



CAPE FEAR Skies

A MONTHLY NEWSLETTER
OF THE
CAPE FEAR ASTRONOMY CLUB

VOLUME 1, No. 5

NOVEMBER 1986

MEMBERS:

OUR EXHIBIT AT INDEPENDENCE MALL WAS A GREAT SUCCESS. WE HAD SEVERAL PEOPLE SIGN UP FOR MEMBERSHIP AND WE ANSWERED LOTS OF QUESTIONS FROM THE PUBLIC. TO ALL THE MEMBERS WHO DEVOTED THEIR ENTIRE WEEKEND TO THIS EVENT, A BIG THANK YOU! FROM THE CLUB.

WE ARE GOING TO HAVE TWO MEETINGS THIS MONTH. ONE ON SATURDAY, NOVEMBER 1st, AND ONE ON SUNDAY, NOVEMBER 2nd. BOTH WILL START AT 7:30PM AT MORTON HALL ON THE CAMPUS OF UNC-W. THIS IS BEING DONE TO SEE WHICH DAY IS MORE CONVENIENT FOR MEMBERS TO COME TO THE MEETINGS. PLEASE TRY TO COME AND GIVE YOUR PREFERENCE ON WHICH DAY IS BETTER FOR YOU. ALSO, THE DRAWING FOR THE TELESCOPE WE SOLD RAFFLE TICKETS FOR WILL BE AT THE SUNDAY NIGHT MEETING.

AT BOTH MEETINGS, WE WILL BE SHOWING A SHORT FILM (ABOUT 10 MIN.) ON THE CONSTELLATIONS. AS WE ARE ABOUT TO START A NEW YEAR, THE CLUB IS THINKING ABOUT STARTING SMALL CLASSES FOR MEMBERS AND THE GENERAL PUBLIC ON THE CONSTELLATIONS. WE WILL BE DISCUSSING THIS AT THE MEETINGS, SO PLEASE GIVE US YOUR OPINION. THERE WERE QUITE A FEW PEOPLE THAT ASKED US IF WE OFFER ANY TYPE OF PROGRAM FOR CHILDREN. WE MAY BE CONSIDERING THIS IN THE FUTURE ALSO.

JUST A REMINDER, CLUB ELECTIONS WILL BE HELD IN EARLY JANUARY. YOU MUST BE PRESENT AT THE ELECTION MEETING TO VOTE FOR CLUB OFFICERS. BE THINKING ABOUT IT, THE DATE, PLACE, AND TIME WILL BE ANNOUNCED IN DECEMBER. IF YOU WOULD LIKE TO RUN FOR AN OFFICE PLEASE CONTACT ONE OF THE PRESENT OFFICERS.

MY APOLOGIES FOR LEAVING OUT THE PLACE THAT THE CLUB PICNIC WAS TO BE HELD. SOMETIMES MY MIND WORKS FASTER THAN MY FINGERS, SO I FORGOT TO TYPE THAT IN. ANYWAY, WE HAD ONLY A FEW MEMBERS THAT WERE ABLE TO MAKE IT, BUT THE ONES THAT DID GOT SOME SPECTACULAR VIEWS FROM THE TELESCOPES WE SET UP. THANKS TO RONNIE AND PAUL FOR HAULING THEM DOWN FOR US TO USE.

THE NOVEMBER SKY

- 1st TAURID METEORS
CHIRON (ASTEROID) DISCOVERED 1977
- 2nd NEW MOON, 1:02PM, TAURID METEORS
MERCURY STATIONARY, CERES IN CONJUNCTION WITH THE SUN
- 3rd SATURN 6 DEGREES NORTH OF ANTARES , MERCURY 0.8 DEGREES
NORTH OF MOON. OCCULTATION, MOON AT PERIGEE 9 PM
TAURID METEORS.
- 4th SATURN 6 DEGREES NORTH OF MOON
ANTARES 0.6 DEGREES SOUTH OF MOON
OCCULTATION
URANUS 4 DEGREES NORTH OF MOON
- 5th VENUS IN INFERIOR CONJUNCTION
NEPTUNE 6 DEGREES NORTH OF MOON
- 8th FIRST QUARTER MOON 4:11PM
JUPITER STATIONARY
MARS 3 DEGREES NORTH OF MOON.
- 10th JUPITER 2 DEGREES NORTH OF MOON
- 12th MERCURY IN INFERIOR CONJUNCTION, TRANSITS SUN'S DISK
VOYAGER 1 FLIES PAST SATURN 1980
- 13th ANDROMEDID METEORS
MARINER 9 ORBITS MARS 1971
- 14th ANDROMEDID METEORS
- 15th ANDROMEDID METEORS
- 16th FULL MOON 7:12 AM
LEONID METEORS
- 17th LEONID METEORS
- 18th LEONID METEORS
- 19th MOON AT APOGEE 5:00 PM
- 22nd MERCURY STATIONARY
- 23rd VENUS STATIONARY
- 24th LAST QUARTER MOON 11:50 AM
- 26th FIRST METEOR PHOTOGRAPH, 1885
- 27th HAPPY THANKSGIVING!!
- 29th VENUS 2 DEGREES NORTH OF MOON
MERCURY AT GREATEST WESTERN ELONGATION (20 DEGREES)

ORIGINS OF THE CONSTELLATIONS

ANDROMEDA- SEVERAL CONSTELLATIONS ARE ASSOCIATED WITH THIS STORY. ANDROMEDA, THE DAUGHTER OF CASSIOPEIA AND CEPHEUS WAS SO BEAUTIFUL THAT HER MOTHER BOASTED HER BEAUTY TO GREATER THAN THAT OF THE SEA NYMPHS. THE SLIGHTED NYMPHS ASKED NEPTUNE, GOD OF THE SEA, TO PUNISH CASSIOPEIA. NEPTUNE SENT THE SEA MONSTER CETUS TO RAVAGE THE KINGDOM. CEPHEUS CONSULTED AN ORACLE FOR ADVICE AND WAS TOLD THAT ONLY THE SACRIFICE OF ANDROMEDA TO CETUS WOULD APPEASE THE GODS. ANDROMEDA WAS THEN CHAINED TO A ROCK AT THE EDGE OF THE SEA. SHE WAS RESCUED BY PERSEUS WHO SAVED HER BY TURNING CETUS INTO STONE WITH THE HEAD OF MEDUSA. FOR HER BRAVERY IN THE FACE OF CERTAIN DEATH, ANDROMEDA WAS AWARDED A PLACE IN THE HEAVENS.

AQUILA THE EAGLE- THIS BIRD WAS PLACED IN THE HEAVENS FOR HAVING BROUGHT FROM EARTH THE HANDSOME GANYMEDE TO SERVE AS CUP BEARER OF THE GODS.

ARA THE ALTAR- THE OLYMPIAN GODS RAISED THIS ALTAR TO COMEMORATE THEIR VICTORY OVER THE TITANS.

ARGO NAVIS, THE SHIP ARGO- THIS SHIP CARRIED THE ARGONAUTS FROM THESSALY TO COLCHIS IN SEARCH OF THE GOLDEN FLEECE. THIS IS NO LONGER CONSIDERED A SINGLE CONSTELLATION. IT HAS BEEN BROKEN DOWN INTO 4 SUBDIVISIONS: CARINA, PUPPIS, PYXIS, AND VELA.

ASTRONOMICAL GLOSSARY.

BAYERS DESIGNATIONS- THE GREEK LETTERS ASSIGNED TO THE STARS IN A CONSTELLATION, USUALLY IN ORDER OF BRIGHTNESS, BY JOHANN BAYER IN HIS SKY ATLAS WRITTEN IN 1603

ASTERISM- A NOTICEABLE PATTERN OF STARS THAT MAKE UP PARTS OF A CONSTELLATION THOUGH ARE NOT THE WHOLE CONSTELLATION ITSELF.

MESSIER CATALOG- THE LIST OF 103 NONSTELLAR, DEEP-SKY OBJECTS COMPILED BY CHARLES MESSIER IN THE 1770'S, AND SUBSEQUENTLY EXPANDED TO 109 OR 110 OBJECTS.

SIDEREAL TIME- TIME BY THE STARS; TECHNICALLY, THE HOUR ANGLE OF THE VERNAL EQUINOX, WHICH IS EQUAL TO THE RIGHT ASCENSION OF OBJECTS ON YOUR MERIDAN.

PLANETARY NEBULA- A SHELL OF GAS EJECTED BY A DYING STAR THAT CONTAINS ABOUT AS MUCH MASS AS THE SUN.

QUASAR- A "QUASI-STELLAR OBJECT" WITH AN EXTREMELY LARGE REDSHIFT PRESUMABLY A POWERFUL EVENT GOING ON IN THE CENTRAL REGION OF A GALAXY. ACCORDING TO HUBBLE'S LAW, QUASARS MUST BE AMONG THE MOST DISTANT OBJECTS IN THE UNIVERSE.

STAR CLOUD- ONE OF SEVERAL REGIONS OF THE MILKY WAY WHERE GREAT NUMBERS OF STARS APPEAR.

THE NOVEMBER SKY CONSTELLATIONS

AURIGA	CASSIOPEIA	PERSEUS	ANDROMEDA
ARIES	PISCES	TAURUS	PLEIADES
ORION	AQUARIUS	CETUS	TRIANGULUM

THE CONSTELLATION ORION IS COMING UP AGAIN. FOR ALL THE MEMBERS WHO WILL GET TELESCOPES FOR CHRISTMAS, THAT'S THE BEST AREA OF THE SKY TO LOOK AT. TRY FOR M42, THE ORION NEBULA. IT'S THE BEST EXAMPLE OF A NEBULA THAT CAN BE SEEN THROUGH EVEN A BEGINNER'S SCOPE. AND AS THE MORE EXPERIENCED OBSERVER KNOWS, THIS AREA OF THE SKY IS FULL OF CLUSTERS AND OTHER GREAT OBJECTS. HAVE FUN!!

SPECIAL REPORT

THE LEONID METEOR STORM OF 1966

THIS MONTH AROUND THE 16th OR 17th WILL MARK THE 20th ANNIVERSARY OF THE GREAT METEOR SHOWER (IT WAS ACTUALLY CALLED A STORM) OF 1966. THIS GREAT EVENT IS ASSOCIATED WITH THE PASSAGE OF COMET TEMPLE-TUTTLE. ABOUT EVERY 33 YEARS, THE EARTH ENTERS THE REMNANTS OF THE COMET'S TAIL AND THIS BRINGS ABOUT A SPECTACULAR METEOR SHOW. DURING A 1 HOUR PERIOD IN 1966, OVER 100 METEORS WERE OBSERVED. DURING A 40 MINUTE PERIOD OVER 1000 WERE SEEN. AT MAXIMUM, SOME OBSERVERS WERE ABLE TO SEE 40 LEONIDS PER SECOND AVERAGE BRIGHTNESS WAS 1.5 TO 2 MAGNITUDE, AND SOME OF THE TRAINS LASTED MORE THAN A MINUTE.

THERE ARE DRAWINGS DATING BACK TO THE 1800'S THAT DEPICT THE SKY AS BEING ABLAZE WITH THESE METEORS. ALAN AND RONNIE OBSERVED THE METEOR SHOWER IN 1966 AND HAVE SAID THAT THIS SHOWER IS OVERWHELMINGLY BEAUTIFUL.

UNFORTUNATELY FOR US THIS MONTH, THE MOON WILL INTERFERE WITH THE SHOWER. NORMALLY, WE WOULD EXPECT ABOUT 15 TO 25 METEORS PER HOUR FOR THE YEARS IN BETWEEN THE STORMS. THE NEXT GREAT SHOWER SHOULD OCCUR IN 1998 AND 1999. IT IS EAGERLY AWAITED!

DID YOU KNOW..... THAT IN ABOUT 13,000 YEARS, POLARIS WILL NO LONGER BE THE NORTH STAR. THIS IS DUE TO A FACTOR KNOWN AS PRECESSION. THE GRAVITY PULL OF THE SUN AND MOON CAUSE THE EARTH TO WOBBLE ON IT'S AXIS. AS A RESULT OF THIS WOBBLING, THE CELESTIAL COORDINATES OF STARS CHANGE SLIGHTLY WITH TIME. THE VERNAL EQUINOX MOVES SLOWLY WESTWARD ALONG THE ECLIPTIC AT ABOUT 50" PER YEAR. THE EFFECT IS NOT GREAT BUT MUST BE TAKEN INTO ACCOUNT TO BE ABLE TO PLOT ASTRONOMICAL OBJECTS ACCURATELY. IN CASE YOU'RE WONDERING, IN 13,000 YEARS VEGA WILL BE WITHIN A FEW DEGREES OF BEING THE POLE STAR.

SINCE THE PASSAGE OF COMET HALLEY THIS YEAR, AND THE RELATIVELY BAD REVIEW IT GOT AS BEING THE FLOP OF THE CENTURY INSTEAD OF THE GREATEST SHOW ON EARTH, (ALTHOUGH MOST CLUB MEMBERS WOULD DEBATE ON THAT POINT), IT HAS CAUSED ONE ECONOMIC REBOUND IN THE WORLD OF TELESCOPE SALES. IF YOU CHECK THE LAST FEW ISSUES OF ASTRONOMY MAGAZINE, YOU WILL NOTICE THAT AN ABOVE NORMAL AMOUNT OF CLASSIFIED ADS OFFERING GOOD SCOPES AT LOW PRICES ARE BEING PUBLISHED. MOST PEOPLE PURCHASED EXPENSIVE TELESCOPES EXPECTING TO SEE GREAT THINGS, AND ARE NOW QUITE DISILLUTIONED WITH THEM. IF YOU ARE IN THE MARKET FOR A GOOD SCOPE AT A REASONABLE PRICE YOU OUGHT TO CHECK THIS OUT.

THIS IS NOT MENT TO BE A PLUG FOR ASTRONOMY MAGAZINE OR AN EDITORIAL COMMENT. I SIMPLY FEEL THAT FOR THOSE OF YOU THAT WANT A GOOD SCOPE YOU WOULD PROBABLY BE ABLE TO FIND SOMETHING GOOD AT A REASONABLE PRICE.

COSMIC COMICS

MOUNT EQUATORIAL

by Gary J. Bivin



From the *Desert Skies*, newsletter of the Tucson Amateur Astronomy Association.