

CAPE FEAR



Skies

A MONTHLY NEWSLETTER
OF THE
CAPE FEAR ASTRONOMY CLUB

VOLUME 1, No 6

DECEMBER 1986

MEMBERS:

FIRST I WANT TO WISH EVERYONE A MERRY CHRISTMAS AND A HAPPY NEW YEAR. MAY ALL YOUR STOCKINGS BE FILLED WITH SUPER C-8 TELESCOPES COMPLETE WITH ALL ACCESSORIES, OF COURSE!

AN IMPORTANT REMINDER. WE WILL BE HAVING ELECTIONS IN JANUARY. I HAVE VOLUNTEERED TO BE THE NOMINATING COMMITTEE CHAIRMAN. IF YOU WISH TO MAKE A NOMINATION, OR WOULD LIKE TO RUN FOR OFFICE YOURSELF, PLEASE CONTACT ME AT 799-4110 DAYS, OR 791-3534 AFTER 6:00 PM. THE FOLLOWING OFFICES ARE OPEN FOR NOMINATION

PRESIDENT	VICE PRESIDENT
SECRETARY	ASSISTANT VICE PRESIDENT
TREASURER	

WE MUST HAVE AT LEAST TWO NOMINATIONS PER OFFICE TO HOLD LEGAL ELECTIONS AS INDICATED IN OUR CONSTITUTION. PLEASE FEEL FREE TO NOMINATE THE PERSON OF YOUR CHOICE. NOMINATIONS WILL BEGIN AT OUR NEXT MEETING.

DECEMBER MEETING- SUNDAY THE 7th, 7:30 PM AT MORTON HALL.

WE HAVE RECEIVED OUR CERTIFICATE PROCLAIMING US A MEMBER IN GOOD STANDING WITH THE ASTRONOMICAL LEAGUE. THIS ORGANIZATION IS A MOST IMPORTANT ONE. THEY CAN HELP US WITH REGIONAL NEWS AS WELL AS MANY OTHER INTERESTS WE MAY HAVE. DEBBIE PETTY HAS VOLUNTEERED TO BE OUR ALCOR (ASTRONOMICAL LEAGUE CORRESPONDENT) AND SHE WILL BE IN TOUCH WITH THE LEAGUE AS WELL AS OTHER CLUBS BELONGING TO THE LEAGUE. THANKS DEBBIE!

ALAN, PAUL, AND RONNIE TOOK A TRIP UP TO JOHNNY HORNE'S OBSERVATORY IN STEADMAN NC. ACCORDING TO THEIR ACCOUNTS, JOHNNY HAS AN EXCELLENT SET-UP AND HAS INVITED THE CLUB TO COME UP FOR A VISIT. WE WILL GO SOON IF PLANS CAN BE MADE TO ACCOMMODATE JOHNNY'S SCHEDULE. ALAN, PAUL, AND RONNIE WERE IMPRESSED TO SAY THE LEAST. ASK THEM ABOUT IT SOMETIME!!

DECEMBER SKY CALENDAR

- 1st NEW MOON 11:43 AM
ANTARES 0.6 DEGREES SOUTH OF MOON
OCCULTATION
- 2nd MOON AT PERIGEE 6:00 AM
- 3rd NEPTUNE 6 DEGREES NORTH OF MOON
- 4th SATURN IN CONJUNCTION WITH SUN
- 7th MARS 3 DEGREES NORTH OF MOON
- 8th FIRST QUARTER MOON 3:01 AM
JUPITER 1.8 DEGREES NORTH OF MOON
- 11th VENUS GREATEST BRILLIANCY
APOLLO 17 LANDS ON THE MOON 1972
- 12th GEMINID METEORS
- 13th GEMINID METEORS
- 14th URANUS IN CONJUNCTION WITH SUN
TYCHO BRACHE BORN 1546
GEMINID METEORS
- 15th MERCURY 5 DEGREES SOUTH OF ANTARES
- 16th FULL MOON 2:04 AM
- 17th MOON AT APOGEE 12 AM
- 19th MARS 0.5 DEGREES NORTH OF JUPITER
MERCURY 1.5 DEGREES SOUTH OF SATURN
- 21st WINTER SOLSTICE BEGINS 11:02 PM
- 24th LAST QUARTER MOON 4:17 AM
- 25th MERRY CHRISTMAS!!
MERCURY 0.4 DEGREES SOUTH OF URANUS
- 26th HANUKKAH BEGINS AT SUNSET
- 27th NEPTUNE IN CONJUNCTION WITH SUN
VENUS 7 DEGREES NORTH OF MOON
- 29th ANTARES 0.6 DEGREES SOUTH OF MOON
OCCULTATION
SATURN 6 DEGREES NORTH OF MOON.
- 30th NEW MOON 10:10 PM
MOON AT PERIGEE 6:00 PM

ALAN HAS ASKED THAT NOMINATIONS FOR OFFICES BE OPENED AT OUR DECEMBER MEETING AND RUN FOR 1 WEEK AFTER THAT. SO AGAIN, IF YOU WISH TO MAKE A NOMINATION, PLEASE CONTACT ME AS SOON AS POSSIBLE.

MEMBERSHIP RENEWALS WILL BE DUE BY DEC 31st. WE NOW HAVE 3 DIFFERENT CATAGORIES FOR MEMBERSHIP. JUNIOR MEMBER IS \$10.00 PER YEAR FOR THOSE 17 YEARS OLD AND UNDER. REGULAR SINGLE MEMBERSHIP IS \$20.00 PER YEAR, AND FAMILY MEMBERSHIP IS \$25.00 PER YEAR FOR A FAMILY OF TWO OR MORE. AND WE ALSO HAVE A LIFE-TIME MEMBERSHIP AVAILABLE FOR \$100.00 WHICH CAN BE PAID IN INSTALLMENTS OF \$10.00 MONTHLY OR ALL AT ONCE. PLEASE CONSIDER YOU MEMBERSHIP THIS MONTH AND PAY RONNIE BY DEC. 31st.

AFTER ELECTIONS, THERE WILL BE SEVERAL VOLUNTEER POSITIONS AVAILABLE.

HISTORIAN - WILL KEEP A DETAILED SCRAP BOOK OF THE CLUBS HISTORY.

ACTIVITIES- WILL COORDINATE THE CLUBS PUBLIC EVENTS AS WELL AS MEDIA COVERAGE ON THESE EVENTS.

DEBBIE PETTY HAS VOLUNTEERED TO BE THE CLUB LIBRARIAN. SHE WILL BE IN CHARGE OF KEEPING THE BOOKS AND REFERENCE PAPERS THAT ARE PROPERTY OF THE CLUB IN ORDER AND WILL MAKE THESE ITEMS AVAILABLE TO ALL MEMBERS AT EACH CLUB MEETING. THEY CAN BE CHECKED OUT FOR USE AND MUST BE RETURNED IN A TIME PERIOD THAT DEBBIE WILL SPECIFY.

SPECIAL REPORT

NEBULAE- NEBULAE ARE CLOUDS OF DUST AND GAS THROWN OFF BY DYING STARS. THEY ARE CONSIDERED SOME OF THE MOST BEAUTIFUL OBJECTS TO OBSERVE IN THE UNIVERSE. THERE ARE SEVERAL DIFFERENT CLASSIFICATIONS FOR THESE NEBULAE.

PLANETARY NEBULAE GOT THEIR NAME BECAUSE THEY OFTEN APPEAR IN SMALL TELESCOPES AS GREENISH DISKS RESEMBLING THE PLANETS URANUS AND NEPTUNE, BUT THEY HAVE NO OTHER SIMILARITY TO PLANETS. REFLECTION NEBULAE REPRESENT GAS AND DUST SURROUNDING YOUNG STARS THE DUST REFLECTS THE STARLIGHT AND MAKES A REFLECTION OF THAT LIGHT. THE NEBULAE SURROUNDING THE PLEIADES IS A GOOD EXAMPLE OF A REFLECTION NEBULAE.

THER ARE ALSO EMISSION AND ABSORPTION NEBULAE. EMISSION NEBULAE GLOW AND ABSORPTION NEBULAE ABSORB RADIATION FROM BEHIND THE HORSEHEAD NEBULAE IN ORION IS AN EXAMPLE OF BOTH EMISSION AND ABSORPTION NEBULAE. THE REDDISH CLOUD OF GAS IS AN EMISSION NEBULAE AND THE "HORSEHEAD" IS A DARK ABSORPTION NEBULAE. THIS IS ALSO THE CASE IN THE NORTH AMERICAN NEBULAE.

THESE BEAUTIFUL OBJECTS ARE CONSTANTLY BEING STUDIED AND RECORDED BY ASTRONOMERS SINCE THEY CAN INDICATE THE DEATH OR BIRTH OF STARS IN THE UNIVERSE.

THE DECEMBER SKY

CONSTELLATIONS

TAURUS	ORION	PLEIADES
GEMINI	AURIGA	ARIES
ANDROMEDA	PEGASUS	PERSEUS
CASSIOPEIA	ERIDANUS	CANIS MAJOR

ORIGINS OF THE CONSTELLATIONS

AURIGA THE CHARIOTEER - ONE MYTH SUGGESTS THAT AURIGA IS ASSOCIATED WITH ERECHONIOUS THE LAME SON OF VULCAN AND MINERVA. ERECHONIOUS INVENTED THE CHARIOT TO HELP HIM MOVE FROM PLACE TO PLACE. THIS INVENTION WON HIM AS WELL AS THE CHARIOT A PLACE IN THE HEAVENS.

BOOTES THE HERDSMAN - ACCORDING TO ONE STORY, BOOTES WAS PLACED IN THE HEAVENS FOR INVENTING THE PLOW.

CANIS MAJOR THE GREAT DOG - CANIS IS MOST FAMOUSLY KNOWN AS THE DOG OF ORION. AS ORION WAS A GREAT HUNTER, HIS HOUNDS WERE ALSO AS TALENTED AS HE. WHEN ORION WAS PLACED IN THE SKY HIS LOYAL DOGS WERE PLACED THERE WITH HIM.

CANIS MINOR THE LITTLE DOG - THIS IS ALSO ASSOCIATED WITH THE CONSTELLATION OF ORION. SOME MYTHS SAY THAT CANIS MINOR IS A PUP OF CANIS MAJOR ON THE HUNT WITH IT'S MOTHER AND IT'S MASTER.

ASTRONOMICAL GLOSSARY

ALTITUDE - THE ANGULAR DISTANCE MEASURED IN DEGREES ABOVE THE HORIZON.

BINARY STAR - A DOUBLE STAR; A SYSTEM CONTAINING TWO OR MORE STARS. IN AN ECLIPSING BINARY, ONE STAR GOES BEHIND THE OTHER PERIODICALLY, CHANGING THE TOTAL AMOUNT OF LIGHT WE SEE.

CELSETIAL SPHERE - THE IMAGINARY SPHERE SURROUNDING THE EARTH WITH THE STARS AND OTHER ASTRONOMICAL OBJECTS ATTACHED TO IT.

EARTHSHINE - SUNLIGHT REFLECTED OFF THE EARTH, WHICH LIGHTS THE SIDE OF THE MOON THAT DOES NOT RECEIVE DIRECT SUNLIGHT.

FIREBALL - AN EXTREMELY BRIGHT METEOR, USUALLY WITH AN APPARENT MAGNITUDE BRIGHTER THAN -5; SOME FIREBALLS ARE AS BRIGHT AS -20 MAGNITUDE.

GALACTIC CLUSTER - AN IRREGULAR GROUPING OF STARS OF A COMMON AND POSSIBLY RECENT ORIGIN

MINIMA - THE TIMES OF A VARIABLE STAR'S MINIMUM BRIGHTNESS



CAPE FEAR
ASTRONOMY CLUB

CAPE FEAR ASTRONOMY CLUB
120 Coventry Rd.
Wilmington, N. C. 28401

Nov. 27, 1986

Dear Member,

Greetings from your President!

I would like to welcome all our New Members to the CAPE FEAR ASTRONOMY CLUB. If there is any thing my Staff or I can help you with please let one of us know. I would also wish to thank our present Membership for their support and patience during this past year.

As you well know, this has been a Tremendous year for Astronomy. Comet Halley was the catalysis that regenerated our club to reform. This created an Astronomical amount of interest in Astronomy, and in our club. We hope to continue in our effort to attract New Members and hope our present Members will renew their 1987 Memberships..

Our 1987 Schedule will call for a Basic Educational program for all Members. We will give a club folder to all Members who renew membership for this year, and enclosed within will be the Educational Kit.

Now we must talk about the Elections. I need to know if the Membership would like to have dinner at some Restaurant or hold the Elections at UNC-W. WE MUST KNOW AS SOON AS POSSIBLE. Please call or write us when ever possible, but it would be nice if you could come to our next meeting.

It will be up to you on what evening or night that this will all take place.

We can have the Elections on any week day or week-end in the Month of January you want. I must tell you that Majority will rule. Also an Awards will be given on the same night as the Elections this will be the Frist in our short club history.

Now a peek into the Future. Here is a few items we hope to accomplish in 1987:

- 1). Tours to Johnny Horhe Observatory.
- 2). A trip to Morehead Planetarium.
- 3). Receive Educational Material from the Astronomical League.
- 4). Have at least Two nights for club Observing per month.
- 5). Try to Organize a N.C. Star Party at Fort Fisher.
- 6). Participate in the Azalea Festival.
- 7). Participate in the N.H. County Fair in 1987.
- 8). And most Importantly Participate in Astronomy Day on MAY 10, 1987 at Independence Mall.

Now past 1987. Our Ultimate Goal is an Observatory of our own or, share one with UNC-W. I have enclosed a Observatory Poll with this Letter. Please fill out and get it back to me at your convenience.

Now in closing I would like also to say that WE have accomplish alot this year and hope to continue with this Trend. Just like the old saying " The Fun has Just Begun ".

I would like to hear from you concerning any suggestions and/or comments concerning the Club.

Sincerely, and Clear Skies

Alan P. Hilburn *

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