



Charlotte Amateur Astronomers Club
www.charlotteastronomers.org

Next Meeting: Friday, July 21th, 2017
Time: 7:00 PM
Place: Myers Park Baptist Church
Address: 1900 Queens Road

CAAC July 2017 Meeting

CAAC "Show and Tell" Program

This month we are going to bring back a program format that has been popular in years past. Several members will share some the things they are doing. We have three speakers for this week's meeting.

Samuel Mask will talk about his experiences as a beginning astrophotographer – how he got started and what he is learning from others.

Frank Westmoreland will show us how the Nikon P900 can be used to take great pictures of the upcoming solar eclipse.

Jack Howard will demonstrate some astronomy projects you can get involved in with your computer. Stuck at home? Cloudy outside? No problem!

FROM THE PRESIDENT:

This month included the first meeting of the newly organized Board of Directors. The Board now includes in addition to the Officers the Outreach Coordinator, Southern Star Chairperson and two at large members. The intent of this change is to provide more representation of the membership concerning the decisions made on behalf of the club.

I am delighted with the members of the board and that we had 100% participation at our first meeting. It is anticipated that this board will meet regularly 4 times per year with additional meetings if needed for an issue needing action.

Beginning with this newsletter we will include highlights of the board meeting to keep the membership informed concerning actions of the board. Your questions and suggestions are always welcomed.

Ken Steiner, President

Highlights of CAAC Board of Director's Meeting July 1, 2017

Attendees: Ken Steiner, President
Jack Howard, Vice President
Nazim Mohamed, Secretary
Benton Kesler, Treasurer
Chris Skorlinsky, Observatory Director
Kevin Moderow, Outreach Coordinator
Jim Gaiser, Chair Southern Star
Karen Achor, At Large Member
Joel Levy, At Large Member and General Counsel

Ken provided a recap and review of the member survey from last fall:

- 40% of members have been with the club 2-5 years
- 80% of members are 50+ years old
- 80% first heard of club through internet search
 - 4% through social media (this will probably trend upward)
- 70% of members requested that CAAC provide training or tutorials for astrophotography

Discussion followed on membership and retention of new members

Ken provided a review of the matrix from the past officer's strategic planning session:

- suggestion was made to provide more interesting visual for the meeting hall
 - astronomy props, telescopes, posters
- suggested that we have an updated handout for visitors
 - Action Item**: Nazim to draft the handout

CAAC Scholarship discussion:

- CAAC Officers need to formalize the process for scholarships, how applicants should be screened, selected and awarded.
- Increase awareness of scholarship program

Board discussed the various telescopes that are presently in the available as loaners and the recently donated telescopes. We will gather the various scopes and evaluate which ones to keep and which ones will be available for disposition. Presently donated scopes in storage include an 8 inch reflector, 8" Celestron OTA like new and an Obsession 15 inch.

Library Loaner program (From Sky and Telescope) was discussed

- Couple of units can be obtain to test in our loaner program
- Item for thought and consideration at next meeting

Upcoming programs:

- Astro moment to focus on Eclipse
- August meeting has potential for many visitors curious about eclipse
- Club's extra eclipse glasses to Kevin for distribution at upcoming outreach events with CMS students and CharMeck Libraries

Ken requested that board members make notes of roles and responsibilities for future document

Southern Star: Jim Gaiser to organize a meeting in July of his committee to review results from 2017 Southern Star Survey and start planning the program for 2018.

GHRO update

- Chris stressed need to get mentorship program going since the GHRO star parties is not a time to instruct new people on the operation of their scopes.
 - We are in need of chairperson for the Mentoring Committee
- Chris to research observatory sign for Taxahaw Road
- Two Liability signs have been purchased and will be installed
 - Chris to get price on large liability sign to fact the road
 - Item per recommendation of our General Counsel to address our liability exposure
- Decision**: Board voted to donate the Hog Roaster which is not being used to PARI
- Insurance will be coming due next month
 - Action item**: Ken to send out info concerning insurance when received
- Informed that land adjacent to GHRO has been purchased by hunt club, to remain rural
- Door frames at GHRO in need of repair
- Possible fence between 24 inch and parking lot to block vehicle lights

Meeting signs:

- Decision**: CAAC Board voted to purchase 3 new meeting signs

Future meetings of Board:

- Saturday mornings seems to work well for meetings
- Action Item**: Ken envisions 4 meetings per year and will send out suggestion dates

FROM THE SECRETARY:

ATTENTION:

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.

But, in addition to that over the next several weeks I will be undergoing a membership maintenance effort to identify former members who are not current on their dues. This is primarily for the following reasons:

- 1) Lack of space in the ID tag case. I will be removing old members from the case to make room for current & active members.
- 2) Re-use of the plastic 2x3 clip-on badge holders. Believe it or not, it's practically impossible to find new badge holders in the 2x3" size. Removing old members will allow me to reuse the plastic holders for our new members.
- 3) Clean up the newsletter and NSN email lists. If you are not current with your membership and would still like to receive the CAAC monthly newsletter and NSN emails for GHRO happenings, please renew your membership today! Please see Benton at the Treasurer's desk at the monthly meeting or renew online here: <http://www.charlotteastronomers.org/membership.htm>

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!

Register with the **Night Sky Network!** It is imperative that all members of the CAAC join the Night Sky Network (NSN). Many of the clubs 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

Meeting Gathering Several CAAC members gather at Panera Bread (601 Providence Road, just a few blocks from our meeting place) at 5:30 prior to the monthly meeting. Anyone interested in sharing a meal with them is welcome.

New signs coming to a CAAC Meeting near you!



As mentioned in the above Board of Director's meeting notes, new signs will be made available to help visitors and first-time members find out where exactly we meet every month for our monthly meeting



CAAC Treasurer's Report as of 6-30-2017

Part 1 of 3

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 net Southern Star income (or expense).
- Funds are expended to meet operating obligations of the club.

1	Operating Fund Balance: 5-31-2017	\$13,405.81
2	Income	
	Dues & Fees	210.00
	Prepaid Subscriptions	0.00
3	Expenses	
	GHRO Expenses	0.00
	GHRO Utilities	264.51
	Fees for Credit Card Service	8.76
	Meeting Expense	0.00
	Administrative	38.89
4	Operating Fund Balance: 5-31-2017	\$13,305.81

Part 2 of 3

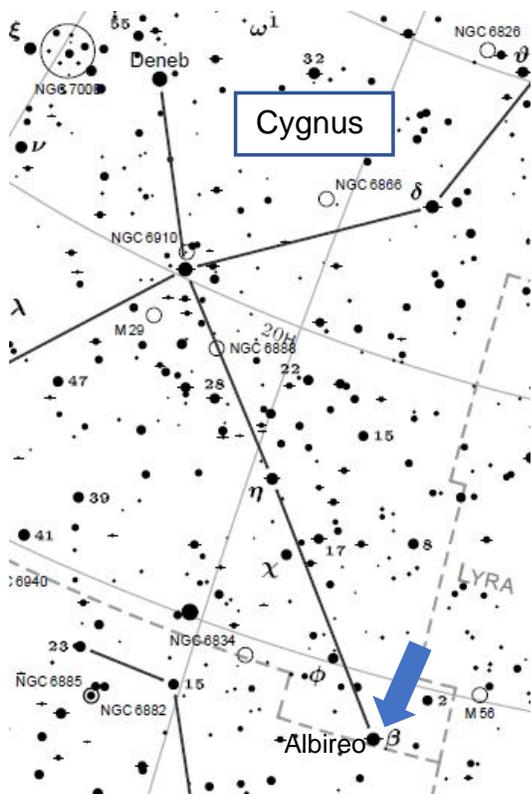
Non-Operating Funds

Purpose: Administer gifts and donations for designated use.

1	Balance 5-31-2017: Non-Operating Funds	
	Scholarship Fund	5,315.00
	Contingency Fund	20,552.00
	Long-Term Fund	2,921.50
2	Income	
	Donation: Bank of America	952.00
	Donation : Duke Energy	100.00
	Donation: Girl Scout Troop 3611	50.00
	Interest	0.71
3	Expenses or Transfers	\$0.00
4	Balance 6-30-2017: Non-Operating Funds	
	Scholarship Fund	5,315.00
	Contingency Fund	21,654.00
	Long-Term Fund	2,922.21

July Sky Challenge

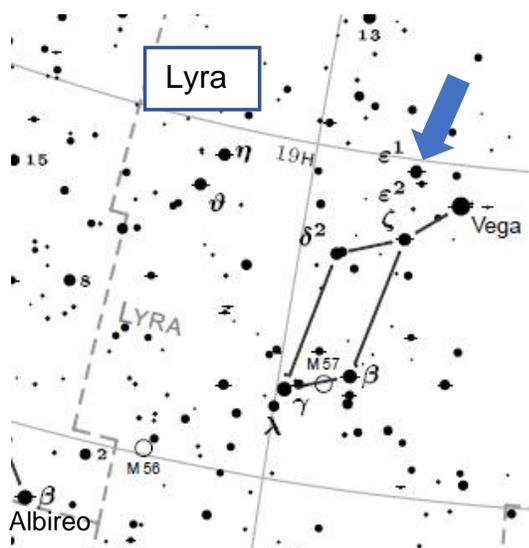
Are you looking for something to discover in the night sky? Try these with a modest size telescope, with some patience and persistence! Or come down to the GHRO and get a really fine look! This month, 6 interesting stars.



Cygnus, often informally termed the Northern Cross, represents the swan into which the god Zeus turned himself to seduce Leda, wife of the King of Sparta. The showpiece of Cygnus is not some large cluster containing hundreds of stars, but a lonely star that marks the head of the swan.

Albireo is 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. The two components have a wide separation of 35 arcseconds; this means that the system can be seen separately through the smallest of telescopes, and even with good binoculars.

Not too far from Cygnus and Albireo...



One excellent example of a multiple star is **Epsilon Lyrae**, a quadruple system commonly known as the Double-Double.

To the average eye Epsilon Lyrae appears as a single star, but small binoculars or even keen eyesight show it to consist of a wide pair of 5th-magnitude stars. Nothing spectacular until now, but if you use an aperture of at least 3-inches and high power you will find that each star is itself a close double!

These two pairs were first noticed in 1779 by William Herschel, the famous musician turned astronomer. Here is his observing log entry: “A very curious double-double star. At first sight it appears double at some considerable distance,

and by attending a little we see that each of the stars is a very delicate double star.”

Acknowledgements:

NightSkyInfo www.nightskyinfo.com/archive for target descriptions, adapted.
Mag Star 7 Star Atlas Project © 2005 Andrew L. Johnson for star maps (clipped)

What's Up in the Sky?

Highly Recommended Download and print a good *FREE* star map (including interesting objects to look for) monthly from:

Skymap <http://www.skymaps.com/downloads.html>

You'll also find a good monthly sky map in each issue of *Sky & Telescope* or *Astronomy* magazines.

New to the Night Sky?

Are you puzzled by folks in the club who point up in the sky and say "There's Gemini... and you can see Leo rising over there...and doesn't Regulus look clear tonight"? Are you trying to figure out where those darn constellations are? Those large star atlases are pretty intimidating... confusing... and expensive.

A good starting point could be called, *My First Star Atlas*... but in reality it is 4 simple but very helpful *FREE* star chart pages from the Stephen F. Austin State University – called **SFA Star Charts**. Pages 2 & 3 show you about 90% of everything you need to get started. There are even a couple pages that explain how to use a star chart. Clear and straight-forward.

Go to this link and print out the pdf file on the largest paper you have available, though standard letter paper is fine:

<http://observe.phy.sfasu.edu/SFAStarCharts/SFAStarChartsAll.pdf>

While these charts do not show the myriad of deep sky objects, they DO show the constellations and brightest stars – a good introduction to the night sky!

Happy Observing!

FOR SALE BY OWNER

BAADER AstroSolar Film for Sale. One piece only, 3 x 3-inches. NEW. In original supplier shipping and includes BAADER instructions for making a filter cell. \$10 cash.

mhoecker@bellsouth.net

UPCOMING OUTREACH EVENT

All CAAC members are invited to attend the Star Party at Camp T.N. Spencer on Aug. 12 from 7:30-10:30pm!

It is part of Mt. Pleasant Library's "Summer Celestial Celebration" that features several different events and culminates with the solar eclipse on Aug. 21. The event is coordinated by the Cabarrus County Active Living and Parks Department along with the Cabarrus County Public Library.

Camp T.N. Spencer is located at 3155 Foxford Rd, Concord, NC. Telescopes and expertise will be needed. Please contact Kevin for more information.

Kevin Moderow
CAAC Outreach Coordinator

News from GHRO – Chris Skorlinski, Director

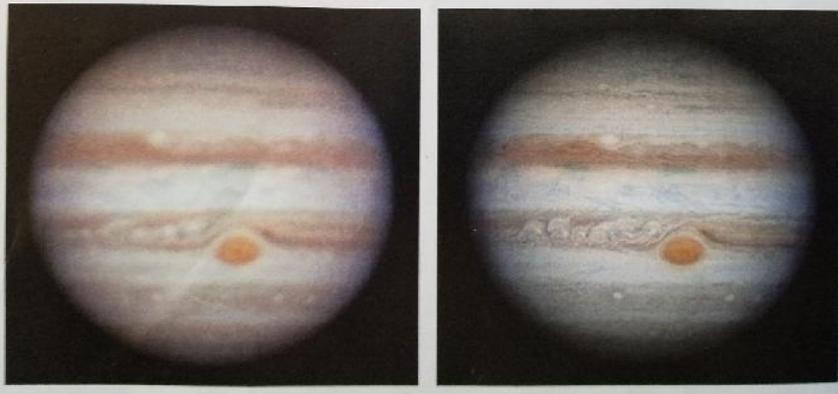
“Why Not Wednesday” - We had a great time with our last "Why Not Wednesday" we're doing it again this Wednesday, July 19th pending clear Carolina skies. Last time we had 50% cloud cover until 11pm allowing enough clearing to see Jupiter, Saturn, and a few globular clusters. Yes, we had to wait a bit for clouds to move along, just relaxing enjoying the peace and quiet of no traffic, no TV, no noisy neighbors, but that's all part of summer skies in Carolinas.

If not raining, come on down, Wednesday, July 19th, 7pm for Solar observing, or at 9pm for night time viewing. Stay 1 hour, 2 hours, or all night, we'll have plenty to see if the skies are clear.

Check out <http://skymaps.com/downloads.html> for downloadable list of objects and map for the July night sky.

“Seeing in Carolinas”

This time of year, you never know what SEEING conditions Carolina skies will bring. Some night we have still air, and the bands of Jupiter and other night sky objects are crystal clear, other nights, just blobs in the sky. Good news, we have plenty of nights ahead with both Jupiter, Saturn and wonderful nebulas in constellation Sagittarius to fill our Summer and Fall skies.



To learn more: [https://en.wikipedia.org/wiki/Sagittarius_\(constellation\)](https://en.wikipedia.org/wiki/Sagittarius_(constellation))

“Saturday, July 22nd CAAC Star Party” -- CAAC members and their guests are invited to CAAC's owned and operated Gayle H. Riggsbee Observatory (GHRO) near Taxahaw, SC. We have “open” pads for your telescope or just come down and look through one of our permanently housed telescopes. We'll have members driving the scopes, no experience required for viewing night sky.

If weather looks cloudy in Charlotte, it may still be clear the observatory. You can also call the observatory at 704-909-0604 for a recording of current event information or check our Sky Camera from our club's weather page at <http://charlotteastronomers.org/weather/>

Come down 2 hours before sunset and view sun through our H-alpha Solar scope, then stay and observe the night sky. For dinner, pack a picnic or stop at JoJo Backyard BBQ on way to GHRO. We can even bring out the BBQ or maybe shoot off a few Rockets!

Telescope Training

If you're already familiar with telescope operations, locating night sky targets, scope alignment, RA\DEC, finder scopes, eyepiece selection, filters, etc, and would now like to try out GHRO's 8" or 16" telescopes send me an email. We have members qualified on those scopes who can offer 1-1 training.

"Heading to GHRO"

Currently, we send out GHRO event notifications through email distribution lists maintained at Night Sky Network hosted by JPL and NASA. https://nightsky.jpl.nasa.gov/club/club-view.cfm?Club_ID=1468

In the past, we've sent GHRO noticed to all members, however, not all members are interested or able to attend events at GHRO. As of July 1st, we'll be sending GHRO event notifications to "Message Group" called "**Heading to GHRO**". You can **ADD ME** or **REMOVE ME** yourself from this group once your sign into Night Sky Network, select "My Profile", then "My Message Groups".

CAAC Home CAAC Website Events Locations Roster **My Profile** Message Groups

My Message Groups

CHRIS'S PROFILE MANAGE MESSAGE GROUPS ADD NEW MESSAGE GROUP

WHAT'S A MESSAGE GROUP?

Message Groups to which I belong

Manage	Message Group	View Group Members	Send a Message to this Group	Remove me from this Group
	Club Coordinators	View Group Members	Send Message	Not Allowed
	Club Contacts (Non-Members)	View Group Members	Send Message	Not Allowed
	Club Members	View Group Members	Send Message	Not Allowed
<input checked="" type="checkbox"/>	Heading to GHRO	View Group Members	Send Message	Remove Me

Groups I can view or join

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 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 CONTACTS

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