

Volume 4 No. 9

Wilmington, NC

September 1989

# September Meeting Announcement

Sunday September 3, 1989; 7:00 PM Bryan Auditorium Morton Hall UNCW Campus

The next meeting of the Cape Fear Astronomical Society will be held on September 3, 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. The program for the general meeting will be a presentation on astrophotography by club member Sam Bissette.

#### Meeting Minutes from August

The vice president, Paul Petty, presiding, the president being absent, called the regular meeting of the Cape Fear Astronomical Society to order at 7:01 p.m. August 6, 1989 in Bryan Auditorium, Morton Hall, UNCW. Andy Johnson called the roll. Tom Jacobs moved to dispense with the reading of the min-

utes from July's meeting and it was approved. The treasurer, Ronnie Hawes, reported that the checking account balance was \$23.48, July's expenditures totaled \$24.76, and the last light bill amounted to \$12.44. The observatory fund contained \$70.59.

Alan Hilburn mentioned that the Perseids Meteors will peak August 12, and gave a handout and some tips for enhanced observing and photography. Take a chair or ground cover; "you want to get really comfortable". Slide film shows the colors better. Expose frames a maximum of about 5 or 10 minutes each, but advance the film soon after catching a meteor. Paul Petty encouraged a good turnout for the meteor watch.

Ronnie Hawes told about the public viewing session for the total lunar eclipse 8 p.m. August 16 at the Fort Fisher Museum. It will be the first total eclipse for this part of North America since 1982 and the last for a few years. WECT-TV is planning to have a crew at the session for a live shot on the 11 p.m. news.

Paul Petty noted that NASA will be producing

(Continues on page 2.)

### Inside This Issue

	Local Solar Ephemeris2
	Meeting Minutes from August1
•	September Meeting Announcement1
	Upcoming Events for September4
•	Welcome New Members2

#### Meeting Minutes – (from page 1)

numerous satellite feeds receivable by home dishes problem at the Hampstead viewing site road, but added during Voyager 2's encounter with Neptune. Alan Hilburn added that UNCW's Dr. Brian Davis is making preparations for such viewing on campus August 24 be on the 10th due to the holiday. and 25. Call the school's library or student union for details.

Paul Petty said the visit to the Chapel Hill observatory and planetarium has been rescheduled for the September 29 open house of the 24-inch Schmidt-Cassegrain. Contact him or Ronnie Hawes if interested in going Friday and coming back Saturday.

Paul Petty iterated that he is preparing a trip to the Kennedy Space Center for the October 12 or 13 launch of the space shuttle carrying the Galileo probe. He plans to be there from the 11th through the 21st, and he can accommodate five others at a Daytona condominium he has for most of that period.

that the road was "dry as bone" after some recent rains.

Paul Petty noted that September's meeting will

Ronnie Hawes reported that Alan Hilburn and he are scheduled for an interview on WECT-TV's noontime news August 15.

Sixteen members were present at the business meeting. It adjourned at approximately 7:45.

During the break Shirley Ballou became a member.

For the evening's program a guest speaker, Mr. Bob Melvin, presented a slide show with commentary on his continuing work at Kitt Peak National Observatory in Arizona. This was a sequel to the program he gave at the club's January 1988 meeting.

Ronnie Hawes noted that the next opportunity for Sam Bissette related the weeds are becoming a a group viewing session is the 25th or 26th of this

month.

Pul D. Walker

# Local Solar Ephemeris

Below you will find a table containing the predicated times of sunrise and sunset as calculated for the Wilmington area. Also included in the table are the beginning and ending times for astronomical twilight.

The table below was created using a program written by your editor. And your editor wishes to ask for your help. I think the program used to calculate this local ephemeris is correct. If anyone should find a discrepancies in this ephemeris (or in the ones to follow in the future) please bring these discrepancies to my attention.

# Welcome New Members

Please welcome the newest members of the Cape Fear Astronomical Society. Our new members are Rhett Bennett and Shirley Ballou. Both live in Wilmington.

Twilight Begin	Sun Rise	Sun	Twilight End	Date	Twilight	Sun	Sun	Twilight End
- B	11150		Lance	Date	Degin	Kisc	364	Life
5:17	6:44	19:39	21:05	Sep 16	5:30	6:54	19:18	20:42
5:18	6:45	19:37	21:04					
5:18	6:45	19:36						
5:19								
5:20	6:47							
5:21	6:47							20:34
5:22								
5:23								20:31
								20:30
								20:28
								20:27
								20:26
								20:24
								20:23
5:29	6:54	19:20	20:44	Sep 30	5:41	7:04	18:58	20:23
	5:17 5:18 5:18 5:19 5:20 5:21 5:22 5:23 5:24 5:25 5:26 5:26 5:27 5:28	Begin         Rise           5:17         6:44           5:18         6:45           5:19         6:46           5:20         6:47           5:21         6:47           5:22         6:48           5:23         6:49           5:24         6:50           5:25         6:50           5:26         6:51           5:27         6:52           5:28         6:53	Begin         Rise         Set           5:17         6:44         19:39           5:18         6:45         19:37           5:18         6:45         19:36           5:19         6:46         19:35           5:20         6:47         19:33           5:21         6:47         19:32           5:22         6:48         19:31           5:23         6:49         19:29           5:24         6:50         19:28           5:25         6:50         19:27           5:26         6:51         19:25           5:26         6:52         19:24           5:27         6:52         19:22           5:28         6:53         19:21	Begin         Rise         Set         End           5:17         6:44         19:39         21:05           5:18         6:45         19:37         21:04           5:18         6:45         19:36         21:02           5:19         6:46         19:35         21:01           5:20         6:47         19:33         20:59           5:21         6:47         19:32         20:58           5:22         6:48         19:31         20:56           5:23         6:49         19:29         20:54           5:24         6:50         19:28         20:53           5:25         6:50         19:27         20:51           5:26         6:51         19:25         20:50           5:26         6:52         19:24         20:48           5:27         6:52         19:22         20:47           5:28         6:53         19:21         20:45	Begin         Rise         Set         End         Date           5:17         6:44         19:39         21:05         Sep 16           5:18         6:45         19:37         21:04         Sep 17           5:18         6:45         19:36         21:02         Sep 18           5:19         6:46         19:35         21:01         Sep 19           5:20         6:47         19:33         20:59         Sep 20           5:21         6:47         19:32         20:58         Sep 21           5:22         6:48         19:31         20:56         Sep 22           5:23         6:49         19:29         20:54         Sep 23           5:24         6:50         19:28         20:53         Sep 24           5:25         6:50         19:27         20:51         Sep 25           5:26         6:51         19:25         20:50         Sep 25           5:26         6:51         19:25         20:48         Sep 27           5:27         6:52         19:24         20:48         Sep 27           5:28         6:53         19:21         20:45         Sep 29	Begin         Rise         Set         End         Date         Begin           5:17         6:44         19:39         21:05         Sep 16         5:30           5:18         6:45         19:37         21:04         Sep 17         5:31           5:18         6:45         19:36         21:02         Sep 18         5:31           5:19         6:46         19:35         21:01         Sep 19         5:32           5:20         6:47         19:33         20:59         Sep 20         5:33           5:21         6:47         19:32         20:58         Sep 21         5:34           5:22         6:48         19:31         20:56         Sep 22         5:35           5:23         6:49         19:29         20:54         Sep 23         5:35           5:24         6:50         19:28         20:53         Sep 24         5:36           5:25         6:50         19:27         20:51         Sep 25         5:37           5:26         6:51         19:25         20:50         Sep 26         5:38           5:26         6:52         19:24         20:48         Sep 27         5:39           5:28	Begin         Rise         Set         End         Date         Begin         Rise           5:17         6:44         19:39         21:05         Sep 16         5:30         6:54           5:18         6:45         19:37         21:04         Sep 17         5:31         6:55           5:18         6:45         19:36         21:02         Sep 18         5:31         6:56           5:19         6:46         19:35         21:01         Sep 19         5:32         6:57           5:20         6:47         19:33         20:59         Sep 20         5:33         6:57           5:21         6:47         19:32         20:58         Sep 21         5:34         6:58           5:22         6:48         19:31         20:56         Sep 22         5:35         6:59           5:23         6:49         19:29         20:54         Sep 23         5:35         6:59           5:24         6:50         19:28         20:53         Sep 24         5:36         7:00           5:25         6:50         19:27         20:51         Sep 25         5:37         7:01           5:26         6:51         19:25         20:50	Begin         Rise         Set         End         Date         Begin         Rise         Set           5:17         6:44         19:39         21:05         Sep 16         5:30         6:54         19:18           5:18         6:45         19:37         21:04         Sep 17         5:31         6:55         19:17           5:18         6:45         19:36         21:02         Sep 18         5:31         6:56         19:15           5:19         6:46         19:35         21:01         Sep 19         5:32         6:57         19:14           5:20         6:47         19:33         20:59         Sep 20         5:33         6:57         19:14           5:21         6:47         19:32         20:58         Sep 21         5:34         6:58         19:11           5:22         6:48         19:31         20:56         Sep 22         5:35         6:59         19:10           5:23         6:49         19:29         20:54         Sep 23         5:35         6:59         19:08           5:24         6:50         19:28         20:53         Sep 24         5:36         7:00         19:07           5:25         6:50

Cape Fear Skies - Vol. 4 No. 9 - Page 2

# Sky Calendar for September 1989

(All times are Given in UT to convert to EDT subtract 4 hours.)

Friday; 1s	1	Friday: 15	5th
20:17	Venus at descending node.	11:51	"Full Moon called the ""harvest"" Moon."
	Pioneer 11 becomes the first space probe to	Saturday:	10th
	Saturn on this date in 1979.	15h	Moon at perigee. Distance from the Earth is
Saturday:	2ed		56.3 Earth-radii.
16h	Mercury passes 0.6° north of the Moon. Oc-	Thursday:	21th
1011	cultation.	5h	Neptune is stationary in right ascension; re-
Sunday: 3			sumes direct motion.
21h	Venus passes 5° north of the Moon.		Pescids Meteors: Radiant is located at right
Monday:			ascension 0:24; declination 0°; ZHR = 5.
8h	Moon at apogee. Distance from the Earth is		Kappa Aquarids Meteors: Radiant is located
0	63.6 Earth-radii.		at right ascension 22:25; declination -5°;
Tuesday:			Slow speed.
7803007.	Pluto at perihelion. Distance from the Sun	Friday: 22	2th
	is 29.7 au.	2:10	Moon at last quarter.
Wednesda		19h	Jupiter passes 4° south of the Moon.
13h	Venus passes 1.9° north of Spica.	Saturday:	23th
	Lyncids Meteor: Radiant is located at right	1:20	September Equinox (Earth at descending
	ascension 6:40; declination +58°; ZHR = 1		node). Fall begins in the Northern Hemi-
	or 2.		sphere.
Thursday,			Alpha Aurigids Meteors: Radiant is located
22h	Antares passes 0.6° north of the Moon.		at right ascension 4:56; declination +42°
2211	Epsilon Perseids Meteor: Radiant is located	Sunday: 2	24th
	at right Ascension 4:08; declination +37°;	22h	Mercury in inferior conjunction with the
	ZHR < 10.		Sun; moves into the morning sky.
P: J 9			Comet P/Gunn at perihelion 2.5 au from the
Friday: 8			Sun.
9:49	Moon at first quarter.	Tuesday:	
Saturday;	Vin	21h	Regulus passes 1.0° north of the Moon. Oc-
16h	Uranus passes 4° north of the Moon.	2111	cultation.
	Piscids Meteors: radiant is located at right	Thursday	
	ascension 0:36; declination +7*; ZHR = 10.	Inursaay	Comet P/Brorsen-Metcalf at perihelion 0.5
Sunday: 1	Oth		au from the Sun.
1h	Uranus is stationary in right ascension; re-	Friday: 2	
-	sumes direct motion.	19h	Mars in conjunction with the Sun; enters
2h	Saturn passes 4° north of the Moon.	1911	evening sky. Magnitude 1.7; distance from
7h	Neptune passes 5° north of the Moon.		Earth 2.6 au.
Monday:	11th	21:47	New Moon. Lunation number 826
5h	Saturn is stationary in right ascension; re-		. 20th
	sumes direct motion.	Saturday, 13h	Pallas in opposition with the Sun; moves
14h	Mercury is stationary in right ascension.	130	into the morning sky.
	"The International Comet Explorer ICE-1,		Rosh Hashanah
	becomes the first space probe to reach a		KUSII riasilaliali
	comet on this date in 1985."		
Thursday	: 14th		

Mercury at it's greatest southern latitude 7°.

### Upcoming Events in September 1989

Monthly Meeting of the Cape Fear Astronomical Society Sunday September 3, 1989; 7:00 PM - Bryan Auditorium; Morton Hall; UNCW

> Deadline for the October Newsletter Wednesday September 20, 1989

Trip the the Moorehead Planetarium and Chapel Hill Observatory Friday September 29, 1989

Group Viewing Session Saturday September 30, 1989; Dusk until "?" – Hampstead Site

Tom Jacobs - Editor

Clo-Cape Fear Skies

110 Linville Dr.

Castle Hayne, NC 28429





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