



CAPE FEAR

Skies

A MONTHLY NEWSLETTER
OF THE
CAPE FEAR ASTRONOMY CLUB

VOLUME 1, No. 3

SEPTEMBER 1986

MEMBERS:

OUR NEXT MEETING WILL BE ON SUNDAY SEPTEMBER 7th. 8:00PM ON THE CAMPUS OF UNC-W AT MORTON HALL. INCLUDED WITH YOUR NEWSLETTER IS A MAP OF THE CAMPUS SO EVERYONE CAN FIND THE CORRECT BUILDING. IT IS MARKED #14 AND YOU MAY PARK IN LOT G.

PERSEID METEOR SHOWER

ON THE NIGHT OF AUGUST 11th, THE CLUB HAD PLANNED TO GO UP TO HENRY McLAUGHLIN'S NEAR BURGAW TO OBSERVE THE PERSEID METEOR SHOWER THAT REACHED IT'S PEAK THE MORNING OF THE 12th.

ONCE AGAIN WE WERE FOILED BY MOTHER NATURE IN THE FORM OF CLOUDS AND THUNDERSTORMS. A FEW MEMBERS TRIED TO DO SOME OBSERVING BEFORE THE CLOUDS MOVED IN, BUT GOT LITTLE ACTIVITY FROM THE METEORS. OH WELL, THERE'S ALWAYS NEXT YEAR.

THE CLUB IS PLANNING A COOKOUT FOR THE EARLY PART OF OCTOBER. EITHER THE 5th OR THE 12th. THAT'S ON SUNDAY. WHAT WE'ER HOPING FOR IS TO HAVE OUR MEETING THEN AND GO FOR A LITTLE OBSERVING AFTERWARDS. FORT FISHER IS THE TENTATIVE PLACE, AND WE'RE SHOOTING FOR EARLY EVENING HOURS, AROUND 6:00 OR 7:00PM. EVERYONE TRY AND COME.

WE ARE ALSO THINKING ABOUT TRYING TO GET A SPACE INSIDE INDEPENDENCE MALL TO SET UP OUR TELESCOPES FOR DISPLAY. AT THE SAME TIME, WE WOULD LIKE TO OFFER ASTROPHOTOGRAPHY PRINTS FOR SALE. WE WILL BE USING MEMBERS PHOTOGRAPHS OF HALLEY'S COMET AS WELL AS ANY OTHER PHOTOS MEMBERS HAVE TAKEN (MOON, PLANETS, ECT.) IF ANYONE IS INTERESTED IN HAVING THEIR PHOTOS DISPLAYED, LET ALAN KNOW.

THE SEPTEMBER SKY

- 1st PIONEER II FLIES PAST SATURN IN 1979
HAPPY LABOR DAY!!
- 2nd JUNO(asteroid) DISCOVERED, 1894
- 3rd VIKING 2 LANDS ON MARS, 1976
- 4th NEW MOON, 3:10am
- 5th MERCURY IN SUPERIOR CONJUNCTION
- 7th VENUS 3 DEGREES SOUTH OF MOON
- 9th E.E. BARNARD DISCOVERES AMALTHEA, MOON OF JUPITER, 1892
- 10th SATURN 5 DEGREES NORTH OF MOON
ANTARES 0.7 DEGREES SOUTH OF MOON
OCCULTATION
JUPITER AT OPPOSITION
- 11th FIRST QUARTER MOON, 3:41am
URANUS 4 DEGREES NORTH OF MOON
MOON AT PERIGEE, 8:00pm
- 12th NEPTUNE 6 DEGREES NORTH OF MOON
LUNA 2, FIRST CRAFT TO IMPACT MOON, 1959
- 13th MARS 0.9 DEGREES NORTH OF MOON
OCCULTATION
- 14th NEPTUNE STATIONARY
CHARLES KOWAL DISCOVERS LEDA, MOON OF JUPITER, 1974
- 17th JUPITER 1.6 DEGREES NORTH OF MOON
- 18th FULL MOON 1:24am
- 19th HYPERION, MOON OF SATURN DISCOVERED, 1848
- 23rd AUTUMNAL EQUINOX 3:59am
PALLAS IN CONJUNCTION WITH SUN
NEPTUNE DISCOVERED 1846
- 25th LAST QUARTER MOON 11:17pm
MOON AT APOGEE 6:00am
- 28th EDWIN HUBBLE DIES 1953
- 29th MERCURY 1.5 DEGREES NORTH OF SPICA

ORIGINS OF THE CONSTELLATIONS

LEO THE LION- THE THICK, TOUGH SKIN OF THIS, THE FIERCEST LION IN THE WORLD, BECAME THE TRADEMARK OF HERCULES AFTER THE HERO SUCCEEDED IN STRANGLING THE LION TO DEATH, THUS SUCCESSFULLY COMPLETING HIS FIRST LABOR. THE LION WAS REWARDED BY BEING GIVEN A PLACE IN THE HEAVENS FOR HIS DEATH.

VIRGO THE VIRGIN- VIRGO HAS BEEN IDENTIFIED WITH A VARIETY OF HEROINES. THE ASSOCIATION WITH CERES, GODDESS OF THE HARVEST, HELPS EXPLAIN THE NAME OF THE BRIGHTEST STAR IN VIRGO, SPICA, WHICH MEANS AN EAR OF WHEAT OR CORN.

LIBRA THE SCALES- THIS CONSTELLATION WAS PROBABLY INVENTED AT THE TIME THE ZODIAC WAS ESTABLISHED. THE ARABIC NAMES OF THE TWO BRIGHTEST STARS IN LIBRA MEANS THE SOUTHERN AND NORTHERN CLAW, CONFIRMING THAT AT ONE TIME LIBRA WAS PART OF SCORPIUS. THE CONSTELLATION WAS LATER ASSOCIATED WITH THE SCALES HELD BY ASTRAEA, GODDESS OF JUSTICE.

SCORPIUS THE SCORPION- ACCORDING TO ONE ACCOUNT, APOLLO, WHO WAS CONCERNED ABOUT MAINTAINING HIS SISTER ARTEMIS' VIRGINITY, SENT THE SCORPION TO KILL ORION. BOTH ORION AND SCORPIUS WERE PLACED AS FAR FROM ONE ANOTHER IN THE HEAVENS AS POSSIBLE, SO AS TO AVOID FURTHER TROUBLE BETWEEN THEM, THOUGH SCORPIUS STILL PURSUES ORION AROUND THE CELESTIAL SPHERE.

ASTRONOMICAL GLOSSARY

ASTRONOMICAL UNIT- THE AVERAGE DISTANCE FROM THE EARTH TO THE SUN, WHICH EQUALS 149,598,770 KILOMETERS OR 86,759,262 MILES.

BLACK HOLE- A REGION OF SPACE IN WHICH MASS IS PACKED SO DENSELY THAT (ACCORDING TO EINSTEIN'S THEORY OF RELATIVITY) NOTHING, NOT EVEN LIGHT, CAN ESCAPE.

CELESTIAL LONGITUDE- LONGITUDE MEASURED (IN DEGREES) ALONG THE ECLIPTIC TO THE EAST FROM THE VERNAL EQUINOX.

DECLINATION- THE CELESTIAL COORDINATE ANALOGOUS TO LATITUDE, USUALLY MEASURED IN DEGREES, MINUTES, AND SECONDS OF ARC NORTH (+) OR SOUTH(-) OF THE CELESTIAL EQUATOR.

ECLIPTIC- THE APPARENT PATH THE SUN FOLLOWS ACROSS THE SKY DURING THE YEAR; THE SAME PATH IS ALSO FOLLOWED APPROXIMATELY BY THE MOON AND PLANETS.

HOURLY ANGLE- THE SIDEREAL TIME ELAPSED SINCE AN OBJECT WAS ON THE MERIDAN OR, IF THE HOURLY ANGLE IS NEGATIVE, BEFORE THE OBJECT REACHES THE MERIDAN. (THE HOURLY ANGLE EQUALS THE DIFFERENCE BETWEEN THE RIGHT ASCENSION OF AN OBJECT AND OF YOUR MERIDAN.)

LIGHT YEAR- THE DISTANCE (63,240 A.U.) WHICH LIGHT TRAVELS IN ONE YEAR.

THE SEPTEMBER CONSTELLATIONS

PERSEUS	CASSIOPEIA	CEPHEUS	ANDROMEDA
PEGASUS	LACERTA	DRACO	CYGNUS(SETTING)
AQUARIUS(RISING)	ARIES	TRIANGULUM	

SPECIAL REPORT

THE 10 NEAREST STARS TO THE EARTH

NAME	R.A.	DEC	DISTANCE (LIGHT YRS)
PROXIMA CEN	14H 32M	-62 49	4.24 LY
CEN A	14H 42M	-60 59	4.34 LY
BARNARD'S STAR	17H 58M	+04 36	5.97 LY
WOLF 359	10H 59M	+06 54	7.76 LY
BD +36o2147	11H 06M	+35 51	8.22 LY
L 726-B=A UV CET = B	1H 39M	-17 49	8.42 LY
SIRIUS A SIRIUS B	6H 46M	-16 45	8.64 LY
ROSS 154 (SGR)	18H 52M	-23 46	9.46 LY
ROSS 248 (AND)	23H 42M	+44 21	10.37 LY
EPSILON ERI.	3H 34M	-09 22	10.76 LY
ROSS 128 (VIR)	11H 50M	+00 41	10.96 LY

DID YOU KNOW....THAT PHOBOS (GREEK GOD OF FEAR) AND DEIMOS (GREEK GOD OF TERROR), THE MOONS OF MARS WERE SO NAMED BECAUSE THEY WERE COMPANIONS OF MARS, THE GOD OF WAR. THE MOONS THEMSELVES HOWEVER ARE INSIGNIFICANT AS MOONS GO. THEY ARE NOTHING MORE THAN SMALL ORBITING CHUNKS OF ROCK WITH NO PARTICULAR SHAPE TO THEM. SOME ASTRONOMERS THINK THAT THE TWO MOONS ARE NOTHING MORE THAN ASTEROIDS THAT STRAYED FROM THE ASTEROID BELT BETWEEN MARS AND JUPITER TO BECOME TRAPPED IN THE GRAVITATIONAL PULL OF THE PLANET. THESE ORBITING ROCKS NEVER BECOME BRIGHTER THAN 11th OR 12th MAGNITUDE WHICH MAKES THEM VERY DIFFICULT TO OBSERVE FROM EARTH.

BY THE WAY, WE WILL BE SHOWING A 30 MINUTE FILM AT OUR NEXT MEETING TITLED "MARS- THE SEARCH BEGINS."

CONGRATULATIONS TO RONNIE HAWES FOR BEING ACCEPTED INTO THE SUPERNOVA SUN SEARCH NETWORK. EACH MEMBER OF THIS INTERNATIONAL GROUP SELECTS BETWEEN 5 AND 10 GALAXIES IN THEIR AREA TO MONITOR ON A REGULAR BASIS. IF ANYONE THINKS THEY MAY HAVE OBSERVED A SUPERNOVA, THE GROUP IS ALERTED AND THEY MONITOR THAT PARTICULAR REGION FOR ACTIVITY. THIS GROUP IS INTERNATIONAL BUT BASED IN THE U.S. IF ANYONE HAS QUESTIONS ABOUT THE GROUP, CONTACT RONNIE AND I'M SURE HE'D BE GLAD TO FILL YOU IN ON THE DETAILS.

CLASSIFIED ADS

FOR SALE 1 COMPLETE SET OF WILTIRION SKY ATLAS 2000
DELUXE EDITION (BLACK STARS ON WHITE BACKGROUND)
CONTAINS 26 CHARTS WITH CONSTELLATIONS OUTLINED.
\$5.00 FOR THE SET. CALL RONNIE HAWES 762-1033.