

Volume 3 No. 3

Wilmington, NC

March 1988

## March Meeting

March 6, 1988 6:00 PM Bryan Auditorium Morton Hall UNC-W Campus

The next meeting of the Cape Fear Astronomy Club will be held on March 6, 1988 in Bryan Auditorium Morton Hall on the UNC-W Campus. The Business meeting will begin at 6:00 PM.

The program for the general meeting will be a presentation on radio astronomy made by club member Sam Bissette.

I hope to see you at the meeting.

# Highlights of the February Meeting

February 7, 1988

Alan Hilburn called the February 7th business meeting of the Cape Fear Astronomy Club to order at 6 PM.

Alan stated that the Southern Star Party will be held this year on April 22-24. He plans to attend again this year and will have more information at next months meeting.

A club viewing session is tentatively scheduled for the early morning hours of February 23th at Paul Petty's house at 110 Linville Dr., in Castle Hayne.

A trip to the Morehead Planetarium is being planned for either February the 26th and 27th or March 25th and 26th. If you are interested please contact Alan.

Saturday, February 13th, has been designated as a work day for the club at UNC-W in Bear Hall from 10am until "?". All members are encouraged to attend as activities for the rest of the year will be planned.

Alan also stated a Yard Sale will probably be held in April. He hopes we can hold it in the lot across the street from the National Outlet. Money raised from the yard sale will go in the general treasury for club expenses.

Ronnie Hawes gave the Treasurer's report. As of the start of the February 7th meeting we have 34 paid up members.

On the Sunday afternoon before the club meeting several CFAC members went to the Boys Home at Lake Wachamaw. Alan; Page Hilburn; Paul and Ronnie presented Joshua Buchanan with a Club Mem-

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## Subscriptions to New Horizons

The last edition of New Horizons stated that your subscription expires with the winter 87/88 edition. It then ask all of it's readers to complete the enclosed renewal form and mail their payment in to avoid missing out on the Spring edition.

This short note is to remind members of the Cape Fear Astronomy Club that the club pays for your subscriptions out of your membership dues. You do not need to worry about missing the Spring editions of New Horizons as Ronnie has already sent in the renewal for all paid members of the Cape Fear Astronomy Club.

#### Morehead Planetarium Trip Continued from page 3.

One for those people who wish to go to Chapel Hill on the 11th of March. Another group on the 18th of March. It is hoped that having two dates will allow more members to attend by providing scheduling flexibility. This would not allow the scheduling of a postponement date but would reduce crowding on the telescope.

## Southern Star Astronomical Convention

April 22 thru 24, 1988
Wildacres Retreat
(between Spruce Pine, NC and
Marion, NC)

The Charlotte Amateur Astronomers Club has announced that they will be the host for the second Southern Star Astronomical Convention. This event will be held at the Wildacres Retreat located between the towns of Spruce Pine and Marion North Carolina.

The program includes talks by Dr. Fred C Hess; Dennis di Cocco; and Dr. Robert Manning.

Also occuring during this convention will be an astrophotography contests and swap tables.

Please contact either Alan Hilburn or Tom Jacobs for more information about: activities; location; or registration.

#### February Meeting Highlights continued from Page 1.

bership and t-shirt; binoculars; and a subscription to Odyssey magazine. Paul videotaped it and Ronnie took pictures. Alan stated that there was a lot of interest in astronomy and he hopes to have a program there in the near future.

Sam Bissette, a local artist and club member, recently had a showing of his work and several members attended. Sam has made slides and will make them available for showing at a future meeting.

Ronnie reported that some club members have been working on a local sky calendar to be printed in the Star News. He will meet with Ben Steelman this week to discuss the format. Ben Steelman was present and was presented with a certificate of appreciation for his help in promoting the club during the past year.

David Maness has been busy as chairman of the Fund Raising Committee. He has been in touch with other groups who have or are building observatories and he is

seeking information on plans and possible funding. Dave has ordered 21 cases of chocolate/almond candy bars. Proceeds from the sale of these candy bars will be placed into the observatory fund. David also has composed a letter to be sent to area school principles offering educational programs geared to specific age groups. The letter requests a \$50 contribution for each program going to the observatory fund.

We continue to seek ways to raise money for the observatory. Your suggestions are welcome and will be considered.

The general meeting started shortly after 7 PM. Johnny Horne showed slides and spoke for about 1.5 hours. The slides included shots of his backyard observatory during and after construction, equipment, and sky shots. It was an excellent program and the members were very impressed.

- Barbara M⊆Gowan

## Morehead Planetarium Trip

The club is planning to travel up to the Morehead Planetarium during the month of March. Also it is hoped that we can arrange to use the 24 inch telescope located in Chapel Hill later in the night. The trip has been scheduled for Friday March the 11th. In the event of cloudy skies the trip will be rescheduled for the following Friday March 18th.

Final plans for this trip will be arranged during the March meeting. If there is enough interest in this trip it is possible that the club will try to schedule two trips.

(Continued on Page 2)

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Sky Calendar Abrams Planetarium Michigan State University East Lansing, MI 48824

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#### Astronomical Lectures this Month

The Physics Department of UNC-W has again asked the club to announce another guest lecturer coming to Wilmington to speak on an Astronomical topics. The following two items contains the information from the University.

## "The Evolution of Life in the Universe"

A lecture by
Yervant Terzian
Professor of Astronomy and Space
Sciences
and
Chairman, Department of
Astronomy
Cornell University
Thursday
March 17, 1988
8:00 PM
Bryan Auditorium
Morton Hall
UNC-W Campus

The structure of the Universe is presented, and the evolution of life on other planets is argued with emphasis on the physical and chemical conditions of the planets around other stars. Unidentified flying objects (UFO's) are debated. Finally, the evolution of life on earth is discussed with emphasis on our future.

# "History of Radio Astronomy"

A lecture by
Yervant Terzian

Professor of Astronomy and Space
Sciences
and
Chairman, Department of
Astronomy
Cornell University
Friday
March 18, 1988
4:00 PM
218 DeLoach Hall
UNC-W Campus

A historical account of one of the most exciting and thrilling stories of the discovery of radio waves from the sky. The rapid progression of surprising radio astronomical discoveries of the interstellar cold neutral hydrogen gas, giant radio galaxies and the creation of the Universe.

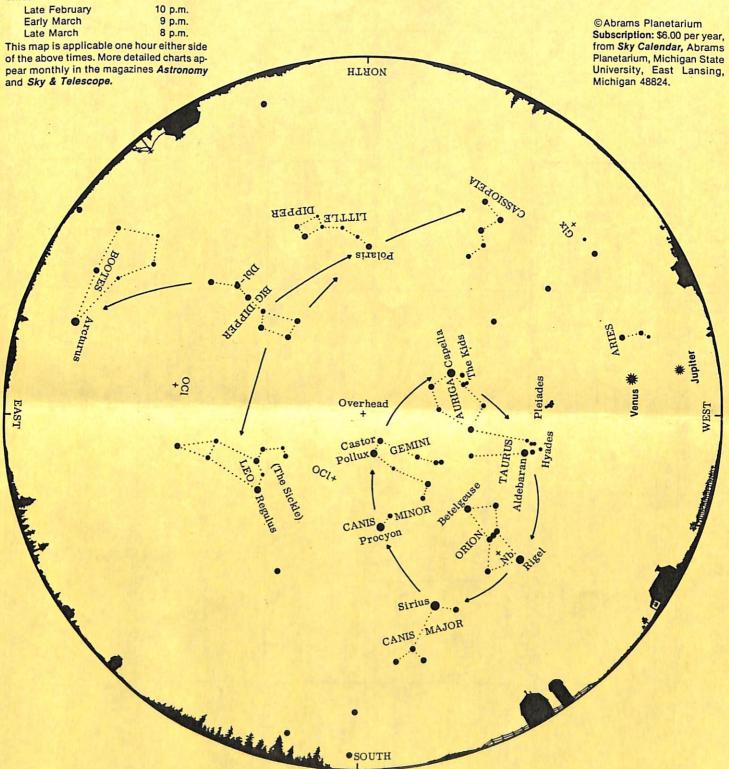
# Sky Calendar for March 1988

#### (All times are Given in UT to convert to EST subtract 5 hours.)

| (All times are Given in Oi to co              | onvert to EST subtract 5 nours.)         |
|---|--|
| 1 s t   | Moon. Occultation                        |
| 12:00 Moon at apogee. Distance is 63.7        | 20:00 Moon at perigee. Distance is 56.4  |
| Earth-radii.                                  | Earth-radii.                             |
|   |  |
| 3 rd  | Corona-Australids Meteor Shower.         |
| 16:01 Full Moon                               | Radiant is right ascension 16:20;        |
| Penumbral eclipse of the Moon                 | declination -48°; Zhr = 5.               |
| (will not be visible from the                 | Astronauts Neil Armstrong and            |
| Wilmington area).                             | Dave Scott accomplish the first          |
| 4th   | space docking between their              |
|   | Gemini VIII spacecraft and an            |
| 23:00 Mercury at descending node.             |  |
| 12:00 Moon at descending node.                | Agena target vehicle on this date in     |
| 5 t h   | 1966.                                    |
| Active volcanoes discovered on Io             | Robert Goddard launches the world's      |
| by Voyager 1 as it passes Jupiter in          | first liquid-fueled rocket on this       |
| 1979.   | date in 1926.                            |
| 6th   | 17th                                     |
| 20:00 Venus passes 2° north of Jupiter.       | Total eclipse of the Sun (not            |
| Magnitudes -4.2 and -2.1.                     | visible from the Wilmington area).       |
|   | 18th                                     |
| 7th   |  |
| 1:00 Spica passes .7° north of the Moon.      | 2:02 New Moon Lunation Number 807.       |
| Occultation not visible from the              | Aleksei Leonov becomes the first         |
| Wilmington area.                              | man to "walk in space" on this date      |
| 22:00 Mars passes 1.4° south of Neptune.      | in 1965.                                 |
| Magnitudes of 1.0 and 8.0.                    | 20th                                     |
| 8th   | 9:39 Vernal or March equinox - Spring    |
| 6:00 Mercury at greatest western              | Begins                                   |
| elongation of 27°.                            | 14:00 Jupiter passes 5° south of the     |
| On this date in 1969 astronauts Jim           | Moon.                                    |
| McDivitt and Rusty Schweickart                | 21st                                     |
| make first areas to the first of the          |  |
| make first space test flight of the           | 12:00 Venus passes 2° south of the Moon. |
| Lunar Module Spider in Earth                  |  |
| orbit.  | Camelopardalids Meteor. Radiant is       |
| 10th  | right ascension 7:50; declination        |
| 10:00 Vesta stationary in right               | $+68^{\circ}$ ; Zhr = 1.                 |
| ascension.                                    | 22ed                                     |
| 15:00 Moon passes .6° North of Antares.       | March Geminids Meteor. Radiant is        |
| Occultation not visible from the              | right ascension 6:22; declination        |
| Wilmington area                               | $+23^{\circ}; Zhr=40.$                   |
| 11th  | 23rd                                     |
| 10:56 Moon at Last Quarter                    | Venus at Perihelion. Distance from       |
| 12:00 Sun enters Pisces.                      | the Sun is .72 au.                       |
|   | Gus Grissom and John Young               |
| 12th  | accomplish the first manned test of      |
| 4:00 Uranus passes 5° north of the            | the Gemini spacecraft on this date       |
| Moon.   | in 1965.                                 |
| 6:00 Saturn passes 6° north of the            | 25th                                     |
| Moon.   |  |
| 19:00 Neptune passes 6° north of the          | 4:41 Moon at First Quarter               |
| Moon.   | 26th                                     |
| 13th  | 20:00 Vesta passes .5° north of the      |
| 0:00 Mars passes 5° north of the Moon.        | Moon. Occultation                        |
|   | 29th                                     |
| 15th<br>6:00 Mercury at aphelion. Distance is | 0:00 Moon at apogee. Distance from the   |
| .4667 au from the Sun.                        | Earth is 63.6 Earth-radii.               |
| .4007 au Hom the Sun.                         | 31st                                     |
| 16th  |  |
| 5:00 Mercury passes .5° north of the          | 18:00 Moon at descending node.           |
|   |  |

# **March Evening Skies**

This chart is drawn for Latitude 40° North, but should be useful to stargazers throughout the continental United States. It represents the sky at the following local times:



The planets Venus and Jupiter are plotted for mid-March 1988. At chart time 11 objects of first magnitude or brighter are visible. In order of brightness they are: Venus, Jupiter, Sirius, Arcturus, Capella, Rigel, Procyon, Betelgeuse, Aldebaran, Pollux, and Regulus. In addition to stars, other objects that should be visible to the unaided eye are labeled on the map. The double star (DbI) at the bend of the handle of the Big Dipper is easily detected. The famous Orion Nebula, a cloud of gas and dust out of which stars are forming, is marked (Nb) in that constellation. The open

or galactic cluster (OCI) known as the "Beehive" can be located between the Gemini twins and Leo. Coma Berenices, "The hair of Berenice," is another open cluster (OCI), between Leo and Bootes. The position of an external star system, called the Andromeda Galaxy after the constellation in which it appears, is also indicated (Gix). Try to observe these objects with unaided eye and binoculars.

Use this scale to measure angular distances between objects on diagrams below.

50.

MUIRATHMAL PLANETARIUM

## SKY CALENDAR MARCH

СПВВЕИТ SKY INFORMATION:

RAT2-SEE (517) 1150

An aid to enjoying the changing sky

|                              | to 7½; Neptune 8.              | Marie of conse                                |  |   | ASA ni dgiH                   |                                |
|------------------------------|--------------------------------|---|--|---|-------------------------------|--------------------------------|
| T steev ; 8.6 of T.6 sunsit  | (March 1-23) + 0.3 to + 0.1; U | M 3   |  |   |                               | SS SSE                         |
| 1.1 to + 0.7; Mercury        | -2.1; Saturn +0.5; Mars +      |   | Moom.  | OnooM   | 00106011                      | betliff                        |
|                              | Mercury. Magnitudes: Venus     |   | next September's Harvest                               | sulugaA.  | •Regulus                      | Saturn's<br>rings,             |
| iter. Morning: Saturn. Mars. | Evening Planets: Venus, Jup    | evenings.                                     | northern U.S. Compare to                               |   |                               | SHOWS                          |
|                              | high in SSE.                   | next few #Jupiter                             | than an hour later each<br>night through April 7, from |   |                               | Telescope TEAPOT               |
| OnooM                        | Gemini twins                   | Pleiades                                      | sunset today, rises more                               | ***   | OMoon                         |                                |
|                              | your I                         | of Venus<br>past the                          | Moon, rising 2 hours before                            |   |                               |                                |
| • xulloq                     | nooM O •xulloq                 | noitom  |  |   | evening:                      | · · sam ·                      |
| Castor•                      | Castor•                        |   | 30   | Evening: 29   | ואוסוומפא' אופובוו בס'        |                                |
| 1301363                      |                                | 23° apart.                                    | before sunset.   |   | ULU MESI                      | morning: Sat                   |
| 9Z Sening:                   | zening: zen                    | Planets                                       | farther N, 15-20 minutes                               | ¥ suneV   | ★ snus ★                      | Sunday, March 27,              |
| MY Company                   | MAN CONTRACTOR                 | Evening:                                      | Moon rides even a little                               |   |                               | ZE dozeM vebruis               |
| (anie M                      | C.W.                           |   | before sunset. Tomorrow,                               |   | CnooM                         | ↑ Jupiter ★                    |
| (obis                        |                                | ¥- ∧euns                                      | highest just over an hour                              |   | 1 20011                       | pegins.                        |
| on<br>dark                   |                                | Pleiades > 31                                 | Texas. Today Moon is                                   | T SOPERH  | Hyades Pleiades               | buhus                          |
| earthshine                   | spot it. Very gung // the gung |   | Overhead in Florida and S                              |   |                               | 1.T23                          |
| Initibaed                    | you first                      | far N of W well after<br>midnight.            | (N-S-overhead line) un-<br>usually high in sky, even   |   |                               | Evening: Equinox               |
| aton) UnooM                  | зде муеп                       | stas noom s'inginoT                           | Moon crosses meridian                                  | Aldebaran JMoon   | Aldebaran                     | Equipox                        |
| , 300/4                      | s'nooM                         | Linet Qualitati                               | Today and tomorrow,                                    |   |                               | * Acrisov                      |
|                              | Calculate                      | March 17.                                     | 23   | Evening   | in indian                     |                                |
| ★ Jupiter                    | + Jupiter ★                    | in Alaska late afternoon                      | Moon   | 707 1   | -                             | Planets 8° apart.              |
|                              |                                | March 18 local date. Partial                  | Old . ESE  | SE / ESE CMOON  | ESE                           |                                |
|                              |                                | Mindanao (Philippines) on                     |  | Mercury   |                               |                                |
|                              |                                | crosses Sumatra, Borneo,                      | twillght. Mercury                                      | )   | Moon Moon                     |                                |
|                              |                                | Total solar eclipse track                     | Moon rising in bright                                  |   |                               |                                |
| Y-Venus →                    | snuə∧ <del>X</del>             | (T29 .m.q S0:9)                               | Binoculars help you spot                               |   |                               | ¥-snue∧                        |
|                              |                                | Mew Moon TST 9:02 p.m. EST                    | before sunrise:  |   |                               | week.                          |
| Evening: 19                  | 8f :gningv                     | Tr nooM wall                                  | 3t sətunim 06  | Tuesday 15  |                               | sint Ilut %00 suneV eworls     |
|                              |                                |   | المخطالاتكان والمرو                                    |   | oming: ESE                    |                                |
| SSE                          | S                              | BSS   | SŚE  | lercury SE  | onday 14 .h                   | Sunday evening: 13 M           |
| March 13                     | southernmost Mar 11 & 12.      |   |  |   | almin.                        | OnooM                          |
| Sunday TEAPOT                | March 11, Moon 15              | TO9A3T  | TO9A3T   | .93   | enuns MS                      | Spica esE                      |
| MOOM                         | Friday                         | 100751  |  | % hour before   |                               |                                |
| . ,                          | Quarter,                       |   |  | of Sun.   |                               |                                |
|                              | at Last March 10               |   |  | elongation,   |                               |                                |
| Warch 12                     | Moon Thursday                  |   |  | ng: Mercury at  | Morning                       |                                |
| Mars • Saturday              | D D                            | • • • Mars                                    | Mars •   |   | nute2                         |                                |
| • sanstnA                    |                                |   |  | h to M° 4.1 tangly gam-418 ah<br>lo W2° 3.1 won aunarU of are |                               |                                |
| ings, March 12 & 13:         |                                | Saturn  |  | slescope 11/2 hours before sur                                |                               | 31/2 hours after sunset:       |
|                              |                                | Thursday and Friday morning                   |  | ay, March 8: Mars passes Nep                                  |                               | Sunday, March 6,               |
| after sunset. of Jupiter.    |                                |   | War II manager   |   |                               | ek Sgr (Lambda Sagittarii, mag |
| Venus passes 2.2 N           | night; visible for 31/2 hours  |   | already E  |   |                               | en Sar II ambda Sanittarii mar |
| Planets closest tonight as   | womomot bas inginot made       | A O dast                                      | uoow 🗸   | ,heqe   | left margin.                  |                                |
|                              | Venus-Jupiter just over 2°     | dmil & s'nooM                                 | states;  | Planets 4°  | More under Uranus in          | .º G tuods                     |
|                              |                                | shading on sky                                | from 48 Full contiguous                                | (Ideiling   | Jopan GJOW                    | A Sgr 11 Sgr Vianus of         |
| onbuer x                     | Jupiter * * Venus              | Time; slight Evening                          | be seen approaching                                    | ¥ Aupiter evening   | Stars shown                   | across.                        |
| Cullay A Marigin             | SHUMA - LANGUE                 | 6:13 a.m. Hawaii                              | nooM O 1'now   | ui :  | . pefore sunup.               | se si                          |
| sunaV ★ ★ Jejiqut            | Super X X settent              |   |  |   |                               |                                |
| sun9V 🛪 🛪 Joilinul           | Supply X X solitari            | lunar eclipse,                                | eclipse  | osla)   | m 1½ hours                    | lield #Satu                    |
| sunaV 🛧 x 10timil            |                                | deep penumbral<br>lunar eclipse,              | norning's<br>eclipse                                   | ozla)   | March 13-28,                  | Circular                       |
|                              | .W of Wew                      | umbral or<br>deep penumbral<br>lunar eclipse, | Fibris • Regulus<br>morning's<br>eclipse               | ezulugaR Regulus•<br>(prinight)                               | Utanus finder<br>March 13-28, | ls up. Circular                |
| ց :նսլսəռ <u>-</u>           | WSW to W.                      | umbral or<br>deep penumbral<br>lunar eclipse, | Thurs • Regulus<br>a'gninnom<br>eclipse                | Tues Mar 1 March 1<br>Evening Regulus•<br>(mid-twilight)      | March 13-28,                  | is up.                         |
|                              | .W of Wew                      | umbral or<br>deep penumbral<br>lunar eclipse, | Fibris • Regulus<br>morning's<br>eclipse               | ezulugaR Regulus•<br>(prinight)                               | Utanus finder<br>March 13-28, | ls up. Circular                |

mit of Pisces March 11. Evening: Verbing 1908 33° E, from Pisces Hrough Aries Laminto Pisces March 11. Evening: Verbing 1908 33° E, from Pisces Hrough Aries Laminto Taurus. Verus passes 2.2° N of Jupiter March 5, 8° S of Alpha Ari March 21° E, 12° and pulls within 3° of Pielades at month's end. Jupiter goes 7° E, from Sigm Pisces into Aries. See acle Aries of the Aries of Changing configuration of Verus-Jupiter. E in Vesta, visible in bincoulars, ends retrograde March 10. For several days, Vesta creat lingers 1.8° S of Pollux, or about midway between Pollux and 3.6-mag Kappa is pid Gem. See Vesta finder in Jan Sky & Telescope. Note 5.3-mag star 76 Gem about 40° F.25 of the way from Kappa to Pollux, and 7.4-mag star 76 Gem about 40° F.25 of the way from Kappa to Pollux, and Ar-mag star 76 Gem about 40° F.25 of the way from Kappa to Pollux, and Ar-mag star 76 Gem about 40° F.20° of 11° and confuse Vesta with the 7.4-mag star; on March 10, Vesta stands 0.2° N of It.

Tainbus 99, 100 or responsible to the factor of the factor

Robert C. Victor, Jenny L. Pon, Robert D. Miller ISSN 0733-6314

LABB

### Upcoming Events in March

Monthly Meeting of Cape Fear Astronomy Club March 6, 1988; 6:00 PM - Bryan Auditorium; Morton Hall

> Morehead Planetarium Trip March 11, 1988

Lecture: "The Evolution of Life in the Universe" March 17, 1988; 8:00 PM - Bryan Auditorium; Morton Hall

> Lecture: "History of Radio Astronomy" March 18, 1988; 4:00 PM - 218 DeLoach Hall

Morehead Planetarium Trip (cloudy date)
March 18, 1988

Deadline to submission for the April Newsletter March 19, 1988

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