The Construction of the 200” Hale Telescope

This month we are privileged to have as our speaker Gayle Riggsbee. The 200” telescope at the Palomar observatory is the largest equatorially mounted telescope in the world.

This month’s program will be an illustrated lecture detailing the reason for building the telescope. The program will contain rarely seen photographs of the construction of the telescope, and the assembly of the scope at the observatory.

Please join us this month for what will surely be another outstanding program.

EAT WITH US: Please plan to join us on Jan 21st prior to our meeting. If you care to eat with us ahead of time, several members will gather at The IHOP Restaurant in Cotswold Shopping Center on Sharon Amity Road, just south of our meeting place at 5:30 PM the night of the meeting. Won’t you join us this time? We’d love to see you.

Next Meeting 7:00 p.m.
January 21, 2011

MEETING LOCATION:
MASONIC HALL
500 NORTH SHARON AMITY ROAD
**Observing Activities:**

Star Party at GHRO Feb. 5, 2011 weather permitting

Our new home at the GHRO.

**Public Outreach**

None scheduled

**GET LINKED UP!**

Please link up with fellow club members by enrolling in the Charlotte Amatuer Astronomers Yahoo Group website. The site and enrollment is free. The site allows you to keep up with the activities of fellow club members, post photos and e mails to all group members.

The link is [http://groups.yahoo.com/group/charlotteastronomers](http://groups.yahoo.com/group/charlotteastronomers)

**Hardware Corner**

This informal CAAC activity takes place at 6:30 P.M. before our regular monthly meeting. The purpose of this meeting is to make available to all the wide expertise and experience within the club to help with your questions on scope upgrades or modifications, astrophotography, software, or anything astronomy related. Please take advantage of this valuable resource. You’ve got questions we’ve got answers.

**Observatory Director’s Corner**

Don’t forget the club has loaner telescopes to check out and use for a month at a time. See the Observatory Director Ken Steiner at the meeting or e-mail [ken@steiner4.com](mailto:ken@steiner4.com) or call 704-817-8607 to schedule your time with one of the scopes.

A BIG THANK YOU for all the help in the barn raising last month. The arches all went up in 1 day! By the time you receive this newsletter the shell of the building should be complete and ready for interior work. Job well done by a great group of people aka Charlotte Amateur Astronomers Club members.
**Secretary’s Notes**

Items or announcements for the newsletter? Please e-mail Tom Blevins @ gtblevins@att.net or call me at 704-442-0530. Don’t forget to check off your attendance on the members sign in sheet when you pick up your name tag at the meeting. Please notify the Secretary of e-mail address changes or any other changes to your information.

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**From The Chancellor of the Exchequer:**

**The Financial Report**

Beginning Balance - 11/18/10 $56,572.27
- Receipts - $5,504.61
- GHRO Strategic Plan Expense $11,455.87
- GHRO Expenses Other - $471.00
- Meeting Expense - $136.86
- Donation to IDA & Clear Sky Clock $200.00

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**CAAC Dues & Fees**

Annual dues are: $35.00 for a family or individual. Students up to 18 years of age: $6.00. Annual dues are prorate based on joining date. See the Treasurer for details.

Optional Fees:
- Observatory key fee for members: $10.00 annually.
- Observatory pad fee for members with a concrete pad at the Observatory is $25.00 annually.

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**Subscriptions**

Discounted magazine subscriptions are available through the club at a reduced rate.
- Sky & Telescope: $32.95 per year
- Astronomy: $34.00 per year or $60.00 for two years.

Please make checks payable to CAAC and give them to Treasurer Scott Holland at meetings or mail them to:

Scott Holland
500 Ethelyn Ave.
Lowell, NC 28098
Club members can also renew their own subscription to Sky & Telescope via mail, or telephone. Members may mail in their renewal notice with payment or telephone using a credit card. Indicate on the renewal notice that you are a member of CAAC. This is for subscription renewal only. The club Treasurer must still process new subscriptions and annually validate a subscriber’s membership in CAAC. Subscriptions to Astronomy both new & renewals cannot be renewed directly by the subscriber and must still be processed through the club Treasurer to obtain the club discounted rate.

Sale Bopp Corner

Please contact me via e-mail at gtlevens@att.net with the details of any item you would like to list for sale.

For Sale an unused, in-the-box, Orion 10 inch, f/5 mirror for sale. Asking $240 OBO.
Contact Bob Meunier at 704-821-1356 or e-mail chezmeunierb@earthlink.net

From the telescope collection of Robert Ariail.
Meade 12” LX200 go to Schmidt Cassegrain Telescope with new upgraded electronics package, and new coatings on all the glass surfaces. Also included are a 9X50 right angle finder, are 32MM Televue plossl, 20MM erfle, and 12.5MM Orthoscopic Eyepieces. The telescope diagonal will accept 1½” & 2” eyepieces. Telescope can be powered by either 115V AC or 12V DC battery. 18V DC converter & extension cord included. Operators’ manual, getting started instructions & from shipping box included. Call Gayle Riggsbee @ 704-846-3136 if interested.

What’s Up Now?

Evenings Planets
Jupiter

Constellations
Cepheus, Cassiopeia Aquarius, Andromeda, Triangulum Perseus Pisces, Cetus, Aries, Taurus, Auriga, Eridanus, Camelopardalis, Orion,

Just Checking In
Canis Major, Canis Minor, Lepus, Lynx

LUNAR HIGHLIGHTS

Jan. 19, Full Moon
Jan. 26, last Quarter
Feb 2, 2011 New Moon
**Constellation of the Month**

**Camelopardalis**  
**The Giraffe**

Camelopardalis is not an ancient mythical constellation but rather a more modern invention dating back to only 1612. The constellation was the invention of Dutch cartographer Petrus Plancius who was working for the Dutch East India Company at the time. There is nothing exciting or romantic that I have been able to find relating to the invention of the constellation. Rather the constellation was drawn simply to fill a void in the sky between Auriga & Ursa Major.

![Constellation of Camelopardalis](image)

**Constellation of the Month Continued**

**Binocular Highlight**

**Open Cluster NGC 1502 & Kemble's Cascade.**

NGC 1502 is easy to locate on a line approximately 2/3 of the way right from Alpha Perseus (Mirfak) and Alpha Camelopardalis right at the end of Kemble's Cascade. Making it easy for you to find. You get the benefit of a
two for one here. Kemble’s Cascade is actually an asterisim made up of a chain of stars running NGC 1502 sits at the The cluster is sometimes referred to as the Golden Harp Cluster. The cluster consists of approximately 60 stars.

A finder chart is locateds on the last page of the newsletter.

**Novice Challenge**

NGC 2403 Overlooked because of the location in a blank portion of the northern sky NGC 2403 is one of the brightest galaxies in the northern sky. When you see it you will have to ask yourself how Messier missed this one. I have read reports that the galaxy is visible in binoculars although I have never seen it through binos. Under dark skies with good seeing and enough aperture the spiral arms show some mottling.

Classified as a Hubble Sc type, the galaxy is a member of the M81/82 galaxy group and we are looking at the galaxy face on. Distance measurements put the galaxy at around 11,000,000 light years from earth. Chalk up the discovery of this beauty to William Herschel in 1788.

The coordinates for the galaxy are 7 hrs. 33.3 min. R.A and +65 degrees 36 sec. declination.
Deep Sky Challenge

NGC 1501

Located just 1.5 degrees south of our Novice Target is the challenging planetary nebula NGC 1501. This little gem will require a large aperture and dark skies to coax it out. With large aperture you may be able to detect some color. An OIII or UHC filter will help the nebula pop and display some ring structure. The nebula glows dimly at 11.9 magnitude and the central star glows at 14th magnitude so it may be visible in large scopes. The planetary was discovered by our old friend William Herschel in 1787. Distance measurements put the planetary at 3,900 light years from earth. Coordinates are 4 hrs. 7 min. R.A. and +60 degrees 55 sec. declination.

Double Delights

Eta Perseus.

One thing that Camelopardalis unfortunately lacks is a nice double star. Therefore we have to jump over to Perseus to get this months' double delight.

Eta is a beautiful color/magnitude contrast for any size scope. With a separation of 28", the pair is an easy split. The primary is a magnitude 3.8 K3 orange giant and the secondary is a magnitude 8.5 B type star. The pair has been compared to Alberio. I would be interested to hear what you see. The coordinates for the system are 2 hrs. 51 min. R.A. and +55 degrees 54 sec. declination.
Kemble’s Cascade/NGC 1502 Finder Chart

1. Locate Cassiopeia
2. Take distance across Cassiopeia
3. Then same distance again along extension A-B (clockwise around Polaris)
4. Follow arc of brighter stars into line of fainter stars, Kemble’s Cascade, with NGC 1502 like pool at end of cascade
5. See below when Cassiopeia faces other way

Locating the delightful asterism Kemble’s Cascade

Father Lucian Kemble OFM
Nov. 5, 1922 - February 21, 1990 AD

In fond memory of one who saw so much with telescope and mind and heart...and shared his lamplight with us.