair is less than 7° up in the west one hour after nightfall.

On the 10<sup>th</sup>, the crescent **moon** joins Jupiter and Uranus in the same binocular field. This does not occur again until October 3, 2037. On the 10<sup>th</sup>, the crescent moon is less than 10° below the Pleiades and 6.2° above the cluster during the next evening, with Aldebaran about 10° to the left. On the 12<sup>th</sup>, the moon is 2.7° below Elnath. Follow the moon

eastward, appearing near Pollux on the 14<sup>th</sup> and 15<sup>th</sup>; Regulus, 17<sup>th</sup> and 18<sup>th</sup>; Spica (1.0°), 18<sup>th</sup>, (a Full or nearly Full moon near Spica is a sure sign that spring has returned); and Zubenelgenubi, 24<sup>th</sup>.

### May

**Jupiter** ( $m = -2.0$ ) is 10° up in the west-northwest at sunset and the sun's apparent eastward trek is overtaking the Jovian Giant. It reaches solar conjunction on the 18<sup>th</sup>, five days after **Uranus** passes behind the sun, and begins a morning appearance.

The **moon** is 5.7° to the upper right of Jupiter on the 8<sup>th</sup>; and appears near Aldebaran, 9<sup>th</sup>; Elnath 10<sup>th</sup>; Pollux 12<sup>th</sup>; Regulus, 15<sup>th</sup>; Spica 19<sup>th</sup>; Zubenelgenubi 21<sup>st</sup>; and Antares 23<sup>rd</sup>.

The moon (36% illuminated) fits into the same binocular field with the Beehive on the 13<sup>th</sup>.

### June

The evening sky is without a bright planet, although **Venus** and **Mercury** enter the sky late in the month, but they set before Civil Twilight.

Look for the crescent moon below Pollux on the 8<sup>th</sup>; near Regulus 11<sup>th</sup>; Spica 16<sup>th</sup>; Zubenelgenubi, 17<sup>th</sup>; and Antares on the 19<sup>th</sup>.

## The Stars

The great congregation that surrounds Orion slowly sinks in the west during the season. Sirius, Orion's belt, and Aldebaran lead the way into bright evening twilight. Their final appearances are around mid-May. Try to trace Hydra from its head, below Cancer and eastward under Corvus to near Zubenelgenubi.

One of my earliest astronomical memories is marveling at Gemini standing upright in the spring western sky. Along with Procyon and Capella, the Twins make an umbrella or arc above the horizon.

This opens the evening sky to the depths of intergalactic space. Use NCRA's [Seasonal Spring Messier Marathon sheet](#) to guide your observing schedule.

At Chicago's latitude, Vega rises at sunset on April 28<sup>th</sup>, followed by Deneb on May 7<sup>th</sup>. Altair joins its Summer Triangle duo in the sky after sunset on June 15<sup>th</sup>.

May 15<sup>th</sup> signals the first appearance of Fomalhaut in the southeast during morning twilight. The star gets little attention because of its distance from the ecliptic (ecliptic latitude -21.1°) and the travels of the bright solar system bodies.

In the morning sky, Capella makes its first morning appearance around May 23<sup>rd</sup>. Like Arcturus, Vega, and Deneb, Capella is far enough north to be seen both in the evening after sunset and before sunrise on the same night. Capella and Deneb are at nearly the same declination. On the

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*Observer's Handbook* list of the brightest stars, only Mirfak ( $\alpha$  Per,  $m = 1.8$ ) and Alkaid ( $\eta$  UMa,  $m = 1.9$ ) are farther north. (Polaris is on the list as well, but it is circumpolar. Mirfak and Alkaid are borderline circumpolar, depending on latitude.)

Begin looking for the Pleiades during morning twilight, another celestial signal that the solstice is approaching.

*Jeff*

## THE DRUNKEN DRAGON



Image of LBN 762 a.k.a. **Drunken Dragon** in Aries, by Mark Job, Minnesota Astronomical Society. This image is 238 x 300 second exposures (19.75 hours of exposure time) using a Stellarvue 130 telescope with a focal reducer and flattener. The camera used is a ZWO ASI2600MM Pro with a filter wheel with standard astro-imaging filter set (red, green, blue, H $\alpha$ , OIII, and SII). All of the equipment is on a Software Bisque Paramount MX+ and controlled by TheSkyX and NINA (Nighttime Imaging 'N' Astronomy) for sequencing and acquisition of the images. Mark's remote observatory is located in the Texas hill country (Bortle 1 sky).

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Did you know that only about 525 of our Region's 1,900 members receive this newsletter? That's less than one-quarter of the membership! Please help NCRAL get its newsletter out to the membership by encouraging fellow club members to add their email addresses to the NCRAL member database. Editors, please include this information in your affiliate's newsletter. It's one of the many benefits of belonging to the Astronomical League.

When one adds his or her email address to the NCRAL member database, he or she will receive direct notifications about the availability of **Northern Lights**. In addition, subscribers receive important and timely announcements about Regional conventions, elections, star parties, and so forth. Only blind addressing (Bcc:) will be used with this email list so that others will not see subscribers' email addresses. Email addresses will never be shared with or sold to outside entities.

No one will add your email address to this list for you, so you'll need to do it yourself. Sign-up takes only about a minute. Resubscribe if you recently changed your email address and are not receiving our notifications. You'll need to provide your name, email address, and astronomy club affiliation (or indicate A.L. membership-at-large) and let us know if you hold specific positions within your club. Go to the following case-sensitive URL to add your information to our database at <https://tinyurl.com/NCRAL> today, so you won't miss important future communications.

# NORTHERN LIGHTS

## REGIONAL OFFICER & LEADER CONTACT INFORMATION

### Chair: Alan Sheidler

**Bio:** Alan has been an active member of the Popular Astronomy club in the Quad Cities for 30 years and has held the offices of vice president and president. He is currently serving as the director of observing. Alan has been very involved in public outreach activities and in 2022 received the Master Level Astronomical League Outreach Award. He has also completed a number of AL observing programs including those for Double Stars, Globular Clusters, Planetary Nebulae, Venus & Mercury transits, and all four of the NCRA Seasonal Messier Observing Awards.

**Contact:** [Adsheidler@gmail.com](mailto:Adsheidler@gmail.com)



### Vice Chair: Bill Davidson

**Bio:** In the days of the Apollo missions, Bill first observed the moon (and sunspots!) with a 50x, 60mm JC Penny's refractor telescope. Not discouraged, 40 years later, he built and observes with a 6.25-inch achromatic doublet objective, f/10, 1600mm focal length refracting telescope. He recently retired as a college mathematics instructor, has been a member of the *Rochester Astronomy Club* (Minnesota) for more than 20 years, and serves as editor of the club's award-winning newsletter *Rochester Skies*. (Two-year term as Vice Chair; currently in his third term, 2023-2025.) As Vice Chair, Bill manages the Region's [membership awards and grants program](#).

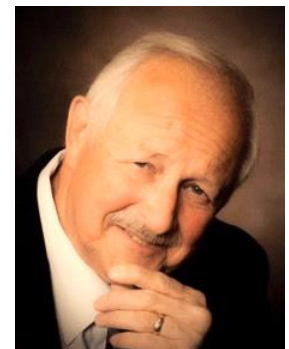
**Contact:** [rochesterskies@outlook.com](mailto:rochesterskies@outlook.com)



### Secretary-Treasurer: Roy Gustafson

**Bio:** Roy, a member of *Popular Astronomy Club* (Quad Cities), got interested in astronomy when visiting the Adler Planetarium in Chicago when he was in 2<sup>nd</sup> Grade. The star projected by the Zeiss Projector hooked him and started him on the path of astronomy. He has been active in outreach and has presented astronomy programs to over 20,000 people. He was awarded the **Master Outreach Award** from the Astronomical League. Roy travels with his telescopes and has observed both Transits of Venus and total solar eclipses in 2017 and 2019. Roy also taught astronomy at Black Hawk Junior College in Moline, IL. Roy retired from John Deere & Company after 32 years of service. As Secretary-Treasurer, Roy manages the Region's [observing awards program](#). (Two-year term as Secretary-Treasurer; currently in his third term, 2018-2024.)

**Contact:** [astroroy46@gmail.com](mailto:astroroy46@gmail.com)



### Regional Representative: John Attewell

**Bio:** John's interest in astronomy was kindled during two great comet events – comets Hyakutake (1996) and Hale-Bopp (1997). For the next ten years he used a 2½-inch refractor borrowed from his brother which he mounted on a rickety camera tripod. It wasn't until 2009 that he acquired a serious telescope as a gift from his family. He started attending meetings of the Rochester Astronomy Club in 2002, becoming a member in 2006, and Vice President in 2019. In 2017, he chaired the NCRA annual conference held at Eagle Bluff Environmental Center in Lanesboro, Minnesota, and served as NCRA Vice Chair from 2017-2019. John's particular interest is the history of astronomy. (Three-year term as Regional Representative; currently in first term, 2022-2025)

**Contact:** [john\\_attewell@hotmail.com](mailto:john_attewell@hotmail.com)





# NORTHERN LIGHTS

**Webmaster:** Jeff Setzer (appointed)

**Bio:** Jeff has been an amateur astronomer since 1984 and has been part of the *Northern Cross Science Foundation* (Wisconsin) since that time. He is a longtime member of their Board of Directors, has held several office positions, and is currently their President. He has completed several Astronomical League observing programs, made his own telescopes and optics, and is a self-described telescope nut. You will often find him at star parties with his 22" Starmaster and TeleVue 85 telescopes. Jeff is webmaster of the NCRAL website which can be found at <https://ncral.wordpress.com/>.

**Contact:** [astrosetz@hotmail.com](mailto:astrosetz@hotmail.com)



**Newsletter Editor:** Carl J. Wenning (appointed)

**Bio:** Carl has been an avid amateur astronomer since being introduced to the sky by his grandfather during July 1957. He has been involved with the *Twin City Amateur Astronomers* (Illinois) since September 1978. Today he is an **Astronomical League Master Observer** and spends most of his free time introducing nascent amateur astronomers to observing using his club's Celestron 11" and PlaneWave 20" telescopes. He also spends a considerable amount of time observing with his club's image intensifier and solar telescopes. Carl served as editor of his club's newsletter, *The OBSERVER*, from 2014-2021 for which he received the Astronomical League's *Mabel Sterns Newsletter Editor Award* in 2017. Carl served three consecutive two-year terms as NCRAL Regional Chair from 2017 to 2023. He also has served as the Region's **Northern Lights** newsletter editor from 2016 to present. He originated the **NCRAL blotter**, a monthly newsletter for affiliate leadership. He was recognized for his Regional education and outreach efforts in 2007 when he received the **NCRAL Region Award**. Carl served as planetarium director (1978-2001) and physics teacher educator (1994-2008) at Illinois State University in Normal where he resides. After retirement, he continued teaching parttime at ISU and Heartland Community College through the spring of 2022.

**Contact:** [carlwenning@gmail.com](mailto:carlwenning@gmail.com)

