

# CAPE FEAR



# Skies

The  
Monthly  
Newsletter of the  
Cape Fear Astronomical Society

Volume 5 No. 7

Wilmington, NC

July 1990

## July Meeting Announcement

Sunday  
July 1, 1990  
7:00 PM  
Bryan Auditorium  
Morton Hall  
UNCW Campus

The next meeting of the Cape Fear Astronomical Society will be held on Sunday July 1, 1990 in the Bryan Auditorium of Morton Hall on the UNCW Campus. The Business meeting will begin at 7:00 PM EDT.

The general meeting will begin at 7:30 PM. The program for this month's general meeting will be a slide presentation titled: *An indepth overview of astronomy in the Tucson Arizona area*. This presentation will be presented by society member Tom Jacobs. (see Editor's Emissions page 2)

There were 9 members and 4 telescopes and a crowd of about 20 people and one dog, of course, mosquitos. The weather for the Saturday night had been mostly cloudy. We still gave a short program about the Hubble Space Telescope and other topics of astronomical interest. During a break in the clouds, Doug Green set his telescope up for the people still present to see the moon. We all left shortly before 10pm. All things considered, it was a nice star party. We will do it again on the 16th of June and hope for better weather. Ronnie also said that we still plan to have an Astronomy Day display on June 23 and 24.

Tom Jacobs talked briefly about his recent trip to Tucson Arizona and several observatories. He will tell more about it and show slides at a future meeting.

Martin informed us on the activities of the Astronomical League.

After the break, Doug shared with the society his slides of his trip to Space Camp in Huntsville, Alabama.

Our main speaker was Mr. Bob Melvin who gave a talk on the differences between Amateur and professional astronomy; and the roles they play in the science of astronomy. There were 13 members and one visitor in attendance.

Ronnie Hawes  
Secretary

## Meeting Minutes from June

Sunday June 3, 1990

Since Alan Hilburn was out sick, Martin Best presided over the meeting. He called the meeting to order at 7:15 pm. He informed us that Alan had collected about \$60.00 at the yard sale. Ronnie Hawes told the membership about the public viewing session at the Carolina Beach State Park on Saturday June 2ed.

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# The Case of the Missing Lock

On Sunday afternoon June 17th Paul Petty went to the Hampstead observing site to cut the grass along the driveway and do some other general cleanup tasks. What Paul found when he arrived at the Hampstead site was the side door unlocked and wide open.

There is no trace of damage or vandalism to the structure. However, Paul Petty; Ronnie Hawes; and your Editor all searched the grounds for the missing lock without success.

The lock appears to have unlocked *itself* and walked away from the Hampstead site.

A replacement lock is already in use at the site. A mailing label with the new combination has been included with this issue of the newsletter. All of the old rules on observatory access still apply. Please do not attach this label to anything at the Hampstead viewing site.

If you find that the lock has stowed away in your vehicle after you were using the viewing site please return the lock to Paul Petty or any society officer.

# Editor's Emissions

Just when you thought it was safe to read *Cape Fear Skies* ... I'm back.

My thanks to Herman Bryant for producing the June issue in my absence.

I have returned from an astronomy seminar held in Tucson Arizona. The seminar was titled: *The New Astronomies* and was a joint effort of the Smithsonian Institution and the University Of Arizona. Photograph I took during the lectures, held on the campus of the University of Arizona, and tours of both the Kitt Peak and Mt. Hopkins observatories will be the heart of this months general program. (Ronnie told me to take lots of pictures; I did.)

There was much to see and study in Tucson. Many of the mountain tops surrounding the city of Tucson contain an observatory. I am looking forward to sharing this with the membership.

During my stay in Tucson several of the speakers were seeking help on the Mt. Graham Observatory. Both *Astronomy* and *Sky & Telescope* magazines have been covering the controversy surrounding this new observatory.

The tactics of the opposition to the observatory have thrown the Mt. Graham issue back into the political arena. The astronomers of the University of Arizona asked me (and I am asking you) to write to selected members of Congress in support of the Mt. Graham observatory.

For more information or address to write to support the Mt. Graham observatory please contact me.

Next months soapbox topic will be the International Dark-sky Association (IDA).

# The Reflector and New Horizons

Several of the membership have complained to the society officers about not receiving their copy of either *The Reflector* or *New Horizons* (the Astronomical League's quarterly newsletters for the U.S. and southeastern region). Your editor is among those who have been missed.

Subscriptions to both of these publications are included in your annual dues to the CFAS. If you have not been receiving your copies please contact Wayne Teachy; Paul Petty; or any society officer.

## (Sky Calendar from page 3)

cension 22:36; declination -17°; speed medium;  
ZHR = 10 to 35

### Monday: Jul 30

- 4:43 Astronomical twilight begins.
- 6:20 Sunrise.
- 20:13 Sunset.
- 21:50 Astronomical twilight ends.
- ±22:00 Pluto is stationary in right ascension; resumes direct motion.

### Tuesday: Jul 31

- ±4:00 Moon at apogee. Distance from the Earth is 63.5 Earth-radii.
- 4:44 Astronomical twilight begins.
- 6:20 Sunrise.
- 20:00 Current Julian date is 244 8103.5
- 20:12 Sunset.
- 21:49 Astronomical twilight ends.
- Astronauts Dave Scott and Jim Irwin are the first to use the Moon Buggy in exploring the Moon on this date in 1971.



# Sky Calendar for July 1990

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

## Sunday: Jul 1

4:17 Astronomical twilight begins.  
6:02 Sunrise.  
20:26 Sunset.  
22:11 Astronomical twilight ends.

## Monday: Jul 2

4:18 Astronomical twilight begins.  
6:02 Sunrise.  
±13:00 Mercury is in superior conjunction with the Sun; moves into the evening sky.  
20:26 Sunset.  
22:10 Astronomical twilight ends.

## Tuesday: Jul 3

4:18 Astronomical twilight begins.  
6:03 Sunrise.  
±11:00 Venus passes 4° north of Aldebaran.  
±12:00 Moon at apogee. Distance from the Earth is 63.6 Earth-radii.  
20:26 Sunset.  
22:10 Astronomical twilight ends.

## Wednesday: Jul 4

±1:00 Earth at aphelion; distance from Sun to Earth is 1.0167228 au.  
4:19 Astronomical twilight begins.  
6:03 Sunrise.  
20:26 Sunset.  
±22:00 Antares passes 0.2° south of the Moon Occultation.  
22:10 Astronomical twilight ends.  
Independence Day.

## Thursday: Jul 5

4:20 Astronomical twilight begins.  
6:04 Sunrise.  
±7:00 Neptune is in opposition with the Sun. Moves into the evening sky.  
20:26 Sunset.  
22:09 Astronomical twilight ends.

## Friday: Jul 6

4:20 Astronomical twilight begins.  
6:04 Sunrise.  
20:25 Sunset.  
22:09 Astronomical twilight ends.

## Saturday: Jul 7

4:21 Astronomical twilight begins.  
±5:00 Uranus passes 2° north of the Moon.  
6:05 Sunrise.  
±12:00 Juno is stationary in right ascension; resumes direct motion.  
±16:00 Neptune passes 3° north of the Moon.  
20:25 Sunset.  
21:23 Full Moon called the "thunder" or "hay" Moon.  
22:09 Astronomical twilight ends.  
Comet P/Russell 4 at perihelion. Distance from the Sun is 2.22 au.  
Comet P/Triton at perihelion. Distance from the Sun is 1.44 au.

## Sunday: Jul 8

4:22 Astronomical twilight begins.  
6:05 Sunrise.  
±10:00 Saturn passes 1.5° north of the Moon.  
20:25 Sunset.  
22:08 Astronomical twilight ends.  
Capricornids Meteors. Radiant is right ascension 20:22; declination -10°; ZHR = 7; Slow moving; Yellow in color many Fireballs possible.

## Monday: Jul 9

4:23 Astronomical twilight begins.

6:06 Sunrise.  
20:25 Sunset.  
22:08 Astronomical twilight ends.

## Tuesday: Jul 10

4:23 Astronomical twilight begins.  
6:06 Sunrise.  
20:24 Sunset.  
22:07 Astronomical twilight ends.  
The first "live via satellite" television broadcast is made between Europe and the United States on this date in 1962 using the Telstar 1.

## Wednesday: Jul 11

4:24 Astronomical twilight begins.  
6:07 Sunrise.  
20:24 Sunset.  
22:07 Astronomical twilight ends.

## Thursday: Jul 12

4:25 Astronomical twilight begins.  
6:08 Sunrise.  
20:24 Sunset.  
22:06 Astronomical twilight ends.

## Friday: Jul 13

4:26 Astronomical twilight begins.  
6:08 Sunrise.  
20:23 Sunset.  
22:05 Astronomical twilight ends.

## Saturday: Jul 14

4:27 Astronomical twilight begins.  
6:09 Sunrise.  
±14:00 Saturn is in opposition with the Sun. Moves into the evening sky.  
20:23 Sunset.  
22:05 Astronomical twilight ends.  
Mariner 4 sends the first close-up images of the Martian surface on this date in 1965.  
Phoenicids Mayors. Radiant is right ascension 2:04; declination -48°. This stream has not been sighted visually.

## Sunday: Jul 15

±2:00 Jupiter is in conjunction with the Sun. Moves into the morning sky.  
4:28 Astronomical twilight begins.  
6:09 Sunrise.  
7:04 Moon at last quarter.  
20:23 Sunset.  
22:04 Astronomical twilight ends.

## Monday: Jul 16

±4:00 Mars passes 8° south of the Moon.  
4:29 Astronomical twilight begins.  
6:10 Sunrise.  
20:22 Sunset.  
22:03 Astronomical twilight ends.  
Alpha Lyrids. Radiant is right ascension 18:40; declination 38°.  
Omicron Draconids. Radiant is right ascension 18:04; declination 59°; Parent body Comet Metcalf (1919).

## Tuesday: Jul 17

4:30 Astronomical twilight begins.  
6:11 Sunrise.  
20:22 Sunset.  
22:03 Astronomical twilight ends.

## Wednesday: Jul 18

4:30 Astronomical twilight begins.  
6:11 Sunrise.  
20:21 Sunset.  
22:02 Astronomical twilight ends.

## Thursday: Jul 19

4:31 Astronomical twilight begins.

6:12 Sunrise.  
±7:00 Moon at perigee. Distance from the Earth is 57.2 Earth-radii.

20:21 Sunset.  
22:01 Astronomical twilight ends.  
±23:00 Venus passes 4° south of the Moon.

## Friday: Jul 20

4:32 Astronomical twilight begins.  
6:13 Sunrise.  
20:20 Sunset.  
22:00 Astronomical twilight ends.  
Neil Armstrong and Buzz Aldrin become the first men to walk on the surface of the moon on this date in 1969.  
Viking 1 transmits the first images from the Martian surface on this date in 1976.

## Saturday: Jul 21

4:33 Astronomical twilight begins.  
6:13 Sunrise.  
20:20 Sunset.  
21:59 Astronomical twilight ends.  
22:37 Total Eclipse of the Sun. (Not visible from the Wilmington area.)  
New Moon. Lunation number 836

## Sunday: Jul 22

4:34 Astronomical twilight begins.  
6:14 Sunrise.  
20:19 Sunset.  
21:58 Astronomical twilight ends.

## Monday: Jul 23

4:35 Astronomical twilight begins.  
6:15 Sunrise.  
±14:00 Mercury passes 3° north of the Moon.  
20:18 Sunset.  
21:57 Astronomical twilight ends.

## Tuesday: Jul 24

4:36 Astronomical twilight begins.  
6:15 Sunrise.  
20:18 Sunset.  
21:56 Astronomical twilight ends.  
Islamic New Year

## Wednesday: Jul 25

4:37 Astronomical twilight begins.  
6:16 Sunrise.  
20:17 Sunset.  
21:55 Astronomical twilight ends.

## Thursday: Jul 26

4:38 Astronomical twilight begins.  
6:17 Sunrise.  
20:16 Sunset.  
21:54 Astronomical twilight ends.

## Friday: Jul 27

4:40 Astronomical twilight begins.  
6:17 Sunrise.  
20:15 Sunset.  
21:53 Astronomical twilight ends.

## Saturday: Jul 28

4:41 Astronomical twilight begins.  
6:18 Sunrise.  
20:15 Sunset.  
21:52 Astronomical twilight ends.

## Sunday: Jul 29

±2:00 Mercury passes 0.04° north of Regulus  
4:42 Astronomical twilight begins.  
6:19 Sunrise.  
10:01 Moon at first quarter.  
20:14 Sunset.  
21:51 Astronomical twilight ends.  
Delta Aquarids. Radiant is right as-

(Continues on page 2)

# Upcoming Events for July 1990

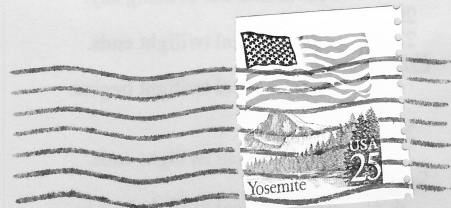
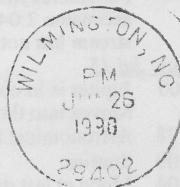
**Monthly Meeting of the Cape Fear Astronomical Society**  
**Sunday July 1, 1990; 7:00 PM - Bryan Auditorium; Morton Hall**

**Club Viewing Session**  
**Saturday July 14, 1990; Dusk until "?" - Hampstead Site**

**Club Viewing Session**  
**Saturday July 21, 1990; Dusk until "?" - Hampstead Site**

**Deadline for August the issue of *Cape Fear Skies*.**  
**Friday July 20, 1990**

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