

# ORWELL ASTRONOMICAL SOCIETY, IPSWICH.

## SOCIETY NEWS

### 1 The F.A.S. Convention at Herstmonceux

This year will be the last F.A.S. meeting at Herstmonceux. It is on Saturday 8th October. If you have not been to any of these yet this will be your last chance. I will give more details when I have them.

2 The Faint Objects and Nebula Section has been running for 10 years this August.

O.A.S.I.

AUGUST 1988



## THE NIGHT SKY

( all times G.M.T.)

**SUN** Rises approximately between 04.20 to 05.10  
Sets approximately between 20.00 to 19.00

**MOON**

4th	12th	20th	27th

**MERCURY** Superior conjunction is on the 3th. The planet will be in evening sky but very difficult to see.

**VENUS** Is visible in the morning sky, it is at greatest elongation on the 22nd ( 46°) It will be rising about 4 hours before the sun during the month. Mag. -4.2

**MARS** Mars will be rising at 22.00 at the beginning of the month. the planet is in Pisces. Mag. -1.9.

**JUPITER** Jupiter will be rising at about 23.30 at the beginning of the month. It is in Taurus. Mag. -2.3.

**SATURN** Saturn sets at 23.40 in mid month. Mag. 0.3.

**URANUS** Uranus follows very close to Saturn in the sky. Mag. 5.9

**NEPTUNE** Rises at 00.40 in mid month. Mag. 7.7

# 21st ANNIVERSARY OPEN DAY

OASI AT THE OXFORD ASTRONOMY WEEKEND

Firstly I would like to thank all members, their families, and friends who were able to help on the Open Day.

The final arrangements were made on the Friday, when several members began the long task of either moving the numerous items of equipment down from the club room or transporting them from home. We were able to use one of the class rooms next to the school gym/hall, for over night storage. It was originally intended to assemble all the displays in the school gym on the Friday afternoon, however this was not possible as the gym was in use in the evening for a barbeque (there were 3 whole pigs being cooked on spits outside all day). In the evening the class room to be used for the lectures was cleaned and about 100 chairs were moved into it. Martin Cook and Alan Smith took a number of direction signs and placed them all around the town bypass.

The Open Day was programmed to begin at 10.30, this gave us only a few hours to have the hall fully operational. The mess that presented itself on the floor of the gym after an evening meal to which at least 300 people came can only be imagined. The first task to be undertaken was to clean up the floor. Every available vacuum cleaner that could be found was used for this job. A floor plan had been drawn up by David Payne, this greatly speeded up the arranging of the tables for the refreshments, trade stands, displays and games. This task of transforming the gym to our own requirements took over 3 hours. The first to arrive was Alan Smith and family at 7.00.

By 10.00 the hall arrangements were complete. The trade stands had all arrived by this time and had set up their displays. All that was missing was the visitors. Unfortunately our Open Day clashed with several other local events, but we did have a good write up in Friday's Evening Star which every one believed would help in attracting visitors.

Several other astronomical societies attended these included: Clacton, Eastbourne, Haringey.

Other visitors started arriving, but only in small numbers. An early fear was that there would be too few members to run all the areas, luckily on the day this proved to be wrong. The number of visitors was between 150 - 200. Many visitors mentioned that they were impressed with our organisation of the Open Day. At the time of writing I do not know if we made a profit or loss on the day

R. Gooding

The annual Oxford Astronomy Weekend is a course organised by the Department of External Studies of Oxford University designed to give an account of the latest research in astronomy for the interested layman / amateur astronomer. The course was first run in 1979 and proved so popular that it has been given ever since. With a different area chosen each year the event now attracts a great interest and a sizeable proportion of attendees have become regulars. The reasonably high level of technicality matches the knowledge of amateur astronomers and well-read laypeople who are 'armchair' cosmologists and astrophysicists.

The venue, Rewley House, is attractive and well equipped with a good sized lecture theatre and other facilities. Its location, close to the colleges, makes it an excellent base for exploring the city. Accommodation is provided in pleasant rooms, with on-suite bath etc., in or adjacent to the main building.

The first lecture of the course was given by Dr. John Barrow a co-author of the controversial Cosmological Anthropic Principle. It was an excellent opportunity for those present to quiz directly one of the two cosmologists promulgating this theory so recently in the news and the subject of an 'Horizon' programme amongst other things. Dr Victor Clube cheered everyone with his account of how the Earth might be devastated in the near future by a gigantic meteor storm. Other lecturers gave an up-to-the-minute account of recent work in galaxy formation, solar studies as well as the latest on the origin and history of the Universe as a whole.

I was pleased to discover that I was one of four attendees who had also been on the first 'Oxford Astronomy Weekend' ( I had always assumed that it had been run before 1979 ) ; however I did lapse several years. The one person who had been on all ten, a truly expert amateur astrophysicist by now no doubt, received a gift from the course organisers. The special dinner to celebrate the occasion of the 10th weekend was thoroughly appreciated by all and the quiz that followed was tremendous fun.

If anyone else is interested in going next year they can either contact the Department of External Studies directly or contact me [ see back page ].

P. Richards.

## OASI XMAS Dinner in Mid-Dec

This has been arranged in advance this year at the Swann in Westerfield. Previous years I had tried to obtain this pub and others like it but they were fully booked. The approximate cost per head will be £8 and a vegetarian meal will be available. The maximum number which can be accommodated is 25, therefore I am reserving places for the first 25 to give me a £1 deposit. If anyone is interested can you please ring me to obtain further details and book a place. Thankyou

R.A.Lobbett, tele. Felix.

## OASI Quiz

This Quiz was held on the OASI open day, Saturday 16th July. It was free to enter with a prize given to the winner. The majority of answers could be found from club exhibits/displays and from a knowledge of the club's History. There were 30 questions with one correct answer from 4. The scores ranged from 12 to all 30 correct. The winner was Mr. K.Sheldon of Worcs and he was sent a book token.

The quiz re-appears here so that people who read the OASI magazine and did not have the opportunity to come to our open day could have the fun of having a go. The answers will appear in next months magazine.

Question	Possible answer	Indicate correct answer
1 Type of main telescope in the club	<u>Reflector</u> <u>Schmidt</u> <u>Refractor</u> <u>Maksutov</u>	
2 Who paid for the construction of the observatory in 1872	<u>John Plummer</u> <u>Colonel Tomline</u> <u>Colonel Blimp</u> <u>Royal Ast. Society</u>	
3 In general a variable star is a star whose	<u>Position varies</u> <u>Brightness varies</u> <u>Distance varies</u> <u>Temperament varies</u>	
4 The Royal Greenwich observatory is currently located in	<u>Edinburgh</u> <u>Hertsmonceux</u> <u>London</u> <u>Nacton</u>	
5 The average height of a meteor is	<u>10 km</u> <u>100 km</u> <u>200 km</u> <u>500 km</u>	
6 Which grinding powder is generally used for the second stage of grinding	<u>20 grade</u> <u>80 grade</u> <u>220 grade</u> <u>400 grade</u>	
7 The Horsehead nebulae is part of the following constellation	<u>Pegasus</u> <u>Orion</u> <u>Andromeda</u> <u>Pleiades</u>	
8 From the variable stars shown which star varies the greatest	<u>O.Ceti</u> <u>R.Coronae Borealis</u> <u>R.Scuti</u> <u>W.Cygni</u>	
9 In general, the length of the tube of a Schmidt camera is NB. FL = focal length	<u>Half mirror's FL</u> <u>Twice mirror's FL</u> <u>Quarter mirror's FL</u> <u>Equal to mirror's FL</u>	
10 When was the OASI formed	<u>1872</u> <u>1938</u> <u>1963</u> <u>1967</u>	
11 When was John Plummer's book an "Introduction to Astronomy" published NB There is a date given in the OASI history sheet which is incorrect.	<u>1872</u> <u>1873</u> <u>1910</u> <u>1967</u>	
12 Planet with the average closest orbit to Earth's orbit	<u>Mercury</u> <u>Venus</u> <u>Mars</u> <u>Jupiter</u>	
13 Diameter of Observatory's Dome	<u>15 ft</u> <u>20 ft</u> <u>25 ft</u> <u>30 ft</u>	
14 Approximately how many Earth's will fit into the sun	<u>1,000</u> <u>10,000</u> <u>100,000</u> <u>1 Million</u>	
15 Which is the furthest distance	<u>Light year</u> <u>Parsec</u> <u>Astronomical unit</u> <u>Pluto from the sun</u>	

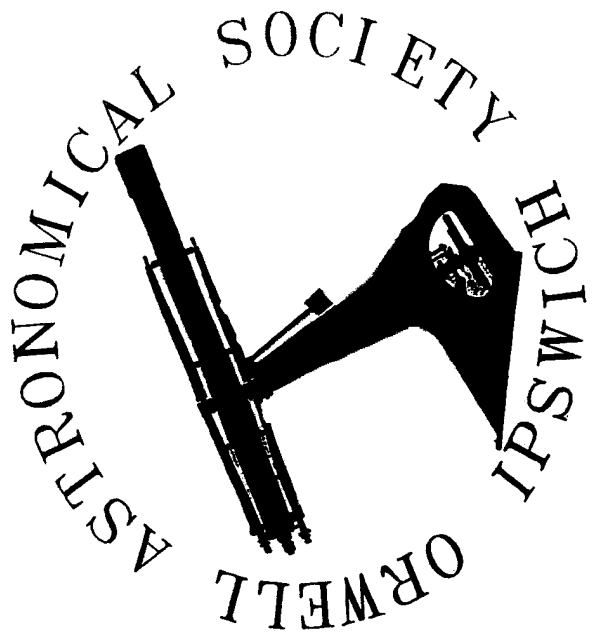
- |    |   |  |  |
|----|---|--|--|
| 16 | The small telescope in room adjacent to the main telescope is   | <u>Spotting scope</u><br><u>Upright scope</u><br><u>Transit scope</u><br><u>Swivel scope</u>                 | <u>2210 km</u><br><u>3476 km</u><br><u>3652 km</u><br><u>5010 km</u>                           |
| 17 | The plough is not a constellation in its own right, it is part of   | <u>Ursa Minor</u><br><u>Great Digger</u><br><u>Orion</u><br><u>Ursa Major</u>                                | <u>East</u><br><u>West</u><br><u>Centre</u><br><u>North</u>                                    |
| 18 | Diameter of main OASI telescope's objective   | <u>8"</u><br><u>10"</u><br><u>12"</u><br><u>20"</u>  | <u>Pretyman family</u><br><u>William Burn</u><br><u>Francis Vernon</u><br><u>Edward Vernon</u> |
| 19 | Size of club's largest binoculars   | <u>8 * 40</u><br><u>10 * 50</u><br><u>11 * 80</u><br><u>25 * 125</u>   | <u>None</u><br><u>One</u><br><u>Two</u><br><u>Half</u>   |
| 20 | Club's main telescope is mounted on an  | <u>Equatorial mounting</u><br><u>Altazimuth mounting</u><br><u>Pillar mounting</u><br><u>Cradle mounting</u> | <u>Upwards</u><br><u>Sideways</u><br><u>Downwards</u><br><u>Backwards</u>                      |
| 21 | Name the largest planet with rings  | <u>Neptune</u><br><u>Jupiter</u><br><u>Saturn</u><br><u>Uranus</u>   | <u>100 years</u><br><u>86 years</u><br><u>60 years</u><br><u>76 years</u>                      |
| 22 | In this country, the sun and moon both set  | <u>In the East</u><br><u>On opposite horizons</u><br><u>In the West</u><br><u>At the same time</u>           |  |
| 23 | What would the approximate diameter of the solar system be given that the sun is 3m in diameter                           | <u>1 km</u><br><u>25 km</u><br><u>50 km</u><br><u>250 km</u>   |  |
| 24 | What is the technique used to measure the largest distances within the universe   | <u>Parallax</u><br><u>Radar</u><br><u>Red shift</u><br><u>Brightness of supernovae</u>                       |  |
| 25 | The average diameter of the Earth's moon is   |  |  |
| 26 | On what part of the nearside of the moon is the Sinus Medii   |  |  |
| 27 | Who had Orwell Park Mansion re-built in the 18th century  |  |  |
| 28 | How many lenses are in the middle of the tube of the OASI large telescope   |  |  |
| 29 | If an astronomical telescope is looking at a smoking chimney on a still day, which way will the smoke appear to be moving |  |  |
| 30 | Halley's comet returns approximately every  |  |  |

**\*\*\*\*\* SOCIETY SWEATERS, SWEATSHIRTS AND TIES \*\*\*\*\***

Various items of clothing with an OASI logo emblazened across the front are to be made available to members in the very near future. Various types of clothing in a range of colours can be obtained from the company contacted ( Alpha ). The proposed logo is shown below. If you want to suggest an alternative logo or wish to recommend an alternative company please tell us. Full details can be obtained by phoning Roy Gooding ( see back page ) or contacting me, Peter Richards, at the observatory on a Wednesday. If you are interested please fill out the form below ( or a copy of it ) and leave it in the observatory log or post it to Roy as soon as possible. A meeting will be arranged to finalise the details and all those who expressed an interest will be contacted prior to ordering. Approximate prices are : sweaters £19, sweatshirts £10, ties £4. These prices will be less if the we place a larger than minimum order.

This form is for information only : you will be contacted again when the actual order is placed.

ITEM TYPE	COLOUR	SIZE	QUANTITY	YOUR NAME AND PHONE NUMBER/ADDRESS

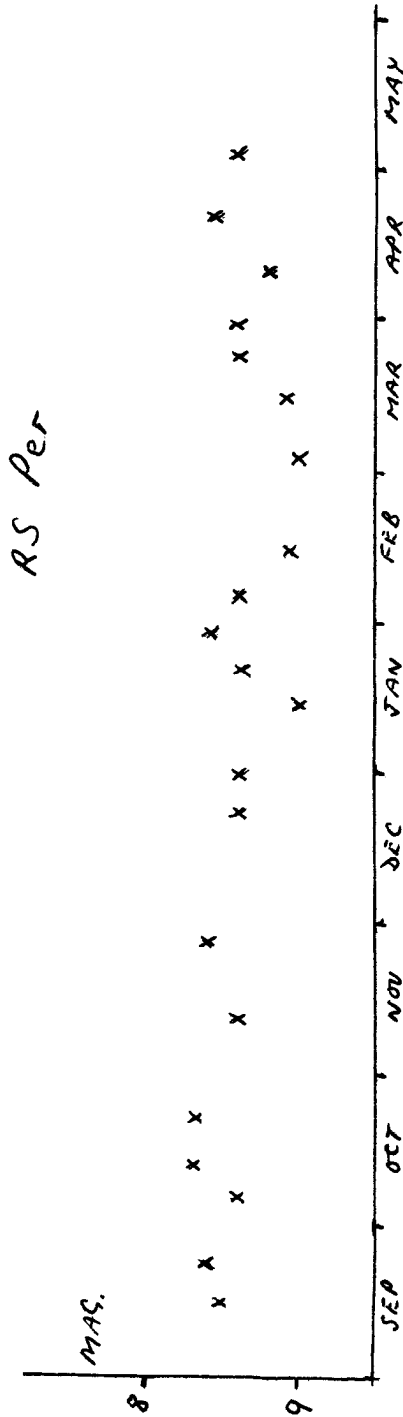


VARIABLE STAR OBSERVATIONS

by Mike Nicholls

This light curve shows RS Persei from September 1987 to May 1988. This is a member of the semi-regular class of variable stars and, typically, has a variation of less than two magnitudes. RS Per is thought to have a very rough period of 152 days, but this does not show up very well on this light curve. RS Per is also a member of one of the sword handle open clusters.

Observations were made with an 8" reflector.



PROGRAMME FOR AUGUST

Mondays from 8pm	GENERAL OBSERVATION SECTION		
1-8	Mr R Newman	[redacted], Felixstowe IP11 9DY	Tel. Fel. [redacted]
15-22	Mr J King	[redacted], Felixstowe IP11 9LQ	Tel. Fel. [redacted]
29	Mr N Taylor	[redacted], Trimley IP10 OXY	Tel. Fel. [redacted]
Tuesdays from 8pm	GENERAL OBSERVATION SECTION		
2-9	Mr R Newman	[redacted], Felixstowe IP11 9DY	Tel. Fel. [redacted]
16-23	Mr J King	[redacted], Felixstowe IP11 9LQ	Tel. Fel. [redacted]
30			
Wednesdays from 8pm	NEBULA AND FAINT OBJECTS SECTION / CLUB NIGHT		
3-10	Mr M Cook	[redacted], Ipswich IP4 5PZ	Tel. [redacted]
17-24	Mr D Payne	[redacted], Wickham Market IP13 OSD	Tel. [redacted]
31			
Fridays from 8pm	GENERAL OBSERVATION SECTION		
	Mr P R Richards	[redacted], Ipswich IP1 2HW	Tel. [redacted]
5-19	Mr M Harlow	[redacted], Trimley IP10 OXB	Tel. [redacted]
	Mr R A Lobbett	[redacted], Felixstowe IP11 8UJ	Tel. [redacted]

On nights other than Wednesday ring directors to confirm dates.

1988 COMMITTEE

CHAIRMAN	D Payne	( Address above )	Home: [redacted] Work: [redacted]
VICE CHAIRMAN	D Barnard	[redacted], Ipswich IP4 5PP	Home: [redacted] Work: [redacted]
SECRETARY	R Gooding	[redacted], Ipswich IP1 6AE	Home: [redacted]
TREASURER	M Nicholls	[redacted], Capel St Mary, Ipswich IP9 2EX	Home: [redacted] Work: [redacted]
MAINTENANCE	M Cook	( Address above )	Home: [redacted] Work: [redacted]
JOURNAL	E Sims	[redacted], Ipswich IP1 4HA	Home: [redacted]
CO-ORD LIBRARIAN	P Richards	( Address above )	Home: [redacted] Work: [redacted]
EQUIPMENT	R Newman	( Address above )	Home: [redacted] Work: [redacted]
CURATOR			Work: [redacted]
SPECIAL	N Taylor	( Address above )	Home: [redacted] Work: [redacted]
EVENTS			