



CAPE FEAR

Skies

A MONTHLY NEWSLETTER

OF THE

CAPE FEAR ASTRONOMY CLUB

VOLUME 2, No 1

JANUARY 1987

MEMBERS:

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I HOPE EACH ONE OF YOU HAD A NICE HOLIDAY! AND WELCOME TO THE NEW YEAR. THIS YEAR PROMISES TO BE A BIG ONE FOR OUR CLUB AS WE HAVE MANY ACTIVITIES ALREADY IN THE PLANNING STAGES, WITH MORE ON THE WAY.

ATTACHED TO THIS LETTER YOU WILL FIND A BALLOT FOR OUR ELECTIONS. THE FOLLOWING IS A EXCERPT FROM OUR CONSTITUTION ON VOTING PROCEDURES. PLEASE READ IT CAREFULLY.

ARTICLE V ELECTIONS

SECTION I THE METHOD OF VOTING SHALL BE BY SECRET BALLOT AT AN ANNUAL ELECTION TO BE HELD DURING A REGULAR MEETING IN THE MONTH OF JANUARY.

SECTION II EACH OFFICE SHALL BE VOTED UPON SEPERATELY IMMEDIATELY FOLLOWING THE CLOSING OF NOMINATIONS OF CANDIDATES FOR THAT OFFICE. THE RESULTS SHALL THEN BE TALLIED BY A PERSON APPOINTED BY THE PRESIDENT, WITH THE RESULTS EXPRESSED VERBALLY TO THE MEMBERSHIP, AND SHALL BE OFFICIALLY RECORDED IN THE MINUTES BY THE SECRETARY.

ELECTIONS CLOSED ON DECEMBER 14, 1986. THE NOMINATIONS FOR OFFICES ARE AS FOLLOWS: PRESIDENT - ALAN HILBURN
VICE PRESIDENT - PAUL PETTY ASSOCIATE V.P. - TOMMY BROCK
AND JOHN MARSHALL. SECRETARY - KIM WHITFIELD, AND TREASURER - RONNIE HAWES.

PLEASE VOTE ON THE ENCLOSED BALLOT AND BRING IT TO THE MEETING WITH YOU. TURN THE BALLOT IN TO ME WHEN YOU ARRIVE. WINNERS WILL BE ANNOUNCED SHORTLY THERE AFTER.

OUR NEXT MEETING (ELECTION MEETING) WILL BE ON JANUARY 18, 7:30 PM AT MORTON HALL, UNC-W CAMPUS.

JANUARY SKY CALENDAR

- 1st NEW YEARS DAY
CERES (ASTEROID) DISCOVERED 1801
- 2nd QUADRANTID METEORS
- 3rd QUADRANTID METEORS
JUNO IN CONJUNCTION WITH SUN
- 4th JUPITER 1.3 DEGREES NORTH OF MOON
LUNA I FIRST SPACECRAFT TO LEAVE EARTH'S GRAVITY 1959
QUADRANTID METEORS
- 5th MARS 1.4 DEGREES NORTH OF MOON
- 6th FIRST QUARTER MOON 5:34 PM
- 7th GALILEO DISCOVERS IO, EUROPA, AND CALLISTO, MOONS OF JUPITER 1610
- 8th GALILEO DIES 1642
- 10th U.S. ARMY MAKES FIRST RADAR CONTACT WITH THE MOON 1946
- 11th WILLIAM HERSCHEL DISCOVERS TITANIA AND OBERON, MOONS OF URANUS 1787
- 12th MERCURY IN SUPERIOR CONJUNCTION WITH THE SUN
- 13th MOON AT APOGEE
GALILEO DISCOVERS GANYMEDE, MOON OF JUPITER, 1610
- 14th FULL MOON 9:30 PM
EDMUND HALLEY DIES 1742
- 15th VENUS AT GREATEST WESTERN ELONGATION 47 DEGREES
VENUS 8 DEGREES NORTH OF ANTARES.
- 22nd LAST QUARTER MOON 5:45 PM
- 24th VENUS 1.8 DEGREES NORTH OF SATURN
VOYAGER FLIES PAST URANUS 1986
- 25th ANTARES 0.4 DEGREES SOUTH OF MOON
- 26th SATURN 6 DEGREES NORTH OF MOON
VENUS 8 DEGREES NORTH OF MOON
URANUS 5 DEGREES NORTH OF MOON
- 27th NEPTUNE 6 DEGREES NORTH OF MOON
- 28th MOON AT PERIGEE
CHALLENGER EXPLODES 1986
- 29th NEW MOON 8:44 AM
- 31st VENUS 3 DEGREES NORTH OF URANUS
EXPLORER I LAUNCHED. FIRST ORBITING AMERICAN SPACECRAFT, 1958.

SPECIAL REPORT

A YEAR AFTER CHALLENGER

THE 28th OF THIS MONTH WILL MARK THE FIRST ANNIVERSARY OF THE TRAGEDY OF SHUTTLE CHALLENGER AND THE LOSS OF HER 7 CREW MEMBERS.

MISSION 51-L WILL BE REMEMBERED AS ONE OF THE GREATEST DISASTERS OF THE SPACE PROGRAM. MOST OF US PROBABLY REMEMBER WHERE WE WERE AND WHAT WE WERE DOING WHEN WE HEARD THE NEWS OF THE EXPLOSION.

SINCE THAT TIME, THERE HAVE BEEN ACCUSATIONS, INVESTIGATIONS, AND STUDIES INTO OUR SPACE PROGRAM. OBVIOUSLY, MAJOR CHANGES WILL HAVE TO BE MADE.

THE MOST CRUSHING BLOW FOR ASTRONOMERS WAS THE TEMPORARY CANCELLATION OF THE SHUTTLE PROGRAM, MEANING THAT THE HUBBLE SPACE TELESCOPE IS ON HOLD FOR AN UNKNOWN PERIOD OF TIME. THE LATEST REPORTS SAY "MAYBE" A LAUNCH OF THE TELESCOPE AROUND FEBRUARY, 1990. UNTIL THAT TIME, WE WILL HAVE TO BE SATISFIED WITH WHAT WE HAVE ON EARTH.

THE LOSS OF 7 LIVES WAS DEVASTATING AND UNEXPECTED, AND WE WILL PRESERVE THEIR MEMORY ALWAYS.

HOPEFULLY, WE WILL LEARN FROM OUR MISTAKES AND CONTINUE TO PERSEVERE IN THIS IMPORTANT FIELD.

THE JANUARY SKY

AURIGA	ORION	PERSEUS
TRIANGULUM	CANCER	CANIS MAJOR
CANIS MINOR	TAURUS	GEMINI

ORIGINS OF THE CONSTELLATIONS

CASSIOPEIA THE QUEEN - WHEN CASSIOPEIA OBJECTED TO THE WEDDING OF PERSEUS AND ANDROMEDA, PERSEUS EXHIBITED THE HEAD OF MEDUSA AND AS A RESULT ALL HIS ENEMIES WERE TURNED TO STONE INCLUDING CASSIOPEIA. NEPTUNE PLACED HER IN THE HEAVENS BUT IN ORDER TO HUMILIATE HER, HE ARRANGED THAT AT CERTAIN TIMES OF THE YEAR, SHE WOULD APPEAR TO BE UPSIDE DOWN.

CENATURUS THE CENTAUR - THIS CONSTELLATION IS OFTEN IDENTIFIED WITH CHIRON, THE ARCHER. WHEN HERCULES ACCIDENTALLY WOUNDED CHIRON WITH ONE OF HIS POISON ARROWS, CHIRON SUFFERED GREATLY, BUT AS AN IMMORTAL, COULD NOT FIND RELEASE IN DEATH. HE RESOLVED HIS PROBLEM BY OFFERING HIMSELF AS A SUBSTITUTE TO

PROMETHEUS, A TITAN WHO WAS SUFFERING BECAUSE HE HAD STOLEN FIRE FROM HEAVEN FOR THE BENEFIT OF MANKIND. THE GODS PUNISHED HIM BY CHAINING HIM TO A ROCK AT THE EDGE OF THE SEA WHERE THE VULTURES CAME DAILY AND DEVoured HIS LIVER WHICH WAS RESTORED EACH NIGHT. AT THE REQUEST OF HERCULES, ZEUS AGREED TO RELEASE PROMETHEUS IF A SUBSTITUTE COULD BE FOUND FOR HIM. CHIRON IMMEDIATELY OFFERED HIS IMMORTALITY TO PROMETHEUS AND BECAME A MORTAL. HIS BRAVERY WON HIM A PLACE IN THE HEAVENS.

CORONA AUSTRALIS THE SOUTHERN CROWN - THE SOUTHERN CROWN IS SAID TO REPRESENT THE CROWN OF LAUREL OR OLIVE BRANCHES PLACED ON VICTORS IN GAMES AND THOSE WHO PERFORM GREAT SERVICE TO THEIR PEERS.

CORONA BOREALIS THE NORTHERN CROWN - THIS CONSTELLATION IS MOST COMMONLY ASSOCIATED WITH ARIADNE, DAUGHTER OF MINOS, KING OF CRETE. EACH YEAR 14 YOUNG PEOPLE FROM CRETE WERE FED TO THE MINOTAUR. WHEN THESEUS ARRIVED FROM ATHENS AS ONE OF THE PERSPECTIVE VICTIMS, ARIADNE FELL IN LOVE WITH HIM. SHE OFFERED TO HELP HIM ESCAPE THE MINOTAUR IF HE WOULD TAKE HER BACK TO ATHENS WITH HIM AS HIS BRIDE. THESEUS AGREED. ARIADNE HELPED HIM KILL THE MINOTAUR AND THEY SAILED OFF. THE PARTY STOPPED OFF AT THE ISLAND OF NAXOS WHERE THESEUS ABANDONED THE SLEEPING ARIADNE AND SAILED BACK TO GREECE. SHE WAS DISCOVERED BY DIONYSIS, THE GOD OF WINE, WHO MARRIED HER IMMEDIATELY. AS A WEDDING GIFT, DIONYSIS GAVE ARIADNE A CROWN OF JEWELS. WHEN SHE DIED, HE PLACED THE CROWN IN THE HEAVENS AS AN ETERNAL REMINDER OF HIS LOVE FOR HER.

ASTRONOMICAL GLOSSARY

ABSOLUTE MAGNITUDE - THE MAGNITUDE A CELESTIAL OBJECT WOULD APPEAR IF IT WERE AT A DISTANCE OF 10 PARSECS FROM EARTH.

CREPE RING - SATURN'S INNER RING, ALSO KNOWN AS THE C-RING, WHICH EXTENDS INWARD TO THE PLANE FROM THE BRIGHTEST RING.

EQUINOX - ONE OF THE TWO INTERSECTIONS OF THE ECLIPTIC AND THE CELESTIAL EQUATOR.

HOURLY CIRCLE - A LINE ALONG WHICH RIGHT ASCENSION IS CONSTANT, LYING ON A GREAT CIRCLE THAT PASSES THROUGH THE CELESTIAL POLES AND THE OBJECT.

INTRINSIC BRIGHTNESS - THE AMOUNT OF ENERGY, USUALLY LIGHT, AN OBJECT GIVES OFF; IT'S TRUE BRIGHTNESS, INDEPENDENT OF THE EFFECTS OF DISTANCE OR DIMMING BY INTERVENING MATERIAL.

MAXIMA - THE TIMES WHEN A VARIABLE STAR REACHES ITS MAXIMUM BRIGHTNESS.

PARSEC - THE DISTANCE FROM WHICH 1 A.U. APPEARS TO COVER. 1 SECOND OF ARC; 1 PARSEC EQUALS 3.261633 LIGHT YEARS.

DID YOU KNOW....., AUTOMATIC CLOCKS, WHICH KEEP TIME BY MEASURING ELECTROMAGNETIC WAVES, GAIN OR LOSE NO MORE THAN A SECOND EVERY 100,000 YEARS. WANT THE EXACT TIME ? CALL THE U.S. NAVAL OBSERVATORY'S MASTER ATOMIC CLOCK AT 1-900-410-TIME. THERE'S A 50 CENT CHARGE FOR THE CALL.

ATTENTION EVERYBODY.....

JOHNNY HORNE FROM STEDMAN NORTH CAROLINA WILL BE OUR GUEST SPEAKER AT THE JANUARY MEETING. HE WILL PRESENT A SLIDE SHOW ON HIS AUSTRALIAN TOUR OF HALLEY'S COMET AT AYER'S ROCK. THIS SHOULD BE VERY INTERESTING. THE SLIDE SHOW WILL BEGIN AT 7:30 PM SHARP. PLEASE TRY TO GET THERE BEFORE 7:30 SO JOHNNY CAN PRESENT HIS SLIDES AND ANSWER QUESTIONS EARLY AS HE HAS TO DRIVE BACK TO FAYETTEVILLE THAT NIGHT.

CORRECTION FROM DECEMBER'S LETTER.

ANNUAL DUES FOR SINGLE MEMBERSHIPS ARE \$15.00 NOT \$20.00 AS I REPORTED LAST MONTH. SORRY ABOUT THAT!