



Happy 250th!
U.S.A!

Cape Fear Astronomical Society



CAPE FEAR *Skies*

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

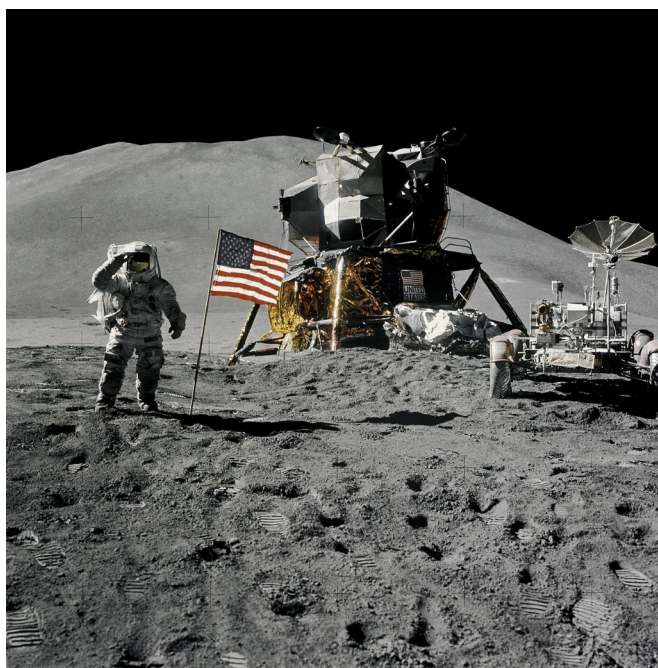
July 2026

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

"I have loved the stars too fondly to be fearful of the night." - Sarah Williams

★ ★ ★ ★ ★

AS15-88-11866 (1 Aug. 1971) --- Astronaut James B. Irwin, lunar module pilot, gives a military salute while standing beside the deployed **United States Flag** during the Apollo 15 lunar surface extravehicular activity (EVA) at the Hadley-Apennine landing site. The flag was deployed toward the end of EVA-2. The Lunar Module (LM) "Falcon" is in the center. On the right is the Lunar Roving Vehicle (LRV). This view is looking almost due south.



Hadley Delta in the background rises approximately 4,000 meters (about 13,124 feet) above the plain. The base of the mountain is approximately 5 kilometers (about 3 statute miles) away. This photograph was taken by astronaut David R. Scott, Apollo 15 commander. While astronauts Scott and Irwin descended in the LM to explore the moon, astronaut Alfred M. Worden, command module pilot, remained with the Command and Service Modules (CSM) in lunar orbit.

President's Message

by Karl Adlon

Happy July!

Our Nation was born on July 4th, 250 years ago!

July 20th marks 57 years since the first humans landed on the Moon!

This year, July 20 is on a Monday; should be Moonday!

And July 12, is our monthly meeting, and the Presentation is "Observing the Moon for Beginners" by Larry McHenry - An introduction to our nearest neighbor. The Moon is one of the favorite objects of stargazers. It is one of the brightest, easiest, and closest celestial objects to find. We'll learn about the Moon's phases and what features you can see with binoculars or a small telescope, along with lunar mythology from around the world.

Upcoming Calendar of Events

JULY

01 Special Interest Group (SIG) Zoom Meeting – 8 PM – General Astronomy

- 04 Mars-Uranus; 0.5 deg apart; 38 deg from sun; morning
- 07 Last Quarter Moon
- 10 Club Observing @ Starfields – 7:00 PM (last quarter Moon)
- 11 Club Observing @ Starfields – 7:00 PM (last quarter Moon)

Sunday, July 12

No Gastronomy this Month

Cape Fear Astro Monthly Meeting - 7:00pm – 9:00pm

Room 212 - DeLoach Hall; UNCW

Program: A Guest Presenter, via Zoom: "Observing the Moon for Beginners"

Also simulcast via Zoom

- 14 New Moon

15 Special Interest Group (SIG) Zoom Meeting – 7 PM – New Astronomers

- 17 Club Observing @ Starfields – 7:00 PM (New Moon)
- 18 Club Observing @ Starfields – 7:00 PM (New Moon)

18 Public Observing – 7:50 PM to 10 PM - Public Observing Session; starts at sunset; Carolina Beach State Park

- 21 First Quarter Moon

25 Blakeslee Air Force Rec Center observing, Kure Beach - 9 PM

- 25 Club Observing @ Starfields - 05:30 PM - Full Moon Planets
- 26 Club Observing @ Starfields - 05:30 PM - Full Moon Planets
- 28 Club Observing @ Starfields - 05:30 PM - Full Moon Planets
- 29 Full Moon
- 29 Club Observing @ Starfields - 05:30 PM - Full Moon Planets
- 31 South Delta Aquarids; ZHR 25; Waning gibbous moon
- 31 Club Observing @ Starfields - 05:30 PM - Full Moon Planets

Presentation Coordinator's Report

by Jon Stewart-Taylor

For July, we're receive "**Observing the Moon for Beginners**" by Larry McHenry

An introduction to our nearest neighbor. The Moon is one of the favorite objects of stargazers. It is one of the brightest, easiest, and closest celestial objects to find. We'll learn about the Moon's phases and what features you can see with binoculars or a small telescope, along with lunar mythology from around the world.

We still need presentations for August - November. If you have a presentation in you, or you know someone who would be willing to do one for us, please let me know so we can get it scheduled.

As previously mentioned, the December meeting will be our annual holiday celebration, held at Jon and Kathleen's house in Burgaw. (Which we've actually started moving into). If weather permits, we can include some observing from the yard, though the sky conditions aren't great in town.

Something About the Moon

by Karl Adlon

This article is about going to the Moon via the Apollo Missions. To navigate in space, the astronauts needed to learn some stars and aim the navigational computer telescope at them.

"NASA chose 37 navigational stars for the task, and from 1960 to 1975, a total of 62 NASA astronauts studied celestial navigation at the University of North Carolina's Morehead Planetarium and Science Center at Chapel Hill.

The planetarium director at the time, Tony Jenzano, was convinced that the astronauts NASA was planning to send into space — including Neil Armstrong, John Glenn, Alan Shepard and the crews from the Apollo lunar landings — needed to know the night sky just in case the navigation systems failed. In that event, these spacefarers would have to be reliant on their own knowledge and skills to land safely, Jenzano said.

Jenzano was also well-known for having a wry sense of humor. Astronaut Walter Schirra revealed in his biography what he described as a "wonderful con" that Jenzano and astronaut Grissom pulled off. In 1966, Grissom created three new star names, and Jenzano quietly incorporated these three names onto NASA's star list without telling anybody, noting them on existing stars: Dnoces, Navi and Regor. "
- Space.com

Navi, Regor, and Dnoces are three navigational stars that were famously renamed by astronaut Gus Grissom as a playful prank during the planning of the Apollo 1 mission. These names, which are the names of the Apollo 1 crew (and one special designation) spelled backward, were added to official NASA star charts and have since become a permanent memorial to the crew, who died in a training accident in 1967.

1. **Navi** (Gamma Cassiopeiae)

- Origin: "Ivan" spelled backward, which is the middle name of Command Pilot Virgil Ivan "Gus" Grissom.
- Star Info: Gamma Cassiopeiae is a fast-spinning, blue variable star located in the center of the "W" or "M" shape of the Cassiopeia constellation.
- Astronomy Recognition: It is often referred to as a "ghost" star because it lacks a traditional proper name, though it is one of the brightest in the constellation.

2. **Regor** (Gamma Velorum)

- Origin: "Roger" spelled backward, for Pilot Roger B. Chaffee.
- Star Info: Gamma Velorum is a bright, luminous Wolf-Rayet star system in the constellation Vela (the Sails).
- Astronomy Recognition: While "Regor" is a nickname, the star itself is sometimes called Suhail al Muhlif, but Regor became very popular in celestial navigation.

3. **Dnoces** (Iota Ursae Majoris)

- Origin: "Second" spelled backward, referring to Senior Pilot Edward H. White II (who was the second man to walk in space).
- Star Info: Iota Ursae Majoris is a star in the Ursa Major (Great Bear) constellation.
- Astronomy Recognition: Also known as Talitha.

These names were, for a time, included in the 37-star list used by the Apollo Guidance Computer:

- 01 Alpheratz – Alpha Andromedae
- 02 Diphda – Beta Ceti
- 03 Navi – Gamma Cassiopeiae
- 04 Achernar – Alpha Eridani
- 05 Polaris – Alpha Ursae Minoris
- 06 Acamar – Theta Eridani
- 07 Menkar – Alpha Ceti
- 10 Mirfak – Alpha Pegasi
- 11 Aldebaran – Alpha Tauri
- 12 Rigel – Beta Orionis
- 13 Capella – Alpha Aurigae
- 14 Canopus – Alpha Carinae
- 15 Sirius – Alpha Canis Majoris
- 16 Procyon – Alpha Canis Minoris
- 17 Regor – Sigma Puppis
- 20 Dnoces – Iota Ursae Majoris
- 21 Alphard – Alpha Hydrae
- 22 Regulus – Alpha Leonis
- 23 Denebola – Beta Leonis
- 24 Gienah – Gamma Corvus
- 25 Acrux – Alpha Crucis
- 26 Spica – Alpha Virginis
- 27 Alkaid – Eta Ursae Majoris
- 30 Menkent – Theta Centauri
- 31 Arcturus – Alpha Boötes
- 32 Alphecca – Alpha Coronae Borealis
- 33 Antares – Alpha Scorpis
- 34 Atria – Alpha Trianguli Australis
- 35 Rasalhague – Alpha Ophiuchi
- 36 Vega – Alpha Lyrae
- 37 Nunki – Sigma Sagittari
- 40 Altair – Alpha Aquilae
- 41 Dabih – Beta Capricorni
- 42 Peacock – Alpha Pavonis
- 43 Deneb – Alpha Cygni
- 44 Enif – Epsilon Pegasi
- 45 Fomalhaut – Alpha Piscis Austrini
- 46 Sun
- 47 Earth
- 50 Moon

Navigating the mid July Night Sky

2026

For observers in the middle northern latitudes, this chart is suitable for mid July at 11 p.m. or late July near 10 p.m.

The stars plotted represent those which can be seen from areas suffering from moderate light pollution. In larger cities, less than 100 stars are visible, while from dark, rural areas well over ten times that amount are found.

The Ecliptic represents the plane of the solar system. The sun, the moon, and the major planets all lie on or near this imaginary line in the sky.

Relative sizes and distances in the sky can be deceiving. For instance, 360 "full moons" can be placed side by side, extending from horizon to horizon.

→ • Relative size of the full moon.

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.
- 3 Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.
- 4 To the northeast of Arcturus shines another star of similar 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.
- 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.



M6 & M7

When these two big, bright, and beautiful open star clusters appear in the early evening in early July, summer is upon us.



If you have recently begun your journey under the stars, why not whet your appetite by exploring southeastern Scorpius and its two wonderful open star clusters, M6 & M7. You will return to them year after year!

While they are visible to the unaided eye from a dark location, binoculars help greatly.

1. Identify Scorpius standing low in the south-southeast on an early summer evening. As summer progresses, it ascends low in the south, then swings low in the southwest in the early fall.
2. From red Antares, direct your gaze southward down the scorpion's back, then turn eastward.
3. When its tail hooks northward, continue the length of that hook.
4. M6 and M7 should be plainly visible in the binocular field.

M6:

A faint hazy glow is seen by the unaided eye from a dark, clear site. Two dozen stellar lights can be discerned with 10x50 binoculars.

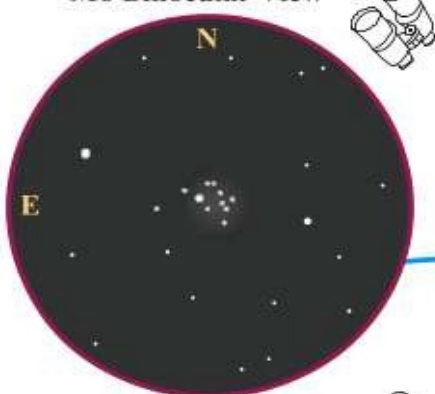
- Integrated Magnitude: 4.2
- Size: 33 minutes

M7:

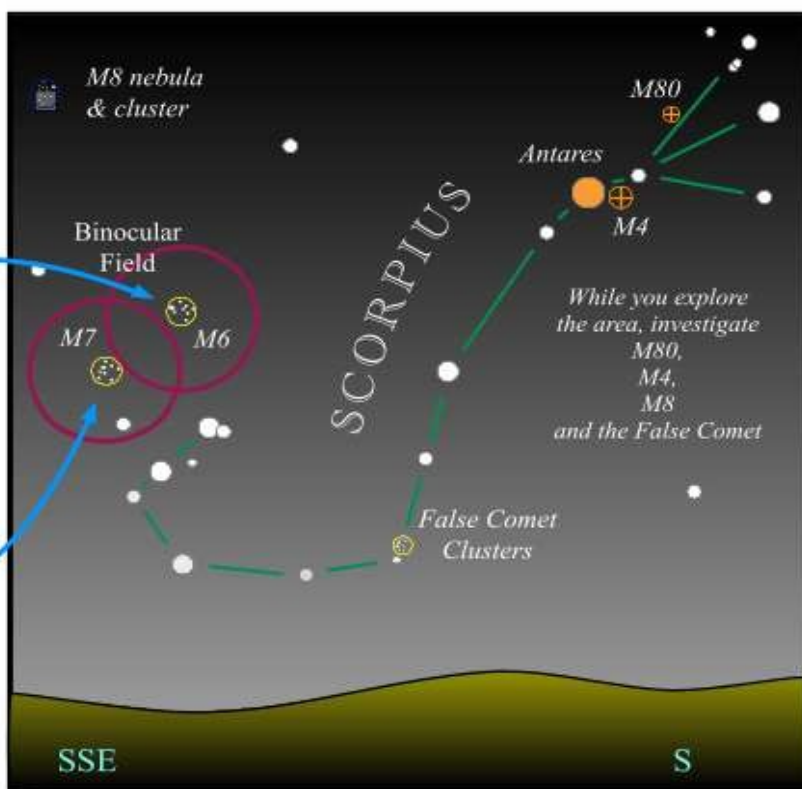
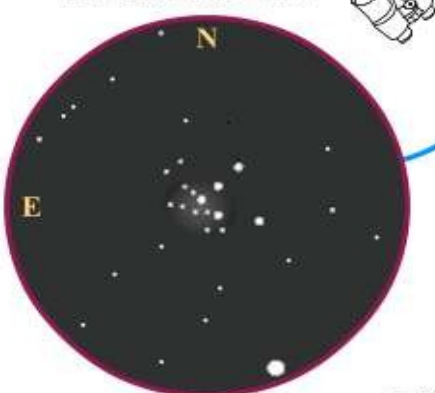
A glittery glow is easily spotted off the scorpion's tail by the unaided eye. Binoculars reveal many faint stars.

- Integrated Magnitude: 3.3
- Size: 80 minutes

M6 Binocular View



M7 Binocular View





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 AL links below to see how the Astroleague can support your astronomical interests and endeavors.

Astroleague Home Page

www.astroleague.org

Astroleague YouTube
Channel

<https://www.youtube.com/channel/...>

AL Observing Programs
(Alphabetical Listing)

<https://www.astroleague.org/alphabeticobserving/>

Night Sky Tools

<https://www.astroleague.org/navigating-the-night-sky-guides/>

Remembering Al Nagler

<https://www.astroleague.org/wp-content/uploads/2025/10/Nagler.pdf>

Current and Past Issues of
Reflector Magazine

<https://www.astroleague.org/reflector/>

Information: Click [HERE](#) for the Astroleague News Page and be sure to check the Astroleague Home Page weekly for new and important posts.

**AL Related News,
Information and
Reminders**

REMINDER - Beware of Fraudulent Emails appearing to originate from the AL.
Click [HERE](#) for more information.

Contact the CFAS ALCOR for any changes to your Reflector delivery preferences (US Mail, Email or Both).

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CFAS Correspondence:

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

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

CFAS Officers:

President:	Karl Adlon
Vice-Pres:	Damain Smith
Associate VP	Alan Hilburn
Secretary:	Jon Stewart-Taylor
Treasurer:	Ben Steelman
ALCor	Ben Steelman

Dues: Dues for 2026 are \$25 for Individual and \$32 for Family Membership. Students dues are \$7 per year.
Mail to: CFAS, P.O. Box 7685, Wilmington, NC 28406
Or you can pay electronically by following this link: <https://www.capefearastro.org/payment.htm>

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