CAPE FEAR Skies

Monthly Newsletter
Cape Fear Astronomical Society
Serving Wilmington, NC and Surrounding Areas

Cape Fear Astronomical Society is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code.

October 2023

President's Message

by Ben Steelman

One of the existential pleasures of amateur astronomy is, you don't have to deal with politics.

Except once a year, when we dip our toe in.

At the October and November meetings, I will call for nominations for officers in the Cape Fear Astronomical Society. Those nominated will be asked to indicate, in person or in writing, that they are willing to do the job.

Then, paper ballots will be distributed at the annual Christmas party, which will apparently be held this year at my house, 1610 Chestnut St. If for some reason we don't get a quorum at the Christmas party, the election will be held at the January 2024 meeting.

There are five elected officers in the Cape Fear Astronomical Society:

1. The President (currently yours truly). He or she presides at the regular meetings, appoints committees as needed, can call meetings of the Executive Board (essentially, the elected officers) to handle business between regular meetings and can call special meetings.

2. The Vice President (currently vacant). She or he basically presides at meetings when the President doesn't show up. The Vice President can also head up the society's outreach activities.

3. The Associate Vice President (currently Jon Stewart-Taylor). No. 3 in line. Also the Associate Vice President normally serves as Program Chairman.

4. The Secretary (currently George Pappayliou). He or she takes the minutes of meetings and holds onto Society records. For legal purposes, the secretary is the "Registered Agent" and files documents as required by law (non-profit status, etc.) He or she is supposed to notify members of upcoming meetings and events through social media.

5. The Treasurer (currently, Bill Cooper). Basically, the sorts of things all club treasurers do: Collect dues, deposit funds, keep track of Society bank accounts, pay bills and keep a roster of members who've paid up.

This might sound intimidating but most of these jobs require only a few hours per month. I hope you'll consider volunteering -- if not this year, then sometime in the future.

There are also two very important un-elected Society officers.

Hank Lyon is our AL Correspondent or ALCOR -- basically, our club contact with The Astronomical League, the major amateur astronomy organization in the USA. You need to check out the League website at www.astroleague.org. It offers books and calendars. It offers guidelines for observing programs in such varied fields as comet observing or binocular astronomy, and you can earn certificates. It publishes a magazine, The Reflector, it puts out an Observers Guide, and its annual conventions have some interesting speakers.

And we can't forget Karl Adlon, the esteemed and overworked editor of the Society newsletter Cape Fear Skies. If you want to sound off about anything, Karl loves contributions.

See you at next month's meeting on Oct. 8!

Calendar

October 2023

Date – Event – Time

06 Last Quarter Moon

06 Club Observing @ Starfields (the Club Observatory); 7:00 PM; 3rd Quarter Moon

07 Club Observing @ Starfields (the Club Observatory); 7:00 PM; 3rd Quarter Moon

08 ★ Cape Fear Astro Monthly Meeting ★

CFAS Monthly Meeting - 7:00pm – 9:00pm

212 DeLoach Hall; UNCW

Also simulcast via Zoom

09 Staunton River Star Party, Staunton River State Park, VA; ends Sunday, 10/15

13 Club Observing @ Starfields (the Club Observatory); 7:00 PM; New Moon

14 New Moon

14 Club Observing @ Starfields (the Club Observatory); 7:00 PM; New Moon

21 Orionid Meteor Shower; ZHR 20: First Quarter Moon

21 6 PM to 8 PM - International Observe the Moon Night Cape Fear Museum of History and Science 814 Market St, Wilmington, NC 28401

21 Public Observing; 07:00 PM; Public Observing Session; starts at sunset; Carolina Beach State Park

22 First Quarter Moon

28 Full Moon

Astro phenomena from:
https://www.universalworkshop.com/astronomical-calendar-any-year/

2023 Public Events

Please plan to join us for one of these events.

They are the last of the year!

October 21 - International Observe the Moon Night – Cape Fear Museum of History and Science

October 21 – Carolina Beach State Park

2023 Monthly Meeting Dates *and Presentation*

October 8, 2023
Jon Stewart-Taylor on the cell phone app AstroHopper

November 12. 2023
TBD

December 10, 2023 Holiday Celebration (and annual meeting) at Ben Steelman's, 1610 Chestnut St., Wilmington, NC

Special Interest Groups (SIGs)

Usual meeting dates – watch emails for exceptions

Phenomena:	First Wednesday
Both Eyes:	Second Tuesday
Telescope Usage:	Third Tuesday
New Astronomer:	Third Wednesday
Outreach:	Fourth Tuesday

Meeting Programs

by Jon Stewart-Taylor

Hi all. Because Dr Pericope is very busy due to her relocation to Mississippi State University and promotion to Associate Vice President for Research, they will be unable to do a presentation for us at our October meeting. Because of the short notice, I don't have anyone else on tap to do a presentation. So, I'll be doing a program on the AstroHopper Web Application which I'd planned to do in November.

If anyone would like to do a program in November, please send me an email. I'd love to hear what you have in mind.

Also, if you have a program in you but can't have it ready so soon, please let me know. We can work you into next year's schedule.

Thanks. Jon

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Girl Scout Astronomy Event

by Karl Adlon

An Explanation

I noticed one of the adults taking pictures. I told the Scout Leader, Savannah, that if she send a couple pictures, I could use them in our newsletter. I guess that since I set up close to the gathering building, I am in many pictures and, since Jon's Tour of the Solar System started nearby but stretched in the distance, he's only in one picture. (Or they liked my blue telescope and orange shirt.)

Last Saturday, Sept. 23, Jon and I did our thing for Pender County Girl Scouts.

(Left): I passed out the SkyMaps.com star chart and explained how to use the chart.

(Right): For a while there were broken clouds and ~25 adults and scouts glimpsed the Moon at 65X.

(Left): Jon set up the Tour of the Solar System and talked about objects from the Sun to Jupiter with spacing between to scale.

(Left): Looking up, fruitlessly wishing the cloud break would return.

(Right): This scout told me she had been to Space Camp. Here I show her my astrophotos I stored on my cell phone.

When I first arrived it was still light out, so I set up my scope, aimed it at the U. S. Flag in the distance. It was so far away, many scouts didn't realize what the were looking at until it was pointed out to them. One it was too dark for the flag, I aimed it at a street light even further away at the entrance to the farm.

Then I remembered I had it and I set up my laptop in the back of the SUV and ran a video I took of the Moon last year in case International Observe the Moon Night was cloudy. Several times I had to explain that it was not a live view, but was a recording.

My 'Take' on This Event and Other Public Events

As I told Savannah in response to her email, my "thing" is *showing people things through the telescope*, preferably things in the sky but something lit in the distance sometimes has to do. Maybe I should have a battery operated lighted *something* that I can place way in the distance that I could aim my scope at for viewing when it's cloudy.

Yay! Unlike the State Wide Star Party, I used a less expensive 1.25" SVBONY 32mm Plössl eyepiece. Even after very young through not so very young looking through the eyepiece, inspecting it the next day I was surprised to not see anything that I needed to clean! Apparently the eye lens is recessed enough that not even eyelashes touch the glass. So I'll use this in the future and a Barlow for higher power if desired.

There wasn't much interest in the sky maps, probably because it was cloudy, so no stars to connect to the sky map.

My old video of the Moon through the scope I brought generated some interest – I should prepare a better discussion of some specific landmarks and what they show.

I should also remember, when showing my astrophotos, as Jon so kindly reminded, that this is not how the object looks through the eyepiece. The human eye can't see the colors that the camera records and the view through the scope is often not as wide a view as the camera shows.

So would I do it again?

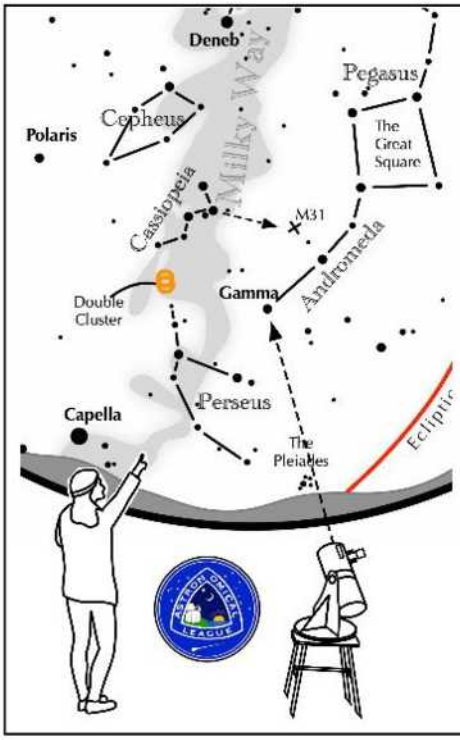
YES!

Many members of the public haven't looked through a telescope or not our size and quality of telescope. Many are surprised and enjoy seeing how the scope makes the distant object (terrestrial or not) appear much closed.

And Savannah has asked if we might come back next year!

Astronomical League Information

ASTRONOMICAL LEAGUE Double Star Activity



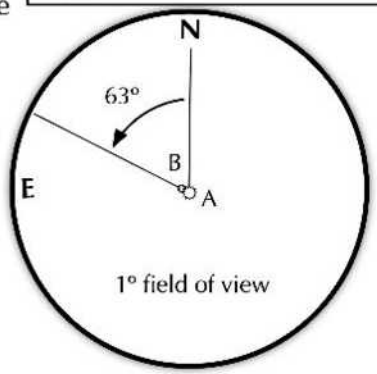
Other Suns: Gamma Andromedae

How to find Gamma Andromedae on an October evening

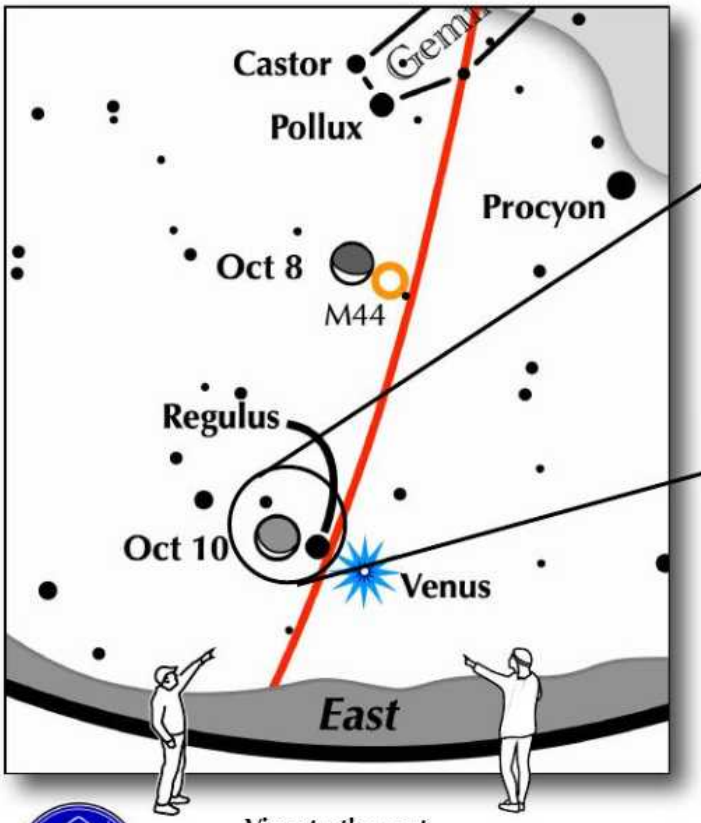
Face northeast. Find the Great Square and the curve of stars extending to the lower left. This is Andromeda. Gamma is the third star on the string and is as bright as the major stars of the Big Dipper. From the "W" of Cassiopeia, Gamma lies to the lower right.

Suggested magnification: 40x
Suggested aperture: >2 inches

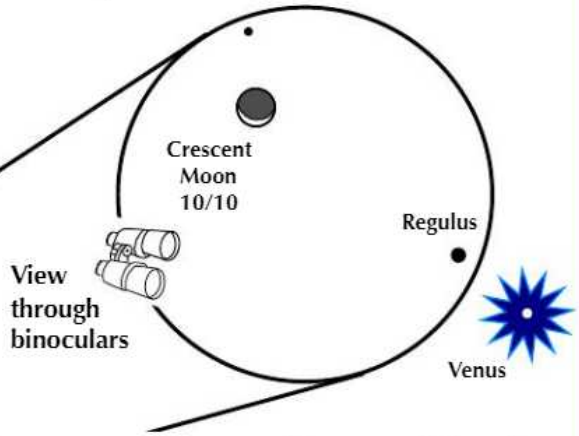
Gamma Andromedae
A-B separation: 9.7 sec
A magnitude: 2.3
B magnitude: 5.0
Position Angle: 63°
A & B colors:
orange, blue



In the early morning on October 10, try this challenge:



View to the east
on October 10
90 minutes before sunrise



Crescent moon meets Venus and Regulus

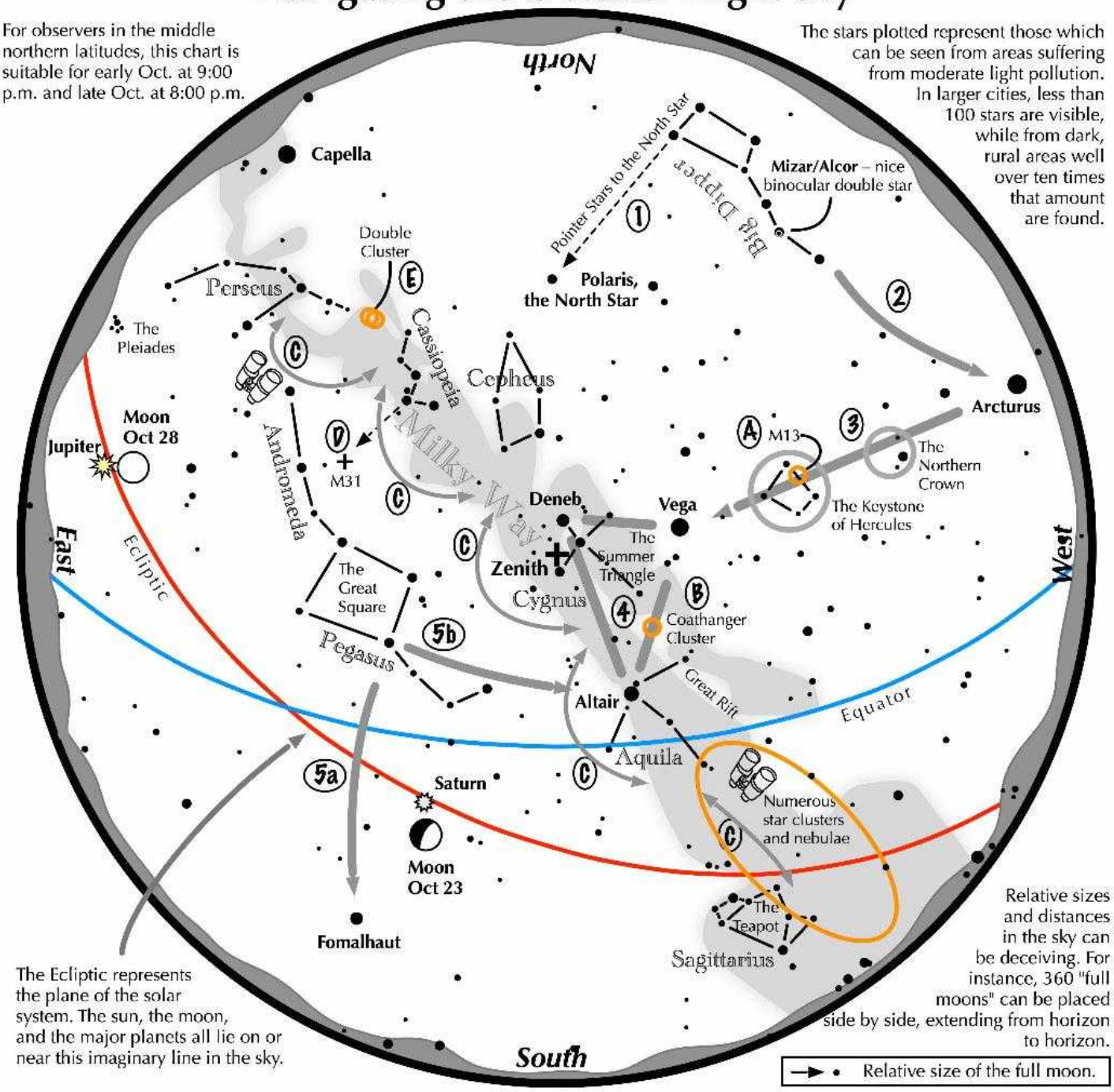
On the morning of October 10, the crescent moon, glowing full with earthshine, floats left of brilliant Venus. Look 90 minutes before sunrise.

Between them, shines Leo's brightest star, Regulus.

Two mornings earlier a thicker crescent moon was near M44, the Beehive star cluster.

The meeting of the crescent moon and Venus also occurs on the mornings of November 9 when the moon nearly covers Venus, and of December 9.

Navigating the October Night Sky



Navigating the October night sky: Simply start with what you know or with what you can easily find.

1. Extend a line north from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
2. Follow the arc of the Dipper's handle. It intersects Arcturus, the brightest star in the early October evening sky.
3. To the northeast of Arcturus shines another star of the same brightness, Vega. Draw a line from Arcturus to Vega. It first meets "The Northern Crown," then the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.
4. Nearly overhead lie the summer triangle stars of Vega, Altair, and Deneb.
5. High in the east are the four moderately bright stars of the Great Square. Its two southern stars point west to Altair. Its two western stars point south to Fomalhaut.

Binocular Highlights

A: On the western side of the Keystone glows the Great Hercules Cluster, a ball of 500,000 stars. **B:** 40% of the way between Altair and Vega, twinkles the "Coathanger," a group of stars outlining a coathanger. **C:** Sweep along the Milky Way for an astounding number of fuzzy star clusters and nebulae amid many faint glows and dark bays, including the Great Rift. **D:** The three westernmost stars of Cassiopeia's "W" point south to M31, the Andromeda Galaxy, a "fuzzy" oval. **E:** Between the "W" of Cassiopeia and Perseus lies the Double Cluster.

Astronomical League *www.astroleague.org/outreach; duplication is allowed and encouraged for all free distribution.*

Get to Know YOUR Astronomical League

The Astronomical League (Astroleague or AL) is one of the largest amateur astronomical organizations in the world. The organization serves to encourage an interest in astronomy (especially amateur astronomy) and promote the science of astronomy by:

- ✓ fostering astronomical education;
- ✓ providing incentives for astronomical observation and research;
- ✓ assisting communication among amateur astronomical societies.

CFAS is one of over 300 member societies affiliated with the Astroleague. Your membership in CFAS allows you take full advantage of this relationship so periodically review the information below to see how the Astroleague can support your astronomical interests and endeavors.

Astroleague Home Page	www.astroleague.org
AL News Page	https://www.astroleague.org/news-2/
AL Observing Programs *(Alphabetical Listing)*	https://www.astroleague.org/alphabeticobserving/
Celestial Savings *(Vendor Discount Program)*	https://www.astroleague.org/celestial-savings/
AL Member Society Aids	https://www.astroleague.org/aid-for-member-societies-of-the-astronomical-league/
Current and Past Issues of *Reflector Magazine*	https://www.astroleague.org/reflector/

The Astroleague Correspondent (or ALCor) is your link between CFAS and the Astroleague. Don't hesitate to contact your ALCor if you need assistance with anything Astroleague related whether its general information or detailed coordination of observing program completions for certification. Check back each month to see any new links, postings or reminders.

CFAS Correspondence:

Please contact the society at: CFAS, P.O. Box 7685, Wilmington, NC 28406

Members are welcome and encouraged to submit articles or other input for *"CAPE FEAR SKIES"*. Submit any and all interesting items for publication to Karl Adlon, Editor (email kmja79@yahoo.com).

Cape Fear Astronomical Society is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code.

CFAS Officers:

President:	Ben Steelman
Vice-Pres:	Brendan O'Byrne
Associate VP	Jon Stewart-Taylor
Secretary:	George Pappayliou
Treasurer:	Bill Cooper
ALCor	Hank Lyon

Dues: Dues for 2023 are $25 for Individual and $32 for Family Membership. Students dues are $5 per year.

Mail to :CFAS, P.O. Box 7685, Wilmington, NC 28406

Contact Us:

You can contact CFAS at info@capefearastro.org

Our website is http://www.capefearastro.org/