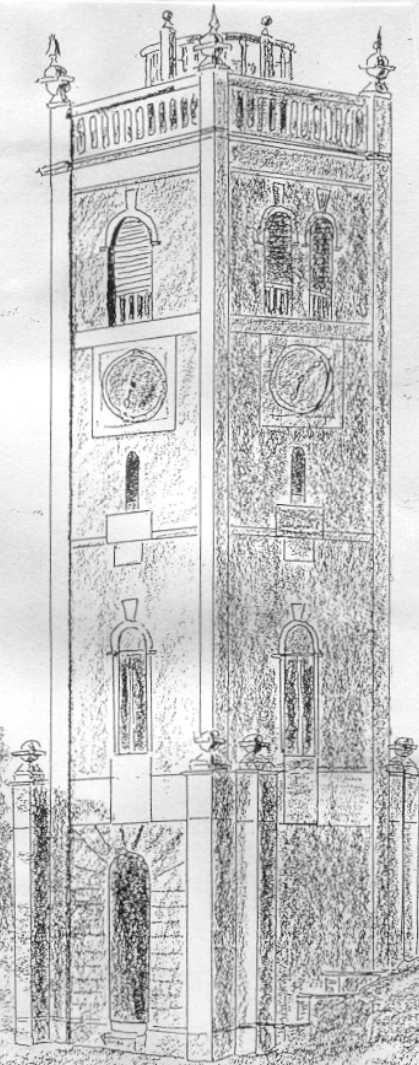


ORWELL ASTRONOMICAL SOCIETY IPSWICH

Charity No 271313.

OCTOBER
1996



CLOCK TOWER

ORWELL SCHOOL

H. Lamb

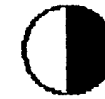
NIGHT SKY

All times GMT

SUN

Rises approximately at 06:10 to 06:42
Sets approximately at 17:30 to 16:50

MOON



4th



12th



19th



26th

MERCURY Mercury will be placed in the morning sky this month for observation. Mag. -1.0 in mid month.

VENUS Venus will be rising at about 02:40 in mid month, being very prominent in the predawn sky. Mag. -4.1.

MARS Mars will be rising at about 00:40 in mid month. Mag. 1.4.

JUPITER Jupiter will be visible in the early evening this month. By the end of the month it will be setting at about 20:30. Mag. -2.2.

SATURN Saturn will be visible most of the night. It will be setting at about 03:50 by the end of the month. Mag. 0.6

URANUS Uranus will be setting at about 22:45 in mid month. Mag. 5.8.

Neptune Neptune will be setting at about 22:20 in mid month. Mag. 7.9

Roy Gooding

SOCIETY NEWS

1 Committee Meeting

The next committee meeting will be held on Saturday 16th November at the observatory, from 19:30. This will be an open meeting and any member is welcome to attend.

2 Events for 1996

This list of events was first presented at the AGM.

Christmas Meal

The Christmas meal this year will be at the Shepherd & Dog again. The deposit is £5 per person. This money must be given to the Pub before the end of October. Any one who wishes to reserve a place, could you please send me the money before the last week of October

Committee Meeting Summary.

The last committee meeting was held on Saturday 7th September.

- i) Arrangements for the Open Weekend were discussed.
- ii) The track at the base of the dome has been cracking at the joints, where the internal frame work and the base track are joined. At some future date this problem will have to be investigated more fully. It would involve closing the observatory for an extended period, while the internal mahogany planks were removed. This work may be undertaken during the new year.
- iii) The present society membership is 70.
- iv) An action point to buy some new eyepieces has resulted in three eyepieces being purchased:- 25, 16, 9.5mm Possels

NEW LIBRARY BOOKS

The OASI library has recently acquired the following books:

Orwell Park, by Gillian Bence-Jones, Electric Ink Ltd, 1995

The author's family were the last residents of Orwell Park before it became a school in 1936. The book provides a history of Orwell Park from the building of the first mansion there in the middle of the eighteenth century to the present day. Unfortunately, the author's style is quite impenetrable, and the text consists of a lengthy series of apparently unconnected anecdotes, so readers not already well versed in the history of Orwell Park will not have an easy read! The author pays only scant attention to the observatory.

Observing Variable Stars, David Levy, Cambridge University Press, 1989

The author of this book is the Levy who achieved public prominence as co-discoverer of comet Shoemaker-Levy 9. The book opens with advice on techniques and equipment for observing variable stars. Thereafter, the author provides details of numerous variable stars, complete with finder charts, characteristic details, and a host of practical observing tips. This book is written for the enthusiast, by an enthusiast.

Please contact me with any requests for purchase of other books for the library.

James Appleton

OCCULTATIONS DURING OCTOBER 1996

The table lists stellar occultation events which occur during the month under favourable circumstances. ('D' denotes a disappearance and 'R' a reappearance.) The data relates to Orwell Park Observatory, but will be similar at nearby locations.

Note in particular the two occultations of Alpha Tauri (Regulus) this month. The second occultation occurs when the Sun is above the horizon, but should be visible telescopically.

Date	Time (UT)	Lunar Phase	Sun Alt (°)	Star Alt (°)	Min Dist (radii)	PA (°)	Star (D = double)	Mag
Tue 01 Oct	D- 20:53:49	.74-	-30	5	.10S	86	Alpha Tau	0.8
	R- 21:48:59	.74-	-36	13		254		
Sat 05 Oct	D- 00:48:14	.44-	-41	18	.56N	58	Lambda Gem	3.6
	R- 01:42:02	.44-	-37	26		306		
Fri 18 Oct	D- 18:16:39	.39+	-13	17	.54S	114	ZC2745 (D)	6.9
Wed 23 Oct	D- 01:22:42	.84+	-44	8	.47N	42	ZC3362 (D)	5.7
Thu 24 Oct	D- 21:16:27	.96+	-41	39	.24N	52	ZC81	6.4
Tue 29 Oct	D- 08:29:35	.92-	13	8	.70S	133	Alpha Tau	0.8
	R- 09:08:32	.91-	17	3		225		

James Appleton

HERSTMONGEUX SCIENCE CENTRE - 1996 ... AND HELEN SHARMAN VISITING by Roy Adams

Some members of O. A. S. I. will remember visiting Herstmonceux Castle together with the Observatory, way back in 1988 October. It was at a time when closure was more than rumoured, but the staff really knew less than anyone else. About a fortnight later, the complex was essentially closed. A period followed in which offers were made up to around £40m, from Japanese interests, I understand, but (one might say of course) such a high offer was not sustained, and eventually, the figure went right down. I'm not sure what the successful buyers bought the Castle and Observatory for, but maybe sometime I may learn the figure - possibly under £10m, two years ago.

The main, isolated dome still remains rather stark and empty, visible on a clear day for many miles. Some of the Equatorial Group domes are still occupied by their original telescopes, which are in surprisingly good condition.

Queen's University of Kingston, Ontario (Canada) took over and a company with charitable status, Science Projects backed by local councils has now set up the Herstmonceux Science Centre. The Centre also has other support, and opened in 1995, April, consisting of many hands-on displays including a 3-D pterodactyl, other physics-of-light tableaux, demonstrations of inertia and gravity and wave resonance. At least one of these you can play tricks with: a small, shallow bath filled with water invites you to rub handles at the sides, and if you do so at the right frequency, a central spurt of water comes up from the bath. Anyone getting down rather close might get an unexpected eyeful!

There is still a shop in the main Equatorial Building along with some of these exhibits, a handy buffet/cafe was also open there when I went with a friend last May, to their Space Fete. We even partook of some 'space food', said to be high in protein but it was so light, almost like biscuit-type candy-floss, I wondered whether the space it took up was really more important than its density!

Lots of exhibits were standing outside with a playdome in the front. Apparently, local amateurs, some from Eastbourne A. S. have helped a lot in the making and arrangement of the displays, also 'manning' at events. Things like wooden bridges in the front of the Equatorial Group help to interest younger children who may be less taken by the more scientific stuff.

Not long after we arrived, we were looking at some moonrock samples (which the staff member coolly told us were worth about £1m) when we learned that Helen Sharman was coming and would be giving two talks. So we juggled for position for her second talk, in another translucent dome behind the main building. Helen, for anyone who doesn't know, is Britain's only female astronaut (or maybe I didn't get the complete picture - only British astronaut, full stop?! This was an unscheduled surprise!

Helen was obviously very enthusiastic about her work, and about the continuance of space exploration in general. She explained how she'd first heard of the invitation to would-be astronauts on local radio, and went on to describe her experiences in training and on the Mir joint space satellite programme. She was very down-to-earth in her initial talk and in answering questions about what it's like to be in space (on Mir, that is, she would have had to do another 18 months more training to do a space-walk). Strange as it may seem, toilets are air-flushed, and if you lose your toothbrush, as likely as not after a few hours it will have turned up against one of the air filters for recycling the air. She explained the types of research that need a space environment - such as allowing aluminium and lead being likely possible there due to the absence of gravity. And it's Man's nature to explore ever further ...

Oxygen storage and release for breathing involves the use of lithium chlorate. Apparently, this material takes up a great deal of oxygen, better than pressure cans?

Asked how they used to wash up there, Helen told us that earlier on, showering used to take eight hours. Now they use big wipes. Someone asked why training for a space-walk would take another 18 months. Basically, it is due to the need to get used to wearing a space-suit at only about half our atmospheric pressure we experience at sea level. If the suit was fully pumped to 'sea-level' pressure, the restriction on movements would be so much as to make any real manoeuvring virtually impossible.

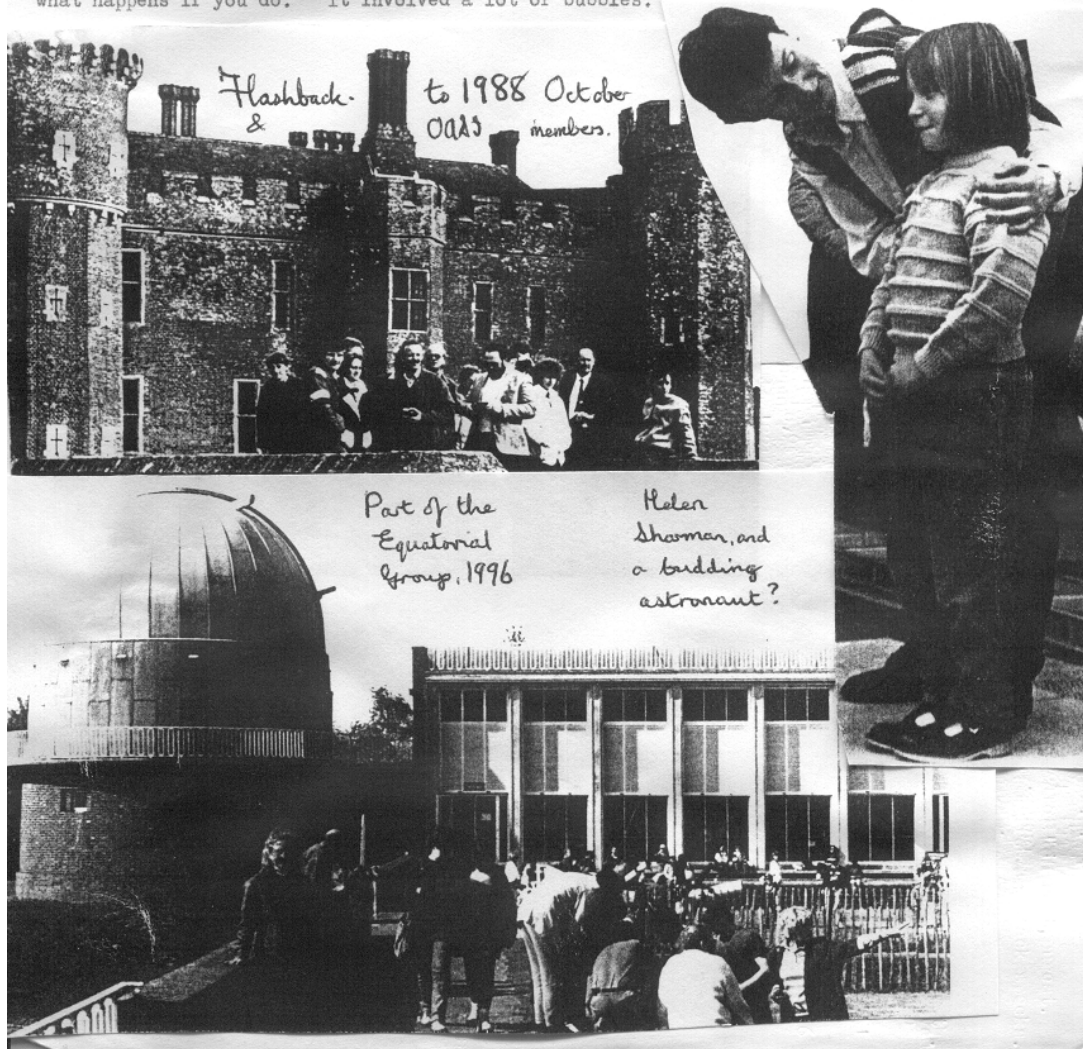
Instead of joining the melee for siggys on the spot, we later availed ourselves of the very kind offer to sign postcards we had bought and put in a box which one Geoffrey, our 'Master of Ceremonies' would give to Helen later. We had a chat with Geoffrey, who said there was something they are connected with in the Norwich area. (This I will look into at a soon date.) After this, the main crowd had gone, and we had a few minutes 'on our own' with Helen. She said that what impressed her most about her whole experience on the Programme was the Russians and their outlook; she had learned that people are more important than things. Helen said she feels the day will come when spacecraft are of a rather different form and propulsion, which will be more convenient, less polluting and cheaper than the rockets used today. (Yes, I did mention a couple of ideas I'd had.)

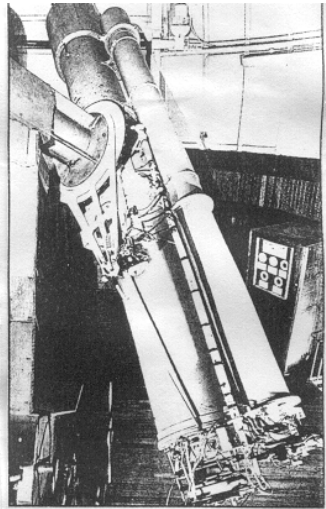
When Merlyn, for it was she who had been with me on the visit, asked Helen if she believed in other entities and/or extraterrestrial craft, 'UFOs' very loosely, she said 'Yes' but that she had not seen any although she would have welcomed - at least been receptive toward seeing them. It certainly was a lucky day for us, because a very 'chuffed' Merlyn even had her picture taken together with Helen. We thanked her for all she was doing to help promote space interests including astronomy. Indeed, whoever chose Helen certainly made the right choice!

As for the Centre itself, developments are ongoing, the situation now being only the first phase of operations. Complete renovation is planned, and it's intended that the Centre will become a major venue for educational programmes, lectures and exhibitions. Research and training facilities will also be developed in conjunction with other organisations, with the telescopes eventually being brought back into operation.

The Castle part we were too late to see. But it is opened on a more or less daily basis - right up-to-date info will be gained and made available for those interested.

Left till last, as even I have a job to believe it - such is the enormity of the coincidence: I recently heard that the people who negotiated the purchase of Herstoncoeur are actually living right next door to Merlyn in Bexhill. I'll try and arrange a chat sometime Meanwhile, I'd recommend the combined Science Centre and Castle as a good day out for anyone. Free car-parking and possibly if one is discreet - picnic space... I think the entry fee per person for the Centre is currently about £2.50; possibly similar for the Castle. Who knows, you may bump into the odd rocket motor, space suit or rocket upper stage on show. But don't jump too high without a space suit. We were shown with the aid of a rather Heath Robinson but very effective 'student' demonstration unit, just what happens if you do. It involved a lot of bubbles.





The 26-inch Thompson refractor
CREDIT SCIENCE CENTRE/RGO

OASI Open Weekend 20th to 23rd September 1996

The Society opened the observatory to the public for the four nights from Friday 20th to Monday 23rd September inclusive to coincide and support National Astronomy Week. which started on Saturday 21st September. Although the weather for the weekend was abysmal with only Saturday evening offering any chance of observing, through short breaks in fairly dense cloud, cover the event was very successful. On Friday night about 25 visitors turned up and were given a tour and description of the observatory followed by a slide show and talk on the objects they would have been able to observe had it been clear! The following night, with the Moon every now and again breaking through cloud, about 160 visitors turned up and we were kept very busy trying to give all visitors a glimpse of the Moon, and for a few lucky ones even a glimpse of Jupiter. A few very keen visitors who stopped late (about 11:00pm 1 hour after our advertised closing time!) even managed to get a glimpse of Saturn! Sunday night was back to completely overcast skies but we still had about 50 visitors turn up. Again Monday evening was equally overcast but a surprising 40 visitors turned up.

In total we probably had about 260 to 280 visitors over the four nights . They all appeared to be genuinely interested in the subject, not just curious about the observatory, which I believe bodes well for a growing public enthusiasm and awareness of astronomy.

D. PAYNE.

PROGRAMME FOR OCTOBER

<i>Mondays from 7.30pm</i> <i>No Directors available for this night</i>	GENERAL OBSERVATION SECTION
<i>Tuesdays from 7.30pm</i> <i>Mr D Barnard</i>	GENERAL OBSERVATION SECTION daytime only
<i>Wednesdays from 7.45pm</i> <i>Mr M Cook</i>	NEBULA & FAINT OBJECTS SECTION <i>Mr D Payne</i>
<i>Thursdays from 7.30pm</i> <i>Mr P Richards</i>	OBSERVATORY VISITS FROM OUTSIDE GROUPS
<i>Fridays from 7.30pm</i> <i>11th - 25th</i> <i>Mr J Hood</i>	DOUBLE STARS <i>Mr M Barritt</i>

All members are welcome on any night, but on nights other than Wednesday please check with the director of the night that the observatory will be open.

Lectures and other events:

COMMITTEE MEETING ----- On Saturday 16th November at 7.30pm in the club room at the observatory. All members are welcome to attend.
CHRISTMAS MEAL-----On Wednesday 11th December at the Shepherd & Dog.

e-mail enquires to oasiengq@btbcs.bt.co.uk
WWW url <http://www.ast.cam.ac.uk:80/~ipswich/>

1996 COMMITTEE		Home Phone	Work Phone
CHAIRMAN	D Payne		
SECRETARY	R Gooding		
TREASURER	M Nicholls		
MAINTENANCE CO-ORD	M Cook		
JOURNAL CO-ORDINATOR	E Sims		
PUBLICITY & VISIT CO-ORD	P Richards		
EQUIPMENT CURATOR	M Harlow		
SPECIAL EVENTS CO-ORD	A Smith		
LIBRARIAN & COMP SOFTWARE	J Appleton		
JOURNAL ARTICLES TO	E Sims	Ipswich Suffolk IP1 4HA	
CORRESPONDENCE ADDRESS	R Gooding	OASI Secretary Ipswich Suffolk IP1 6AE	