



Charlotte Amateur Astronomers Club
www.charlotteastromers.org

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

Our April meeting presentation is "**Charles Messier and His Catalog of Deep Sky Objects**". Mark Krochmal will giving a light overview of how Charles Messier (a very dedicated comet hunter) kept discovering objects which were not comets and how he started documenting them to let other comet hunters be aware of their locations. Mark will also review the seasonality of the objects and point out some of the biggest, brightest, and easiest ones to see. He will also share some of his observational comments from experience.

Mark Krochmal has been a CAAC member for many years and used the opportunity of being near the GHRO site to complete his observations of all of the Messier Objects. He was doing a lot of work "out of town", and his Messier project that he thought would take 1 year, ran on for 2½ years. Mark has had a long interest in astronomy, beginning with a 3" Edmund reflector which he got in May of 1963. He then progressed up through a 6", 8", 10" and his largest is a 12" Meade LX200.

More recently, after being a volunteer at the Pisgah Astronomical Research Institute (PARI), he was hired onto staff as an IT Support Manager. Today Mark still works at PARI and also gets to show the objects in the night sky to the public during their "Sky Trek" observation sessions. Join with us on April 21 to hear the story of Charles Messier and his list of "non-comets" at the CAAC!

FROM THE PRESIDENT:

This meeting is especially important because this is when we elect officers for the coming 12 months. Per our constitution a slate of officers will be presented for your approval. Nominations from the floor are permitted. In addition, two At large Board Members are to be elected. This is provided for in the constitutional changes the membership approved at the last meeting.

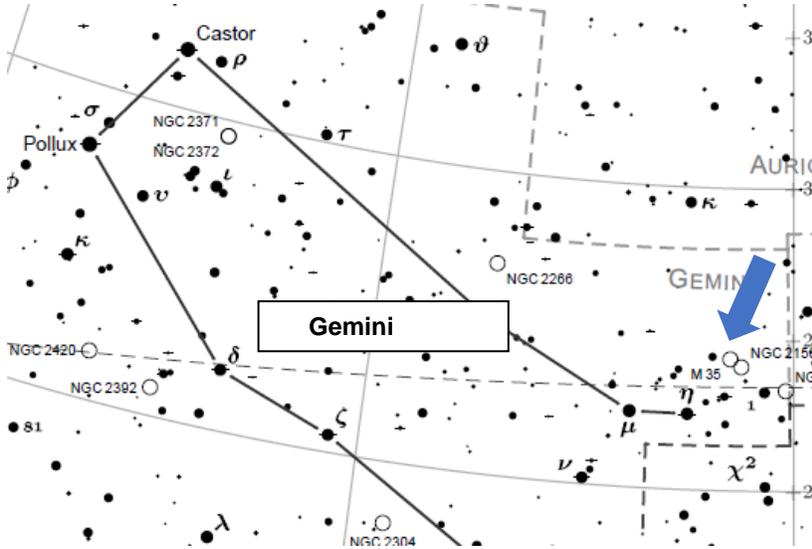
We have two events (weather permitting) on April 22. One is on the parking deck of Discovery Place and the other is near Mt Pleasant on property of the Catawba Land Conservancy group. I could still use some members with telescopes for the Discovery place location.

Sophia Mullis and yours truly presented a program at the Nature Museum last Saturday that was well received. This is part of their increasing Astronomy awareness along with the Planetarium that recently reopened. Hopefully this will be a step in the direction of more astronomy education at the Nature Museum.

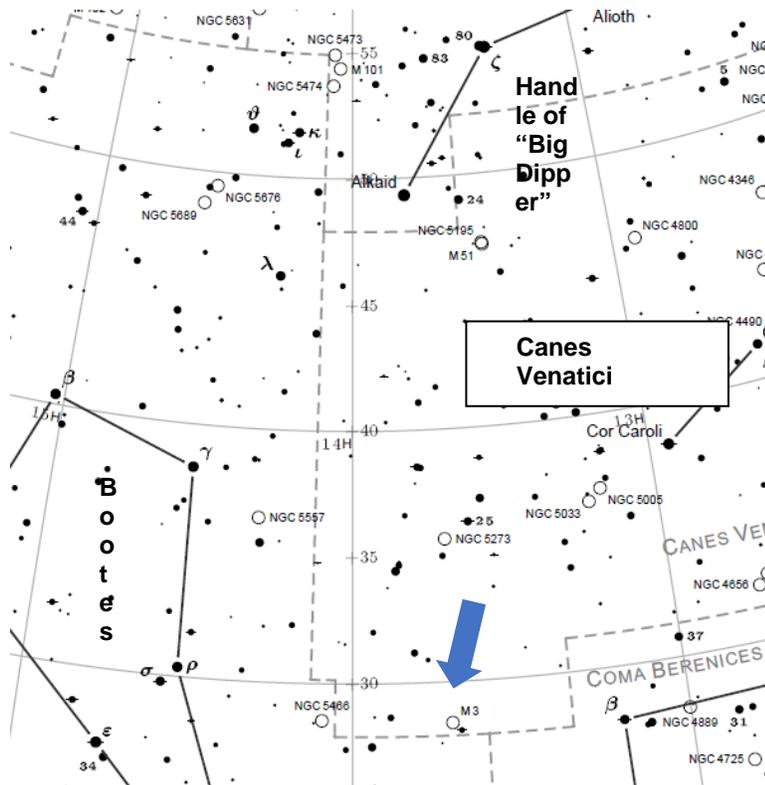
Ken Steiner, Club President

April 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!



Gemini
M35 Open Star Cluster
 ...can be found in the constellation Gemini, near the feet of the twins, close to the border with Taurus. It contains over one hundred member stars scattered across an area as large as the full Moon. Binoculars show the cluster as a mottled patch enveloped in mist, but small telescopes clearly show individual stars, of 8th magnitude and fainter. If you have never observed M35 before, this is a “must see” object.



Canes Venatici
M3 Globular Cluster
looks great even through the smallest backyard telescope. The cluster has a wide, bright center that accounts for about half of its apparent width. Surrounding the center are dozens of stars whose density gradually decreases with their distance from M3’s core. Larger telescopes with a high power will reveal hundreds of stellar points, massing to a central blaze, with glittering streams of stars running out on all sides. The French astronomer Charles Messier discovered M3 on the evening of May 3, 1764, and this marked an important point in the history of astronomy. Come to the April club meeting to hear more about Messier Objects!

Acknowledgements:
 NightSkyInfo
www.nightskyinfo.com/archive for target descriptions, adapted.

Mag Star 7 Star Atlas Project © 2005 Andrew L. Johnson for star maps (clipped)

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.

TREASURERS REPORT:

How Your Volunteer Time Supports The CAAC:

Volunteering your time in support of CAAC activities makes our club an ongoing success. Here are four examples:

1. GHRO Grounds Care: Three summers ago, we spent almost \$1,200 to cut the grass at GHRO. For the last two summers, we averaged \$350 per year. What changed? One member donated a riding lawn mower...and many members volunteered to use it! This summer, if you are able, consider volunteering to help us keep the grass down.
2. The rent of \$100/month we pay for our meeting space is being contributed by Myers Park Baptist Church (for March through November) in honor of highly specialized maintenance work contributed to the church by CAAC members.
3. The Southern Star Astronomical Convention is our club's premier annual educational event. Over the years, Southern Star funds have helped the CAAC build observatories, purchase equipment, and operate effectively. Consider joining the Southern Star volunteer team to support this program. It's a great way to help our club.
4. Corporate Volunteer Time Contributions: Many corporations encourage their employees to volunteer time in support of local non-profit organizations. Some corporations go further by providing programs that match their employee's volunteer time with financial contributions for each hour of service. The CAAC qualifies for these programs---and benefits from them. If you're working, ask your company if they have a program like this. If they do, and you volunteer time in support of the CAAC, your company will make a gift to the CAAC for each hour you volunteer.

CAAC Treasurer's Report as of 3-31-2017

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: 2-28-2017	\$14,331.83
2	Income Dues & Fees Prepaid Subscriptions	 1,680.00 66.95
3	Expenses GHRO Expenses GHRO Utilities GHRO Wi-Fi Fees for Credit Card Service Subscriptions Expense Awards Expense Meeting Rent *No Charge: See Volunteer Time Note	 3,023.80 76.00 180.16 42.58 66.95 32.95 0.00
4	Operating Fund Balance: 3-31-2017	\$12,656.34

Part 2 of 3

Non-Operating Funds

Purpose: Administer gifts and donations for designated use.

1	Balance 2-28-2017: Non-Operating Funds Scholarship Fund Contingency Fund Long-Term Fund	 5,315.00 17,832.00 2,919.44
2	Income Donation: Duke Energy Foundation Donation: Bank of America Interest	 600.00 120.00 0.66
3	Expenses or Transfers	\$0.00
4	Balance 3-31-2017: Non-Operating Funds Scholarship Fund Contingency Fund Long-Term Fund	 5,315.00 18,552.00 2,920.10

Part 3 of 3

2017 Southern Star Fund Update

Southern Star Astronomical Convention is the club's largest educational outreach event each year. Its annual net financial contribution (income or expense) is posted to the club's Operating Fund.

To date, ahead of the event, registrations are \$28,294 and expenses are \$483.17. Typically, most of the expenses (estimated this year at \$26,000) will be incurred the week of the event.

This year's Southern Star will be held April 27th to 30th. Final accounting will be completed in May and reported in June.

FROM THE SECRETARY:

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.

CAAC Apparel & Gear

Visit our Lands' End Store – Follow the navigation bar link on our club website:

<http://www.charlotteastronomers.org>

Updates from GHRO

The 16" Cassegrain telescope is down for about 1 month for a major overhaul. Gayle is replacing a bearing on the swing arm yoke, I'm sure there is a technical term for it, that was binding. He's also modifying the housing to allow the mirror to be cleaned with the mirror still mounted in the telescope.

Upcoming Events!

As you read above, the 16" telescope will be down for repairs. We have 3 upcoming events. We're looking for volunteers to bring out their telescope and/or binoculars and share the night sky. We have a couple of laser pointers if you'd like to come and point out constellations.

April 29th: International Astronomy Night at GHRO

For those who are not attending Southern Star this year, come on down to GHRO for our monthly Star Party. We'll start around 4pm with ground maintenance, we'll bring out the solar telescopes, and gas grill. We'll supply the burgers, bring chips or a side dish to share.

Girls Scouts May 19th

On May 19th-20th, we're hosting a local Girl Scout Troup at GHRO with a Star Party on Friday the 19th. Yes, this is same night as May CAAC meeting, perhaps a meeting one or two volunteers might skip? How can you pass up S'MORES?

GHRO hosting Belmont Astronomy Club May 27th

For our May 27th Star Party we're once again hosting Belmont Astronomy club as our guest to GHRO for an overnight campout. Last year they brought hotdogs and burgers for evening cookout and pancakes for Sunday breakfast. As this overlaps with our Star Party it is a wonderful way to meet and share with other amateur astronomers in the Charlotte Area.

Observatory Committee

I'm really excited about brainstorming the new GHRO Observatory Committed did at our last meeting. We've just begun, but already exploring new ideas for GHRO. Look for new improvement to make this wonderful facility enjoyable for all.

Telescope Training

If you'd like training on the 8" or 24" telescope, contact me directly. I'm available most weeks Thursday, Friday, or Saturday evenings for one-on-one training.

GHRO Event Recordings: 704-909-0604

Chris Skorsinski Director GHRO 704-996-4215 or ChrisSkor@Hotmail.com

CAAC CONTACTS

President	Ken Steiner	Ksteiner30@gmail.com
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Public Outreach Coordinator	To Be Filled	