

CAPE FEAR



Skies

The
Monthly
Newsletter of the
Cape Fear Astronomical Society

Volume 4 No. 10

Wilmington, NC

October 1989

October Meeting Announcement

Sunday
October 1, 1989
7:00 PM
Bryan Auditorium
Morton Hall
UNC-W Campus

The next meeting of the Cape Fear Astronomical Society will be held on October 1, 1989 in the Bryan Auditorium of Morton Hall on the UNC-W Campus. The Business meeting will begin at 7:00 PM EDT.

The general meeting will begin at 8:00 PM. For the program of this month's general meeting we will show a NASA film on the subject of SETI. The film is titled "A Quest for Contact". The film is 32 minutes long.

Meeting Minutes From September

The president, David Maness, called the regular business meeting of the Cape Fear Astronomical Society to order at 7:07 p.m. September 3, 1989 in Bryan Auditorium, Morton Hall, UNCW. The secretary, Paul Walker, read the minutes from August's meeting. The treasurer, Ronnie Hawes, reported that the checking account balance was \$9.70, and the expenditures since last month's meeting totaled \$30.78, specifically for

the newsletter. The observatory fund contained \$58.23, after \$12.36 was spent on the light bill for the Hampstead viewing site.

David Maness announced a work day, September 16 about 10 a.m., for getting the Hampstead site prepared for the fall viewing season.

Ronnie Hawes said approximately \$60 was raised during the lunar eclipse public viewing session at Fort Fisher last month.

Alan Hilburn explained that the Chapel Hill observatory's Schmidt-Cassegrain telescope will be under repair and not available during the society's planned trip of September 29. Ronnie Hawes added that Morehead Planetarium is showing "Sky Ramblers" at 7 and a program on galaxies at 8 on Friday evenings through mid-November, with more programs on Saturdays. He said to contact Alan Hilburn, Paul Petty, David Maness, or himself concerning going on the 29th. Alan added that the planetarium will have a Voyager program later this year.

David Maness related his last-weekend visit with the Catawba County Astronomy Club and their good site near Boone on the Blue Ridge Parkway. They will have a star party in two parts on September 30 and Oc-

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tober 28.

Ronnie Hawes thanked members who helped at the lunar eclipse session, and particularly David and Mrs. Maness for providing the food. Also he mentioned he had received correspondence from Mr. Bob Melvin, who presented August's program, regarding a new project, involving professionals and amateurs, about which he could present a program in the future.

David Maness noted that the society has reached the break-even point on the M&M's sales, therefore further revenues will supplement the treasury. He said he received correspondence from the Star Hustler promoting September as Amateur Astronomy Month, and the S. U. N. (Saturn, Uranus, and Neptune) program.

About eleven members were present at the business meeting. It adjourned at 7:30.

After the break David Maness welcomed Rhett Bennett as a new member.

For the evening's program Sam Bisette lectured on astrophotography. With his telescope and a myriad of equipment and photographs at hand, he explained the four techniques: camera on tripod, piggyback, prime focus, and eyepiece projection. He covered various related subjects including cost-effective developing, exposure considerations, tele-extenders and tele-compressors, and emulsions. He emphasized the importance of keeping good records. Two visitors attended the program.

Alan Hilburn showed some slides of August's lunar eclipse which he exposed using piggyback and prime focus.

David Maness closed in remarking that Paul Petty might present Voyager 2 video for October's program.

-Paul D. Walker

Hurricane Hugo

I have been to the Hampstead observing site after Hurricane Hugo passed through the coastal area.

We still have an observing site.

When I arrived at the Hampstead site late Friday afternoon I had no trouble driving all the way to the shelter. The driveway was almost completely dry. There was water standing in the field next to the road. This water was flowing slowly through the pipes under the driveway.

The only effect of Hugo I could find was to the south wall. This is the wall that we have discussed reinforcing in the past. It looked to me that this wall was further warped by Hugo.

Everything else was in good shape. Now if we can only get some clear skies.

Local Solar Ephemeris

This month's local Sunrise and sunset table is listed below. If you find any discrepancies in the table below please alert the editor.

Date	Twilight Begin	Sun Rise	Sun Set	Twilight End
Oct 1	5:41	7:04	18:58	20:21
Oct 2	5:42	7:06	18:56	20:18
Oct 3	5:43	7:07	18:54	20:17
Oct 4	5:44	7:07	18:53	20:16
Oct 5	5:45	7:08	18:52	20:14
Oct 6	5:46	7:09	18:50	20:13
Oct 7	5:46	7:10	18:49	20:12
Oct 8	5:47	7:10	18:48	20:10
Oct 9	5:48	7:11	18:46	20:09
Oct 10	5:49	7:12	18:45	20:08
Oct 11	5:49	7:13	18:44	20:06
Oct 12	5:50	7:13	18:42	20:05
Oct 13	5:51	7:14	18:41	20:04
Oct 14	5:52	7:15	18:40	20:03
Oct 15	5:52	7:16	18:38	20:01
Oct 16	5:53	7:17	18:37	20:00
Oct 17	5:54	7:17	18:36	19:59
Oct 18	5:55	7:18	18:35	19:58
Oct 19	5:55	7:19	18:34	19:57
Oct 20	5:56	7:20	18:32	19:56
Oct 21	5:57	7:21	18:31	19:55
Oct 22	5:58	7:22	18:30	19:54
Oct 23	5:59	7:22	18:29	19:53
Oct 24	5:59	7:23	18:28	19:52
Oct 25	6:00	7:24	18:27	19:51
Oct 26	6:01	7:25	18:25	19:50
Oct 27	6:02	7:26	18:24	19:49
Oct 28	6:02	7:27	18:23	19:48
Oct 29	6:03	7:28	18:22	19:47
Oct 30	6:04	7:29	18:21	19:46
Oct 31	6:05	7:29	18:20	19:45

Sky Calendar - from page 3.

- 6:00 Eastern Standard Time returns. Set your clock back 1 hour.
- 15:27 New Moon. Lunation number 827
- Edmund Halley born this day in 1656.

Sky Calendar for October 1989

(All times are Given in UT to convert to EDT subtract 4 hours; for EST subtract 5 hours.)

Sunday: 1st

20h Moon at apogee. Distance from the Earth is 63.7 Earth-radii.

Tuesday: 3rd

6h Mercury is stationary in right ascension.
 10:09 Mercury at ascending node
 ----- First successful flight test of a V-2 rocket made on this date in 1942.
 ----- Andromedids Meteor. This stream is sometimes referred to as the Epsilon Piscids. The radiant is located near right ascension 00:20; declination +8°; slow moving; red in color; ZHR about 1 or 2.

Wednesday: 4th

1h Venus passes 3° north of the Moon.
 ----- The Soviet Union launches the world's first artificial satellite Sputnik 1 on this date in 1957.

Thursday: 5th

5h Antares passes 0.4° north of the Moon.

Friday: 6th

----- Venus at aphelion. Magnitude -4.2; distance from the Sun is .73 au.

Saturday: 7th

0h Uranus passes 4° north of the Moon.
 11h Saturn passes 4° north of the Moon.
 15h Neptune passes 5° north of the Moon.
 16h Vesta passes 0.5° north of the Moon. Occultation.

Sunday: 8th

0:52 Moon at first quarter.
 ----- Mercury at perihelion. Magnitude 0.0; distance from Earth 0.9 au.
 ----- Draconids Meteor. The radiant is located at right ascension 17:28; declination +54°; speeds slow 21 km/sec. Derived from comet Giacobini-Zinner; last returned in 1985. Meteorites travel in a swarm close to the comet. Shower can become a storm in the year the comet passes perihelion.

Monday: 9th

13h Juno in conjunction with the Sun; moves into the evening sky. It's distance from Earth is 4.1 au; Magnitude 11.3
 ----- Yom Kippur

Tuesday: 10th

12h Mercury at it's greatest western elongation 18°.
 ----- Comet P/Lovas at perihelion 1.7 au from the Sun.

Wednesday: 11th

----- Wally Schirra; Donn Eisele; and Walt Cunningham make the first space flight test of

the Apollo Command and Service Modules on this date in 1968.

Friday: 13th

----- Piscids Meteors. The radiant is located at right ascension 01:44; declination +14°; ZHR = 5; slow moving about 27km/sec.

Saturday: 14th

20:32 "Full Moon called the "hunters" Moon."
 ----- First supersonic flight made on this date in 1947 by Chuck Yeager in the X-1 rocket plane.
 ----- First Day of Tabernacles

Sunday: 15th

1h Moon at perigee. Distance from the Earth is 55.9 Earth-radii.

Tuesday: 17th

1h Venus passes 1.8° north of Antares.
 ----- Epsilon Geminid Meteors. The radiant is located at right ascension 06:50; declination +27°; fast moving 70km/sec.

Wednesday: 18th

----- Mercury at it's greatest northern latitude 7°.
 ----- First images of the far side of the Moon are made by the Soviet probe Luna 3 on this date in 1959.
 ----- Comet P/du Toit-Neujmin-Delporte at perihelion 1.7 au from the Sun.

Friday: 20th

5h Jupiter passes 4° south of the Moon.
 ----- Orionids Meteors. The radiant is located at right ascension 06:20; declination +15°; ZHR varies between 10 and 70 (expect around 25 this year). Fast moving 67km/sec many different colors but faint. Derived from Comet Halley.

Saturday: 21th

13:19 Moon at last quarter.

Tuesday: 24th

2h Regulus passes 1.1° north of the Moon. Occultation.

Wednesday: 25th

23h Mercury passes 4° north of Spica.

Thursday: 26th

----- Comet P/Schwassmann-Wachmann 1 at perihelion 5.8 au from the Sun.

Saturday: 28th

22h Moon at apogee. Distance from the Earth is 63.8 Earth-radii.
 ----- Venus at it's greatest southern latitude 3°.

Sunday: 29th

1h Jupiter is stationary in right ascension; begins retrograde motion.

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Upcoming Events in October 1989

Monthly Meeting of the Cape Fear Astronomical Society
Sunday October 1, 1989; 7:00 PM - Bryan Auditorium; Morton Hall; UNC-W

Deadline for the November Newsletter
Wednesday October 18, 1989

Group Viewing Session
Saturday October 28, 1989; Dusk until "?" - Hampstead Site

Tom Jacobs - Editor
c/o Cape Fear Skies
110 Linville Dr.
Castle Hayne, NC 28429



Alan Hilburn
929 Arnold Rd.
Wilmington, N.C. 28403