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.

July 2023

President's Message

by Ben Steelman

One of my favorite websites is Phil Plait's "Bad Astronomy" (BadAstronmomy.com). Or was -- Phil shut down his blog about a year ago, and really hasn't updated his site in a decade.

Which is a shame: Plait, a professional astronomy would provide good, concise debunkings of such nonsense as The Giant Face on Mars or "The Apollo landings were faked in a movie studio at Area 51."

He was often at his best in going after the boners in Hollywood movies. Some of his best pans are still upon the Bad Astronomy site, although he's years behind.

I say all this because I wish I could read what Phil Plait thought of "Asteroid City," the new movie by director Wes Anderson, who did "Rushmore," "The Royal Tennenbaums," "Moonrise Kingdom," "The Grand Budapest Hotel" and other arch-hipster movies. (A rave review for "Asteroid City" praised its "eccentricity," which gets it about right.

As you may be aware if you saw the previews, "Asteroid City" is set in 1955 at a "Young Stargazers" convention at a meteor crater somewhere on the "California-Nevade-Arizona border." Things are thrown awry when an alien starship lands in the midst of proceedings, and an alien hops out and steals the site's meteorite. (He brings it back later.)

To be precise, "Asteroid City" is about a Broadway production of a drama about the above plot. This is a story within a story. Almost all the landscape around the little desert town is composed of painted or obviously stagy backdrops.

I suppose this is a signal that we shouldn't take all of this seriously, but astronomy really takes a whacking in this. It's clear that, for almost all the characters, astronomy is dull, dull, dull. The little kids are bored with the Solar System and want to talk about anything else.

There's an astronomer on hand, Dr. Hickenlooper (played by actress Tilda Swinton), a clearly embittered spinster. She leads the group in viewing an "astronomical ellipse," which shows up when three meandering heavenly bodies line up like this: ●●●

Participants are instructed to place cardboard boxes over their heads while viewing this phenomenon; otherwise, Dr. Hickenlooper explains, the three red dots will be burned into their retinas forever. (That happened to her when she was 11.)

So, astronomy is not just dull; it's silly.

Incidentally, there's a kind of science fair going on, with high school kids developing things like jet packs and ray guns. One of them, Woodrow, has come up with technology that can project an image of an American flag on the Moon. That's probably less harmful, overall, than the StarlLink mini-satellite array.

By the way, the alien -- played by Jeff Goldblum -- comes from the planet Magnavox (actually one of the moons). Woodrow has younger sisters named Andromeda, Cassiopeia and Pandora.

Speaking of sci-fi, by the way, the second installment of the latest "Dune" version is scheduled for November, while "Rebel Moon," which sounds a lot like a reboot of "Star Wars" (evil space empire, plucky little planet, etc.) is scheduled for Dec. 22.

Calendar

July 2023

Date – Event – Time

03 Full Moon

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

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

09 ★ Cape Fear Astro Monthly Meeting ★

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

212 DeLoach Hall; UNCW

Also simulcast via Zoom

10 Last Quarter Moon

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

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

17 New Moon

22 Public Observing; 08:00 PM; Public Observing Session; starts at sunset; Carolina Beach State Park

25 First Quarter Moon

27 South Delta Aquarid Meteor Shower; ZHR 25; Waxing gibbous moon

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

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

2023 Public Events

Watch this space for 2023 Public Events. If you haven't done one before, perhaps make a New Year resolution to try on – you might like it!

July 22 – CBSP

August 26 – CBSP

September 23 – CBSP

October 21 - International Observe the Moon Night – Location TBD

October 21 – CBSP

CBSP = Carolina Beach State Park

2023 Monthly Meeting Dates *and Presentation*

July 9, 2023
Allen Hillburn and Ronnie Hawes; CFAS at 40, club history.

August 13, 2023
(Tentative): Field Trip to Ingram Planetarium

September 10, 2023
Frank Rich on Eyepieces

October 8, 2023
Dr. Narcisa Pricope, UNCW Earth and Ocean Sciences; topic TBD

November 12. 2023
OPEN

December 10, 2023 (Date and time may change for Holiday Celebration)
Holiday Celebration (and annual meeting?)

Potentially, a New Direction

by Karl Adlon

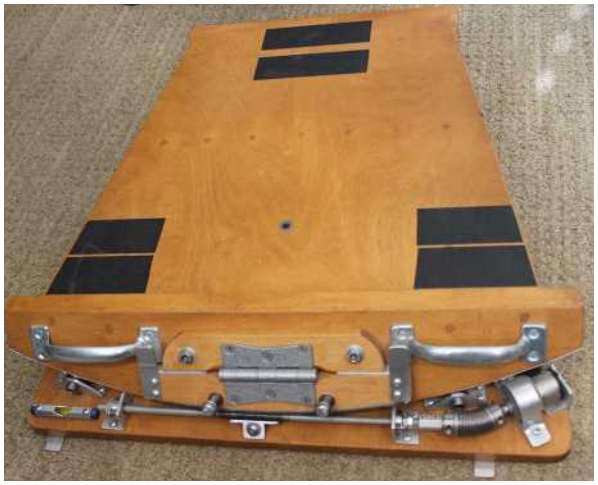
The title only means more emphasis on one thing and a little less on others.

Using the 18" Dobsonian for the first time in a long time has motivated me to use it more often. I sanded and cleaned the teflon pads for a little bit better movement, assembled the OTA and put it on a yard cart. Now I can move it to the patio rather easily, so I'm hoping to use it more.

With the cell phone holder I built and AstroHopper, aiming the scope at targets should be much easier (I wonder if I need a finder scope now?). So I (we, at star parties) can spend more time looking at things.

More potential:

When using high magnification, like for the Moon and planets, the target can move out of the field of view in a minute or less.



I have an equatorial platform (pictured at right) that I have used in the past but not too often.

Equatorial platforms are designed to rotate the top plate (table) about an axis aligned with Earth's axis so that a scope or tripod placed on the table will track stars and nebulae for about an hour, at which time the table is tilted too far and needs to be reset, which is not difficult.

One difficulty can be polar alignment which can be time consuming for best alignment. Best to leave it set up for several nights in a row if possible.

Deep sky astrophotography *may* be possible. It depends on being able for my Canon camera to attain focus. I need to see of the focal plane is sufficiently extended from the focuser that the camera will focus. If not, I'll need to shorten the 8 truss tubes. I'll probably need to attach some weights at the rear to compensate for the camera weight at the front.

And, I would love to be able to track and video record a planet and I'll have to see if that can be done sufficiently. If the planet drifts off the camera sensor, fine adjustments would be necessary. However, like many Dobsonians, mine does not have fine adjustments and neither does the platform.

I hope to get a nice image of Saturn.

I hope you get to look through the 18".

A Few of Damain's Recent Images

Messier 13 (M13), also designated NGC 6205 and sometimes called the Great Globular Cluster in Hercules. If you look near the bottom, left corner, you will find NGC 6207, a spiral galaxy about 30 million light-years from Earth.

Note: Karl loves to find things in images that you need to look for to see.

Below, right: M57, The Ring Nebula. It is small, less than 4 arc-minutes across and, consequently, hard to image.

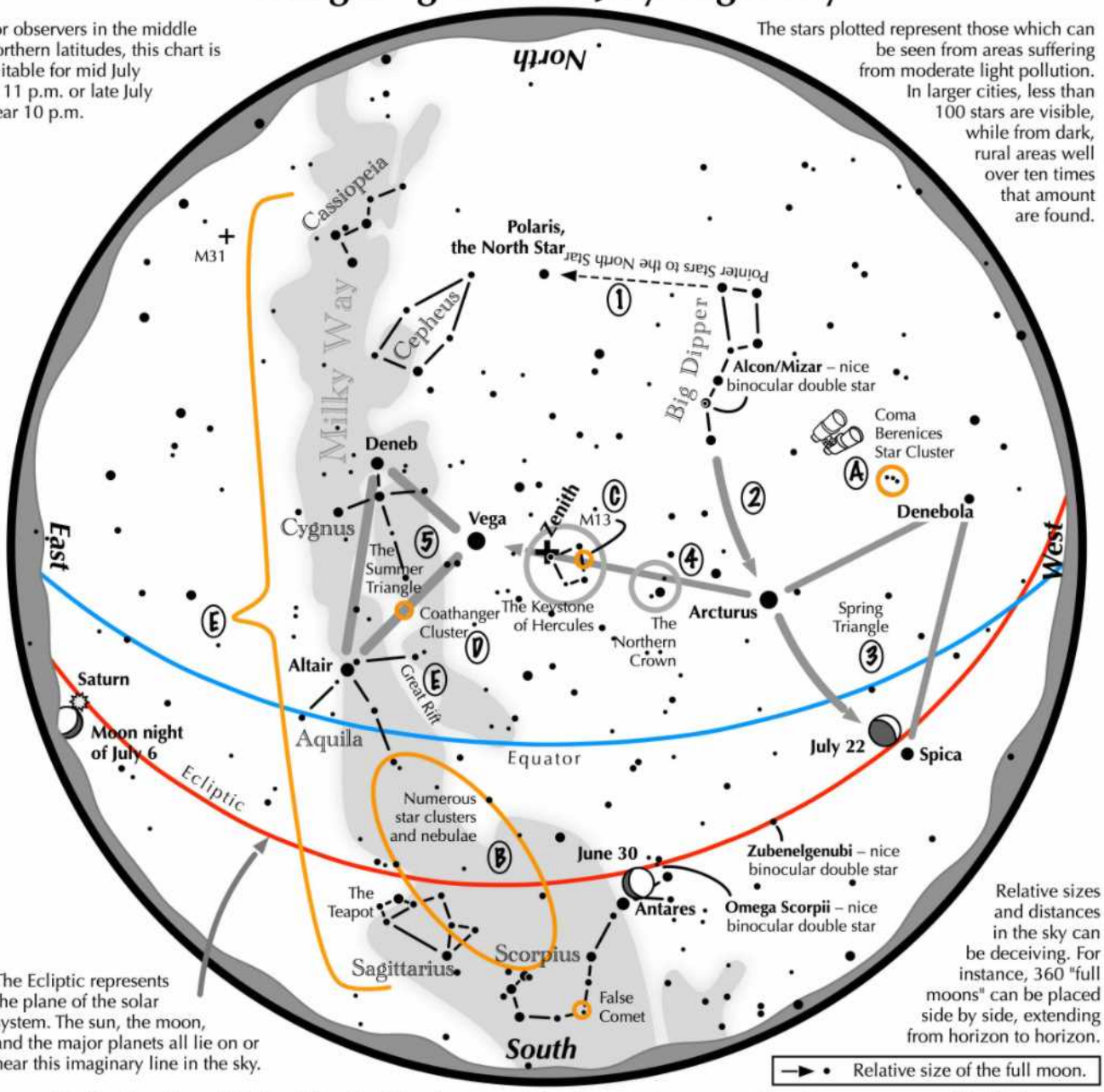
Below is M16, The Eagle Nebula. The associated cluster is pretty easy but seeing an eagle in the nebula has eluded me.

At right: The Helix Nebula, however, is large (about 25 arc-minutes).

Sue French, in Sky & Telescope's July 28, 2006 issue, writes *"On nights of good transparency, my 4.1-inch (105-mm) scope at low to medium power shows a 14'-by-11' oval glow elongated northwest to southeast. The center is slightly darker than the rim. Averted vision (directing your gaze to one side of the nebula) can help you see the nebula better, and O III and narrow-band light-pollution filters often work well. At high power, without a filter, some faint stars can be seen embedded in the nebulosity."*

Astronomical League Information

Navigating the mid July Night Sky



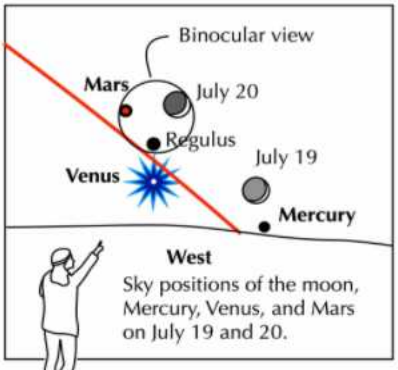
Navigating the mid July night sky: Simply start with what you know or with what you can easily find.

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 first intersects Arcturus, the brightest star in the July evening sky, then continues to Spica. Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.
3. To the northeast of Arcturus shines another star of similar brightness, Vega. Draw a line from Arcturus to Vega. It first meets "The
4. Northern Crown," then the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.
5. High in the East lies the Summer Triangle stars of Vega, Altair, and Deneb.

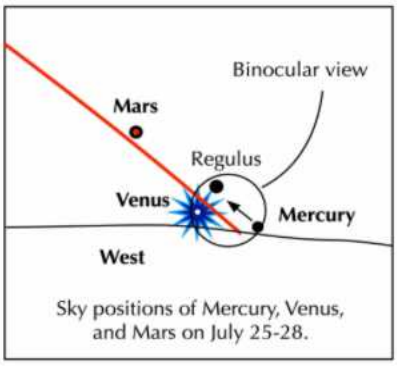
Binocular Highlights

A: Between Denebola and the tip of the Big Dipper's handle, lie the stars of the Coma Berenices Star Cluster.
B: Between the bright stars Antares and Altair, hides an area containing many star clusters and nebulae.
C: On the western side of the Keystone glows the Great Hercules Cluster, containing nearly 1 million stars.
D: 40% of the way between Altair and Vega, twinkles the "Coathanger," a group of stars outlining a coathanger.
E: Sweep along the Milky Way for an astounding number of faint glows and dark bays, including the Great Rift.

If you can see only one celestial show in the evening this July, see this one.



Sky positions of the moon, Mercury, Venus, and Mars on July 19 and 20.

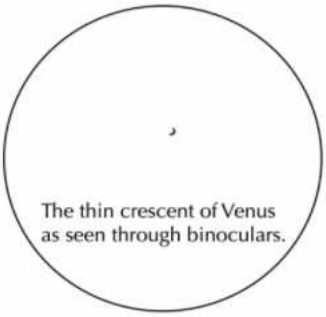


Sky positions of Mercury, Venus, and Mars on July 25-28.

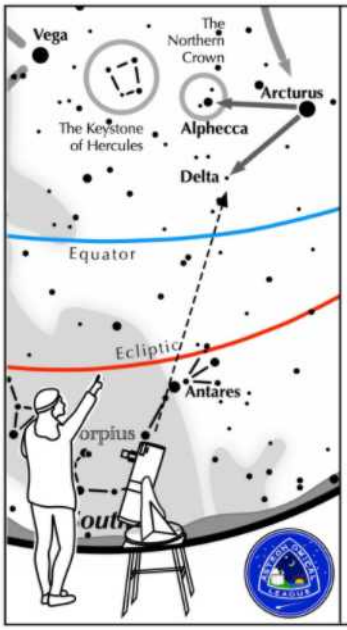
All the rocky planets, all at once!

On the evenings of July 19 and 20, look towards the west 30 minutes after sunset.

- Brilliant Venus will be seen as a tiny crescent in steadily held binoculars.
- On the first evening, the thin crescent moon, full with earthshine, hangs above Mercury. The little planet might be lost in the bright twilight.
- On July 20, the moon forms a triangle with Regulus and Mars. Venus sinks below them. Mars, having lost its splendor from last fall, might be difficult to spot in the bright twilight. Binoculars will help.
- Mercury climbs somewhat higher over the remaining evenings in July. On July 28, it lies directly next to Regulus, which has dropped much closer to the horizon. Venus may lie too close to the horizon to be spotted. Because of their low alittude, very clear skies and a low horizon are needed to see this.


The thin crescent of Venus as seen through binoculars.

ASTRONOMICAL LEAGUE Double Star Challenge



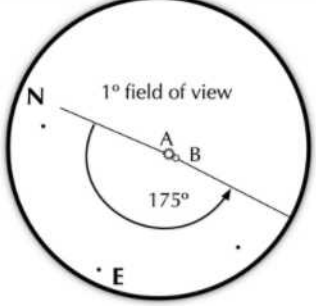
Other Suns: Delta Serpentis

How to find Delta Serpentis on a July evening

Find bright Arcturus, nearly overhead. To its northeast is a similarly bright star, Vega. One-third the distance between the two is Alphecca. Delta Serpentis lies the same distance from Arcturus as Alphecca, but to the southeast.

Delta Serpentis
A-B separation: 4 sec
A magnitude: 4.2
B magnitude: 5.2
Position Angle: 175°
A & B colors: white

Suggested magnification: >60x
Suggested aperture: >3 inches



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 *New Website!*	www.astroleague.org
AL Observing Programs *(Alphabetical Listing)*	https://www.astroleague.org/alphabeticobserving/
Navigating the Night Sky *(Monthy Guides and Links)*	https://www.astroleague.org/navigating-the-night-sky-guides/
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/
Additional AL News, Information and Reminders	The Astroleague's updated website is now in operation! Many of the old links are broken if you saved them. Above are some key links to help get you familiar with the new layout. There are a few missing links on the new website so please have a little patience as the AL works through the remainder of the transition process. Happy with your *Reflector* magazine delivery preferences (digital or snail mail)? If not, please let your ALCor know your preference. Your current CFAS ALCor is Hank Lyon, hlyon8448@gmail.com.

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.

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