

# CAPE FEAR



# Skies

*The  
Monthly  
Newsletter of the  
Cape Fear Astronomical Society*

Volume 5 No. 1

Wilmington, NC

January 1990

## January Meeting Announcement

Sunday  
January 7, 1989  
7:00 PM  
Bryan Auditorium  
Morton Hall  
UNCW Campus

The next meeting of the Cape Fear Astronomical Society will be held on January 7, 1989 in the Bryan Auditorium of Morton Hall on the UNCW Campus. The Business meeting will begin at 7:00 PM EST.

The general meeting will begin at 8:00 PM.

## Meeting Minutes from December

The president, David Maness, called the regular business meeting of the Cape Fear Astronomical Society to order at 7:11 p.m. December 3, 1989 in Bryan Auditorium, Morton Hall, UNCW. John Marshall called the roll. The treasurer, Ronnie Hawes, reported that the observatory fund contained \$52.08, and the treasury balance was \$171.64 mostly from candy sales and a yard sale.

David Maness reviewed five nominations from

the November meeting for the January election, and re-opened nominations. For president, Paul Petty nominated Alan Hilburn who accepted. For vice president, Martin Best accepted the nomination made by Paul Petty at the November meeting.

Paul Petty moved to retain the January meeting on the first Sunday despite the holidays' proximity and it was adopted.

David Maness noted that Sam Bissette had donated an artist's proof to be auctioned after the business meeting stipulating the proceeds to fund power bills for the Hampstead viewing site.

Twelve members were present at the business meeting. It adjourned at 7:22.

After the break David Maness conducted the auctioning of the artist's proof. The 24" by 36" watercolor by Sam Bissette entitled "Dismal Swamp Canal at South Mills" is from his series *North Carolina Circa 1900*, and other copies hang in the governor's mansion and abroad. Tom Jacobs acquired the painting.

Ronnie Hawes displayed his improved Voyager model and described some of the real spacecrafts' features.

Paul Petty and Ronnie Hawes produced a video-  
**Meeting Minutes – continues on page 2**

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# Instructions for the 1990 election

Elections for society officers for 1990 will be held during the regular January business meeting. Page 3 of this newsletter (the other side of this sheet) is your official ballot for the 1990 elections.

Please don't forget to bring your ballot with you to the January meeting. Our constitution does not allow for any form of absentee voting. Therefore, you must bring your ballot to the January meeting yourself to vote for new officers. A box will be provided for you to drop your ballot during the meeting.

Please mark your ballot by circling the name of the person for which you wish to vote. Or by writing the name of the person you wish to vote for in the space provided for write-in candidates.

This year nobody accepted a nomination for the office of Secretary. There is no name in the ballot for this office. A person will only be elected to this office via a write-in campaign. If a write-in candidate receives the most votes for an office, that person may still decline the office.

## Please pay your 1990 dues now!

Can you believe it we have reached another January. Your membership in the Cape Fear Astronomical Society is expiring.

Please renew your membership in the Cape Fear Astronomical Society as soon as possible. If you don't act soon you will start to miss out on the benefits of membership.

### Meeting Minutes – (from page 1).

tape for the evening's program. It included camcorder video Paul shot in October of the space shuttle launch and highlights of the extensive taping he organized from NASA satellite feeds during Voyager 2's encounter with Neptune in August.

Ronnie Hawes mentioned a probable viewing session for December 30. A few more members and ten visitors attended the program.

Paul D. Walker

# Changes to the Sky Calendar

There are a number of changes that are being made to the sky calendar that appears each month in *Cape Fear Skies*. All of these changes are being incorporated into the sky calendar in an effort to make the information easier to use. The changes that are being made include the following:

- All times are being given in Eastern Time. There will no longer be a need to convert from UT to either EST or EDT
- Sunrise; Sunset; and twilight information will be included in the standard sky calendar.
- Moonrise; Moonset; and phase angle information will be included later in the year.

The sky calendar is produced as a guide to the local sky. It is intended for to be used for planing viewing session in the Wilmington area.

Some of the items included in the calendar will not be visible from the Wilmington area. It is hoped that the added solar information will make it easier to identify these events.



# Sky Calendar for January 1990

(All times are given in Eastern Time. Times preceded with the "±" symbol are ±30 minutes of the time listed.)

## Sunday: Dec 31

19:00 Current Julian date is 244 7891.5

## Monday: Jan 01

5:47 Astronomical twilight begins.  
7:17 Sunrise.  
17:12 Sunset.  
18:41 Astronomical twilight ends.  
New Years Day.

## Tuesday: Jan 02

5:47 Astronomical twilight begins.  
7:17 Sunrise.  
±13:00 Neptune is at conjunction with the Sun. Moves into the morning sky.  
17:13 Sunset.  
18:42 Astronomical twilight ends.

## Wednesday: Jan 03

5:47 Astronomical twilight begins.  
7:17 Sunrise.  
17:13 Sunset.  
18:43 Astronomical twilight ends.

## Thursday: Jan 04

5:40 Moon at first quarter.  
5:48 Astronomical twilight begins.  
7:17 Sunrise.  
±12:00 Earth at perihelion; distance from Sun to Earth is 0.9833171 au.  
17:14 Sunset.  
18:43 Astronomical twilight ends.  
Quadrantids Meteors. Radiant is located at right ascension 15:28; declination +50°; speeds about 40km/hr; blue color with many trains; ZHR = 110 (can range from 40 to 150). Best just before dawn.

## Friday: Jan 05

5:48 Astronomical twilight begins.  
7:17 Sunrise.  
17:15 Sunset.  
18:44 Astronomical twilight ends.

## Saturday: Jan 06

5:48 Astronomical twilight begins.  
7:17 Sunrise.  
±16:00 Saturn is in conjunction with the Sun. Moves into the morning sky.  
17:16 Sunset.  
18:45 Astronomical twilight ends.

## Sunday: Jan 07

5:48 Astronomical twilight begins.  
7:17 Sunrise.  
±14:00 Moon at perigee. Distance from the Earth is 57.5 Earth-radii.  
17:17 Sunset.  
18:46 Astronomical twilight ends.

## Monday: Jan 08

5:48 Astronomical twilight begins.  
7:17 Sunrise.  
17:17 Sunset.  
18:46 Astronomical twilight ends.  
±21:00 Mercury is in inferior conjunction with the Sun. Moves into the morning sky.

## Tuesday: Jan 09

±3:00 Ceres passes 0.6° south of the Moon. Occultation.  
5:48 Astronomical twilight begins.  
7:17 Sunrise.  
17:18 Sunset.  
18:47 Astronomical twilight ends.  
±19:00 Jupiter passes 4° south of the Moon

## Wednesday: Jan 10

5:48 Astronomical twilight begins.  
7:17 Sunrise.  
17:19 Sunset.  
18:48 Astronomical twilight ends.  
23:57 Full Moon called the "Old Moon" or the "Moon after Yule".

## Thursday: Jan 11

5:48 Astronomical twilight begins.  
7:17 Sunrise.  
17:20 Sunset.  
18:49 Astronomical twilight ends.

## Friday: Jan 12

5:48 Astronomical twilight begins.  
7:17 Sunrise.  
17:21 Sunset.  
18:50 Astronomical twilight ends.

## Saturday: Jan 13

5:48 Astronomical twilight begins.  
7:17 Sunrise.  
±16:00 Mercury passes 3° north of Neptune  
17:22 Sunset.  
18:50 Astronomical twilight ends.

## Sunday: Jan 14

5:48 Astronomical twilight begins.  
7:17 Sunrise.  
17:23 Sunset.  
18:51 Astronomical twilight ends.

## Monday: Jan 15

5:48 Astronomical twilight begins.  
7:16 Sunrise.  
17:24 Sunset.  
18:52 Astronomical twilight ends.  
Martin Luther King's Birthday.

## Tuesday: Jan 16

5:48 Astronomical twilight begins.  
7:16 Sunrise.  
17:25 Sunset.  
18:53 Astronomical twilight ends.

## Wednesday: Jan 17

5:48 Astronomical twilight begins.  
7:16 Sunrise.  
17:26 Sunset.  
18:54 Astronomical twilight ends.

## Thursday: Jan 18

5:48 Astronomical twilight begins.  
7:15 Sunrise.  
16:17 Moon at last quarter.  
17:27 Sunset.  
±18:00 Venus is in inferior conjunction with the Sun. Moves into the morning sky.  
18:55 Astronomical twilight ends.

## Friday: Jan 19

5:47 Astronomical twilight begins.  
7:15 Sunrise.  
±11:00 Moon at apogee. Distance from the Earth is 63.4 Earth-radii.  
17:28 Sunset.  
18:55 Astronomical twilight ends.  
±22:00 Mercury is stationary in right ascension; begins retrograde motion.

## Saturday: Jan 20

5:47 Astronomical twilight begins.  
7:15 Sunrise.  
17:29 Sunset.  
18:56 Astronomical twilight ends.  
Comet P/Kopff at perihelion. Distance from the Sun is 1.59 au.

## Sunday: Jan 21

5:47 Astronomical twilight begins.  
7:14 Sunrise.

17:30 Sunset.  
18:57 Astronomical twilight ends.

## Monday: Jan 22

±3:00 Antares passes 0.3° north of the Moon. Occultation.  
5:47 Astronomical twilight begins.  
7:14 Sunrise.  
17:31 Sunset.  
18:58 Astronomical twilight ends.

## Tuesday: Jan 23

5:46 Astronomical twilight begins.  
7:13 Sunrise.  
±10:00 Mars passes 4° north of the Moon.  
17:32 Sunset.  
18:59 Astronomical twilight ends.

## Wednesday: Jan 24

5:46 Astronomical twilight begins.  
7:13 Sunrise.  
±8:00 Uranus passes 3° north of the Moon.  
±15:00 Mercury passes 5° north of the Moon.  
17:33 Sunset.  
±18:00 Neptune passes 4° north of the Moon.  
18:59 Astronomical twilight ends.

## Thursday: Jan 25

±5:00 Saturn passes 3° north of the Moon.  
5:45 Astronomical twilight begins.  
7:12 Sunrise.  
17:34 Sunset.  
19:00 Astronomical twilight ends.

## Friday: Jan 26

5:45 Astronomical twilight begins.  
7:12 Sunrise.  
13:54 Annular Eclipse of the Sun. (Not visible from the Wilmington area.)  
14:20 New Moon. Lunation number 830  
17:35 Sunset.  
19:01 Astronomical twilight ends.

## Saturday: Jan 27

5:45 Astronomical twilight begins.  
7:11 Sunrise.  
17:36 Sunset.  
±18:00 Mercury passes 0.3° north of Neptune.  
19:02 Astronomical twilight ends.

## Sunday: Jan 28

5:44 Astronomical twilight begins.  
7:11 Sunrise.  
17:37 Sunset.  
19:03 Astronomical twilight ends.

## Monday: Jan 29

5:44 Astronomical twilight begins.  
7:10 Sunrise.  
17:38 Sunset.  
19:03 Astronomical twilight ends.

## Tuesday: Jan 30

5:43 Astronomical twilight begins.  
7:09 Sunrise.  
17:39 Sunset.  
19:04 Astronomical twilight ends.

## Wednesday: Jan 31

5:43 Astronomical twilight begins.  
7:09 Sunrise.  
17:40 Sunset.  
19:00 Current Julian date is 244 7922.5  
19:05 Astronomical twilight ends.  
±20:00 Mercury at it's greatest western elongation of 25°.

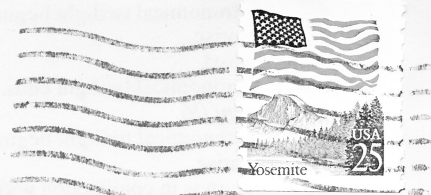
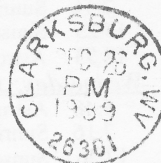
# Upcoming Events for January

**Monthly Meeting of the Cape Fear Astronomical Society**  
**Sunday January 7, 1989; 7:00 PM - Bryan Auditorium; Morton Hall**

**Club Viewing Session**  
**Saturday January 20, 1989; Dusk until "?" - Hampstead Site**

**Club Viewing Session**  
**Saturday January 27, 1989; Dusk until "?" - Hampstead Site**

*Cape Fear Skies*  
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