



Charlotte Amateur Astronomers Club
www.charlotteastronomers.org

CAAC July 2023 Meeting

<p><u>Next Meeting:</u> Friday July 21st, 2023</p> <p><u>Time:</u> 7pm ET</p>	<p><u>Place:</u> <i>Myers Park Baptist Church Education Building – Shalom Hall (Basement) <u>Or</u> Zoom Virtual Meeting</i></p> <p><u>Address:</u> 1900 Queens Road Charlotte, NC 28207 <u>Or</u> Zoom web conference link (See newsletter info below)</p>
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Astronomy at Discovery Place

A look at the current astronomy related experiences at Discovery Place, as well as potential future experiences, and opportunities for collaboration with the Charlotte Amateur Astronomers Club

Speaker: George Booth

George Booth has been the Physical Science Experience Specialist at Discovery Place since October 2022. He is from Denver, Colorado, where he was a high school technology, graphic design, and astronomy teacher for 6 years. George has a bachelor's degree in Astronomy from the University of Colorado at Boulder, specializing in Planetary Science. Outside of work, George likes to hike, camp, play golf, and produce electronic music.

CAAC Virtual Meeting Login Instructions

1. If you have not used Zoom before, go to Zoom.com and download the Zoom program onto your computer.
2. **To Log In:**

Click on the meeting link below:

<https://us06web.zoom.us/j/82489334922?pwd=dWRsdDFkMjJOWFVNUFIIN1IFL1NoQT09>

If needed Meeting ID: **824 8933 4922**

Passcode: **893125**

This manual “log in” rather than invitation to everyone prevents all the emails showing up on the invite. This is a security issue for your privacy.

3. When on the Zoom screen to prevent chaos and overloading bandwidth:
 - a. Mute your microphone-icon lower left of screen
 - b. Mute Video icon on the lower left of screen.
 - c. You will be able to see and hear leaders of the meeting when they are speaking
4. If you wish to ask questions of the speaker after the main presentation:
 - a. Submit on the chat feature which is at the bottom of the screen. You will then type out your question and hit enter.
5. Excellent Zoom tutorials are available on You Tube:
 - a. <https://www.youtube.com/user/ZoomMeetings>

From the President:

Greetings Friends,

With summer comes the doldrums...stifling heat and little breeze to cool you. The atmospheric haze seems to be pervasive, pop-up storms are the norm and the humidity never drops below 100%. While the environment seems to be working against you, take the few opportunities you get and view the night sky from wherever you are. Sunday night I played "find the second magnitude stars" from my Bortle 8 backyard.

The officers met in June to discuss the coming year, here's a summary of what we discussed: Resurrection of the standing committees and the addition of two new ones. These include Room Set Up and Meeting Refreshments, and newcomers Audio/ Video and Webmaster/ Social Media coordinator. We will be looking for volunteers for these, be on the lookout for opportunities in your e-mail in the coming weeks.

2016 was the last survey of the membership and we believe that it is time to conduct another survey. We hope to have the new survey ready to deploy in the fall.

Our constitution calls for an annual audit of the club financials. This is an opportunity for one or more members of the club to review the books/receipts and verify that the funds as reported by the treasurer each month reflect the funds in the bank. The results of the audit will be presented at the first club meeting after the audit. If you wish to avail yourself of this opportunity, please contact one of the officers at your convenience.

Finally, it is with great sadness that I announce the passing of Joyce Riggsbee, longtime club member and wife of Gayle Riggsbee. Her support of the club through her tireless work on the Refreshment committee and acting as registrar for Southern Star for innumerable years will never be forgotten.

Clear skies,

Jim
CAAC President

Secretary's Report:

1. Please see below for the 2023 CAAC annual membership options:
 - Annual individual/family membership, which includes access to the CAAC dark sky [observatory](#) (GHRO) - \$60.00
 - Dues are collected at the October meeting and are pro-rated for members joining in January or later.
 - Students up to 18 years old - \$15.00 per year.
 - Private Observing Pads - additional \$25.00 per year.
Optional fee for members with private concrete observing pads at the club's dark sky location. Contact the Observatory Director for additional information.

Membership Applications are available through the CAAC Treasurer at monthly meetings. Click <https://charlotte-amateur-astronomers-club-2.square.site/> to navigate to the CAAC online store. Then select "CAAC Membership" to add it to your cart

2. The CAAC website, <https://charlotteastronomers.org/> has been updated to provide better service to our members with easier navigation, up to date announcements and postings, and accessible communication. Please explore and enjoy your new CAAC website.
3. If you are a former CAAC member and have not been keeping up with your membership dues, firstly please come back! We'd love to reconnect you with the love of astronomy through our club, use of GHRO observatory, and the camaraderie of our members.

Please also remember to return your badges on the table near the exit at the end of the meeting before you leave! Doing this will significantly reduce the chances of badges getting lost and reduce the amount of time (and cost) of having to re-create your name tag if it is lost. Thank you!

4. Register with the **Night Sky Network!** It is imperative that all members of the CAAC join the Night Sky Network (NSN). Many of the club's outreach activities are managed by the NSN, as well as club communications (newsletters, event notifications, general email). The NSN is a wonderful tool specifically designed for amateur astronomy clubs like ours. Membership allows you to contact other members via email, and receive last minute updates for outreach events via text message:
http://nightsky.jpl.nasa.gov/club-apply.cfm?Club_ID=1468&ApplicantType=Member Pre-Monthly
5. As mentioned in the President's note, we are seeking volunteers to participate in the following standing committees: Room Set Up, Refreshments, Audio/ Video, and Web Master/ Social Media. Please be on the lookout in the next couple of weeks for emails with more details and how to participate. Please contact the CAAC Officers and let us know which committee interests you.
6. The club is seeking participants for the Audit Committee. Additional information forthcoming.
7. The club is adding a new CAAC Astronomy Equipment Sales page to the newsletter. Please check out the offerings at the end of the newsletter.

8. Sign up for CAAC Slack / chat!

Chat with fellow astronomy and astrophotography enthusiasts on our discussion group. This is a free service, we are using the basic plan. See who's going to GHRO, ask questions, or just be sociable. You can access via webpage or native applications on all major platforms and mobile phones. Sign up, introduce yourself, talk to your peers, tell your stories, ask your questions, and share your wisdom!

Again, if you run into issues signing up, email Jamie at caac-slack@jamieandamy.com and he will help you get on the team.

My Do
CAAC Secretary

CAAC Treasurer's Report as of 6/30/2023

Operating Fund

Purpose: Enable the CAAC to pursue our non-profit goals, maintain our facilities, and run our programs.

*Funds are acquired through ongoing receipts of dues, fees, and annual Southern Star income (or expense).

*Funds are expended to meet operating obligations of the club.

1	Operating Fund Balance: 5/31/2023	\$33,507.42
2	Income: Dues and Fees	\$300.00
3	Expenses: Monthly Meeting GHRO Utilities (alarm, elec, internet) GHRO maintenance Service fee to accept credit cards	\$317.47 \$519.90 \$722.65 \$8.76
4	Operating Fund Balance: 6/30/2023	\$32,238.64

Non-Operating Funds

Purpose: Administer gifts and donations for designated use.

1	Non-Operating Fund Balance: 5/31/2023 Scholarship Fund CAAC Self Insurance Fund Contingency Fund	\$6,706.87 \$20,000.00 \$7,394.39
2	Income: Interest	\$4.21
3	Expenses or Transfers:	\$0.00
4	Non-Operating Funds Balance: 6/30/2023 Scholarship Fund CAAC Self Insurance Fund Contingency Fund	\$6,706.87 \$20,000.00 \$7,398.60

Scott Goforth
CAAC Treasurer

News from GHRO

1. The next Star Party is Saturday, August 19th beginning at dusk. Current forecast doesn't look promising, but hopefully it will clear.
2. Telescope training for new members (and those wishing to get a review) will be held on Saturday, July 22nd beginning at 6:30 PM. This training is required for all new members who wish to use the facilities at GHRO. The training will take place even if it is cloudy, it will be canceled only if it is actively raining or snowing. If it's clear, you can practice your newfound skills immediately after the training. To sign up please contact Rick Bassham.
3. Please follow the posted startup and shutdown procedures for any club owned scopes. This helps other members when they go to use our equipment.
4. Don't forget that the current sky conditions and weather and the Clear Sky Clock is found at the bottom of our homepage... <https://charlotteastronomers.org/>
5. The new telescope storage building near the all members pad is available for rent. The fee is \$10/month for a 3'x3' spot inside, with a 6 month minimum commitment. There are nine spots available. Users are encouraged to have their contents insured, as CAAC will not be insuring the contents of the building. Please see Rick Bassham if you have any questions.
6. A new state of the art imaging observatory has been constructed and contains a Planewave 12.5" CDK telescope on a Planewave L-350 mount. This roll-off-roof facility will be available for all members of the club who get training, and it will be operated from inside the Outreach Center. The telescope now has first light. Please contact Rick Bassham at ghro@charlotteastronomers.org to learn how to use it. As a primer, if you are new to astrophotography, check out the [NINA tutorial by Everyday Astro on YouTube](#). A special thank you to Dr. Jim Hermann for his generous donations.
7. Construction on the new solar panels is delayed pending permits from Lancaster County.
8. Anyone interested in the "Sponsor a Telescope" program, please reach out. My vision on this is to pair up CAAC members who want to learn more about a particular club owned telescope and/or help pass on the knowledge and history of our club scopes. There would be no monetary commitment involved, only some time. Ideally, we would have two members sponsor each telescope. Sponsors would be responsible for checking their telescope once a quarter and working with the observatory director to address any required maintenance or repairs needed. You would also be expected to attend a new-member training event once a quarter to help pass on your knowledge of the history and operation of the scope. As our club grows, maintenance and knowledge transfers become much more difficult to be done by just one person. If you are interested, please reach out to Rick Bassham (ghro@charlotteastronomers.org).
9. The complete GHRO calendar for 2023 is below:

2023 Star Party and Training Schedule

Month	Star Party Date	Moon Illumination	Training Date	Training Start Time (PM)
January	21	1%	28	4:30
February	18	5%	25	5:00
March	18	15% waning	25	6:00
April	22	7%	15	6:00
May	20	1%	13	6:30
June	17	1%	24	6:30
July	15	5%	22	6:30
August	19	9% waxing	26	6:30
September	16	2%	23	5:30
October	14	1%	21	5:30
November	11	4%	18	4:30
December	9	14% waning	No training in December	

Rick Bassham
CAAC Observatory Director

GHRO Information

GHRO is located at [1427 Bloomwood Drive, Lancaster, SC](#). (some GPS show city as Pageland). Gravel road leading to the observatory is located 5.22 miles east of the "522 Grill" on Taxahaw, Rd.

Facebook FAQ

<https://www.facebook.com/CharlotteAstronomers/> scroll down to NOTES, then Frequently Asked Questions page for more information about GHRO. Be sure to share your astronomy photos and observing tips.

Night Sky Network -- "Heading to GHRO"

For updates on GHRO, be sure to join the <https://nightsky.jpl.nasa.gov/index.cfm> "Heading to GHRO" message group.

As always, we care about the safety and security of all visitors to our observing facility, the GHRO. To keep us all mindful for the need to keep alert while visiting the observatory, we provide the following reminder. Please share this with your family and any visitors who may join you at the observatory. Thank you.

*** WARNING ***

This facility (GHRO) and adjoining area may contain uneven terrain, dangerous wildlife, low light conditions, and dangerous man-made obstacles.

By using this facility, users assume the risk of personal injury, and loss or damage to personal property. All persons should use extreme caution at all times.

Users of this facility agree to hold harmless the Charlotte Amateur Astronomers Club, its Directors, and its members for any and all injuries sustained while participating in club activities or using this facility.

CAAC Outreach Opportunities

Since last meeting:

- 6/20 Kids Are Kids Summer Camp Solar Viewing clouded out.
- 7/7 Matthews Glen Retirement Community presentation of "James Webb Space Telescope" by Ken Steiner.
- 7/18 Windsor Run Retirement Community presentation of "Cosmic Perspective" by Ken Steiner.

Scheduled:

- 7/29 Matthews Library Solar Presentation and Solar viewing, 2:00 PM
 - Solar telescopes and assistance are needed.
- 8/24 Providence Rotary Club presentation of "James Webb Space Telescope"

On Deck:

- 10/26 Charlotte Mecklenburg Library- Independence Regional Library, Solar Presentation and Solar Viewing, 2:30 PM
 - Solar telescopes and assistance are needed.
- 11/20 Southminster Retirement Community presentation of "Cosmic Perspective".
- TBD Catawba Lands Conservancy Star Party, Mount Pleasant, NC.

Ken Steiner
CAAC Public Outreach Coordinator

New! CAAC Astronomy Ad Listings

We are excited to add an astronomy classifieds section to our newsletter. If you would like to post an ad in the newsletter, please let us know at the beginning of each month and we will list your items. Please provide a brief description and your contact information. David Friday is the lucky first advertiser in the July 2023 newsletter.

- Item 23-001:** 1958 Criterion Newtonian reflector, 6" f/8 for sale with original mount. Asking \$600 with free delivery within the Charlotte area.
 - David Friday, wdfriday@twc.com 704-579-1778.

The Night Sky in July 2023

The sultry summer nights this month delight us with the Summer Triangle. The trio of bright stars that form this asterism are: *Deneb* in the constellation Cygnus, the Swan or Northern Cross, *Vega* in Lyra, and *Altair* in Aquila or the Eagle constellation. The Milky Way passes through Deneb and between Altair and Vega. You can use the Summer Triangle to guide you to other night sky objects such as Cassiopeia and Sagittarius.

The Summer Triangle also offers a host of interesting double and quadruple stars. In Lyra is Epsilon Lyrae, also known as the 'Double-Double', is a quadruple star system. It is a pair of stars but look closer and each star is a double star. The Epsilon Lyrae quadruple was first observed by William Herschel in 1779.

And in Cygnus, one can observe Albiero, considered "one of the most beautiful double stars in the sky, probably the finest in the heavens for small telescopes. The two components are known as Beta Cygni A and B. A is the primary member of the system, a golden yellow or "topaz" star shining at 3rd magnitude, while B is known as the companion, a fainter 5th-magnitude star with a beautiful bluish color."



Albiero courtesy of Night Sky Network, Richrd Yandrick

To find more information on the Summer Triangle, please visit: <http://www.nightskyinfo.com/objects/>

If you would like to download a map of each month's night sky, use this link, <https://www.skymaps.com/skymaps/tesms2307.pdf> to download and print the Evening Sky Map.

Of course, we welcome and encourage our CAAC members to come and visit the GHRO observatory to enjoy, learn, and observe the celestial wonders.

Endowment Corner

Gifts for the Present:

Cash

A gift of cash is simple, has immediate impact, and provides tax savings due to the charitable deduction that you can receive. The easiest way to make an outright gift is to write a check to the CAAC Stewardship Foundation.

To make a contribution or learn more, please visit
<https://charlotteastronomers.org/endowment/>

Ken Steiner
Chair, CAAC Stewardship Foundation

CAAC CONTACTS

President	Jim Gaiser	president@charlotteastronomers.org
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