



# CAPE FEAR

# Skies

A MONTHLY NEWSLETTER  
OF THE  
CAPE FEAR ASTRONOMY CLUB

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VOLUME 1, No. 2

AUGUST 1986

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## MEMBERS:

FIRST I'D LIKE TO SAY THANKS FOR THE GREAT RESPONSE TO THE FIRST NEWSLETTER. EVERYONE SEEMED TO LIKE IT AND I HOPE THAT ALL OF YOU ENJOY IT.

I'D ALSO LIKE TO THANK RONNIE HAWES FOR DESIGNING THE LETTER-HEAD FOR THE NEWSLETTER.

HOPEFULLY WE WILL BE ABLE TO CONTINUE OUR NEWSLETTER THROUGHOUT THE YEAR.

OUR NEXT MEETING WILL BE ON SUNDAY, AUGUST 3rd, 8:00pm  
AT KING HALL ON THE UNC-W CAMPUS.

## REPORT ON MARS AT OPPOSITION

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ON JULY 13th, THE CLUB AGAIN VISITED THE FAMILIAR SURROUNDINGS OF FT. FISHER TO OBSERVE MARS AT OPPOSITION. THIS WAS ALSO AN EVENT OPEN TO THE PUBLIC. WE HAD 2 TELESCOPES SET UP COURTESY OF RONNIE AND ALAN. WE HAD ABOUT 45-50 PEOPLE TURN OUT FOR A LOOK AT MARS. ALSO VISIBLE WERE VENUS, SATURN, AND THE MOON. EVERYONE SEEMED TO ENJOY THE EVENT, SO HOPEFULLY, OUR PUBLIC EVENTS WILL CONTINUE.

THE CONDITIONS WERE A LITTLE LESS THAN FAVORABLE, WITH A STRONG WIND FROM THE SOUTH, BUT SOME FEATURES WERE STILL VISIBLE.

VIEWING THIS MONTH WILL BE SOMEWHAT MORE RESTRICTED, AS THE PLANET WILL BE ONLY ABOUT 90 % ILLUMINATED AND WILL DECREASE IN THE COMING MONTHS. IT WILL BE ONLY A SHORT TIME THOUGH BEFORE SEPT. 1988 WHEN MARS MAKES ITS CLOSEST APPROACH TO US. VIEWING THEN SHOULD BE EXCEPTIONAL.

THE AUGUST SKY

- 2nd MERCURY STATIONARY
- 4th MERCURY 8 DEGREES SOUTH OF MOON
- 5th NEW MOON AT 2:36pm
- 7th SATURN STATIONARY
- 9th VENUS 2 DEGREES SOUTH OF THE MOON
- 11th MERCURY AT GREATEST ELONGATION (19 DEGREES)  
PERSEID METEORS  
ASAPH HALL DISCOVERS DEIMOS, MOON OF MARS, 1877
- 12th FIRST QUARTER MOON AT 10:21pm  
MARS STATIONARY  
PERSEID METEORS
- 13th SATURN 5 DEGREES NORTH OF THE MOON  
PERSEID METEORS
- 14th ANTARES 0.8 DEGREES SOUTH OF THE MOON  
OCCULTATION  
URANUS 4 DEGREES NORTH OF MOON
- 15th NEPTUNE 6 DEGREES NORTH OF MOON
- 16th MARS 0.5 DEGREES SOUTH OF MOON  
OCCULTATION  
MOON AT PERIGEE, 1:00pm
- 17th ASAPH HALL DISCOVERS PHOBOS, MOON OF MARS, 1877
- 19th FULL MOON 2:45pm  
VESTA STATIONARY
- 21st JUPITER 1.4 DEGREES NORTH OF MOON
- 25th VOYAGER 2 FLIES PAST SATURN, 1981.
- 27th LAST QUARTER 4:38am  
VENUS AT GREATEST ELONGATION (46 DEGREES)  
URANUS STATIONARY
- 28th MOON AT APOGEE 11:00am  
WILLIAM HERSCHEL DISCOVERS ENCELADUS, MOON OF SATURN.  
1789
- 31st VENUS 0.5 DEGREES SOUTH OF SPICA.

## AUGUST SKY CONSTELLATIONS

LYRA-SETTING	HERCULES-SETTING	PERSEUS-RISING
CYGNUS	OPHIUCHUS	AQUILA
SCORPIUS	DELPHINUS	SAGITTARIUS
CASSIOPEIA-RISING		URSA MINOR

## ORIGINS OF THE CONSTELLATIONS.

THIS WILL BE THE FIRST IN A SERIES ON THE ORIGINS OF THE CONSTELLATIONS. I WILL TRY TO FIND THE LEGENDS BEHIND ALL 88 OF THEM AND PASS A FEW ALONG TO YOU EVERY MONTH. SINCE WE ARE MOST FAMILIAR WITH THE 12 IN THE ZODIAC, THAT'S WHERE I'LL START.

**ARIES-THE RAM** THIS WAS THE RAM WHO'S GOLDEN FLEECE WAS CARRIED OFF BY JASON AND THE ARGONAUTS. IT WAS ONE OF THE PRIZES OF THEIR VOYAGE. THIS SACRIFICE BY THE RAM EARNED HIM A PLACE IN THE SKY.

**TAURUS-THE BULL** ZEUS DISGUISED HIMSELF AS THIS SNOW-WHITE BULL IN ORDER TO ATTRACT EUROPA, PRINCESS OF PHEONECIA. SHE WAS DRAWN TO THE ANIMAL BECAUSE OF IT'S BEAUTY AND CLIMBED ONTO IT'S BACK. ZEUS THEN SWAM WITH HIS PASSENGER TO CRETE, WHERE HE REVEALED HIS IDENTITY TO HER AND WON HER HEART.

**GEMINI-THE TWINS** SOME LEGENDS SUGGEST THAT THESE TWO BROTHERS WERE NOT REALLY TWINS, OR EVEN BROTHERS. THEY WERE HALF-BROTHERS CASTOR, BEING THE SON OF TYNDARUS, AND POLLUX, THE SON OF ZEUS. THIS WOULD HAVE MADE POLLUX IMMORTAL. AFTER CASTOR'S DEATH, POLLUX WAS SO GRIEF STRICKENED THAT ZEUS REUNITED THEM BY PLACING THEM TOGETHER IN THE SKY.

**CANCER-THE CRAB** WHEN HERCULES WAS STRUGGLING WITH HYDRA, THE GODDESS JUNO SENT THIS CRAB TO ATTACK HIM. THE CRAB WAS NOT SUCCESSFUL AND WAS CRUSHED BY HERCULES, BUT JUNO REWARDED THE CRAB'S EFFORTS BY PLACING HIM IN THE HEAVENS.

NEXT MONTH I'LL HAVE 4 MORE FOR YOU.

## ASTRONOMICAL GLOSSARY

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**APHELION-** THE FARTHEST POINT FROM THE SUN IN AN OBJECTS ORBIT AROUND IT.

**CONJUNCTION-** THE ALIGNMENT OF 2 CELESTIAL BODIES THAT OCCURS WHEN THEY REACH THE SAME CELESTIAL LONGITUDE. THE BODIES THEN APPEAR APPROXIMATELY CLOSEST TO EACH OTHER IN THE SKY.

**INFERIOR CONJUNCTION-** THE CONJUNCTION IN WHICH A PLANET WHOSE ORBIT IS INSIDE THAT OF THE EARTH PASSES BETWEEN THE EARTH AND THE SUN.



ASTRONOMICAL GLOSSARY cont'd

SUPERIOR CONJUNCTION- THE CONJUNCTION IN WHICH A PLANET WHOSE ORBIT IS INSIDE THAT OF THE EARTH PASSES ON THE FAR SIDE OF THE SUN WITH RESPECT TO THE EARTH.

OCCULTATION- THE HIDING OF ONE CELESTIAL BODY BY ANOTHER.

PERIHELION- THE NEAREST POINT TO THE SUN IN AN OBJECTS ORBIT AROUND IT.

ELONGATION- ANGULAR DISTANCE IN CELESTIAL LONGITUDE FROM THE SUN IN THE SKY.

OPPOSITION- THE POINT IN A PLANETS ORBIT AT WHICH IT'S CELESTIAL LONGITUDE IS 180 DEGREES FROM THAT OF THE SUN. A PLANET AT OPPOSITION IS VISIBLE ALL NIGHT LONG.

METEOR REPORT

THIS MONTH, REMEMBER TO CATCH THE PERSEID METEOR SHOWER. (AUG 11th-13th) THIS SHOWER IS ANNUAL. IT AVERAGES ABOUT 30 TO 50 METEORS PER HOUR. RADIANT FOR THIS SHOWER IS 03H 04M r.a. & +58 dec. IT'S WORTH STAYING UP FOR.

THE CLUB IS TENTATIVELY PLANNING AN OUTING THE NIGHT OF THE 12th TO DO SOME OBSERVING AND PHOTOGRAPHY. TIMES AND PLACES WILL BE DISCUSSED AT THE MEETING.

IF YOU PLAN TO OBSERVE THE SHOWER, YOU COULD TAKE DOWN SOME OF THE FOLLOWING INFO TO SEND TO THE AMERICAN METEOR SOCIETY. I'VE LISTED THE ADDRESS BELOW.

FIRST, YOU'LL NEED A GOOD COMFORTABLE CHAIR TO SIT IN, AWAY FROM LIGHTS, AN ACCURATE WATCH, SET TO THE NEAREST SECOND, AND SOMEONE TO HELP YOU TAKE NOTES TO KEEP YOUR NIGHT VISION FROM BEING RUINED WHILE TRYING TO WRITE THINGS DOWN.

WHEN A METEOR PASSES OVER, RECORD THE TIME OF THE EVENT, THE DURATION OF THE METEOR, THE LENGTH OF THE TRAIL, AND THE APPARENT VISUAL MAGNITUDE (BY COMPARING IT TO NEARBY STARS). REMEMBER, THE PEAK TIME WILL BE EARLY IN THE MORNING PROBABLY AROUND 3:00 TO 5:00am SO THAT'S WHEN YOU'LL SEE THE MOST ACTIVITY. WHEN YOU COMPILE YOUR DATA, YOU CAN SEND IT TO:

THE AMERICAN METEOR SOCIETY  
DEPT OF PHYSICS  
SUNY  
GENESCO, NY 14454

MAKE SURE TO GIVE YOUR LOCATION AND WEATHER CONDITIONS. ALSO MENTION THAT YOU ARE A MEMBER OF THE CLUB.

SPECIAL REPORT

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SOME SELECTED DOUBLE STARS FOR VIEWING IN OUR AREA.

<u>NAME</u>	<u>CONST.</u>	<u>MAG</u>	<u>COLORS</u>
GAMMA ANDROMEDA	ANDROMEDA	2.3,5.1	ORANGE/BLUE
BETA MONOCEROTIS	MONOCEROS	5.2,5.6	BLUE
IOTA CANCRII	CANCER	4.2,6.6	YELLOW/BLUE
GAMMA VIRGINIS	VIRGO	3.6,3.6	YELLOW
BETA SCORPII	SCORPIUS	2.9,5.1	
BETA CYGNI	CYGNUS	3.2,5.4	YELLOW/GREEN

DID YOU KNOW..... THAT IN ONE 24 HR PERIOD ABOUT 1000 POUNDS  
OF EXTRATERRESTRIAL MATERIAL REACHES THE SURFACE OF THE  
U.S. , ABOUT ONE TINY PARTICLE PER SQUARE YARD EVERY DAY?