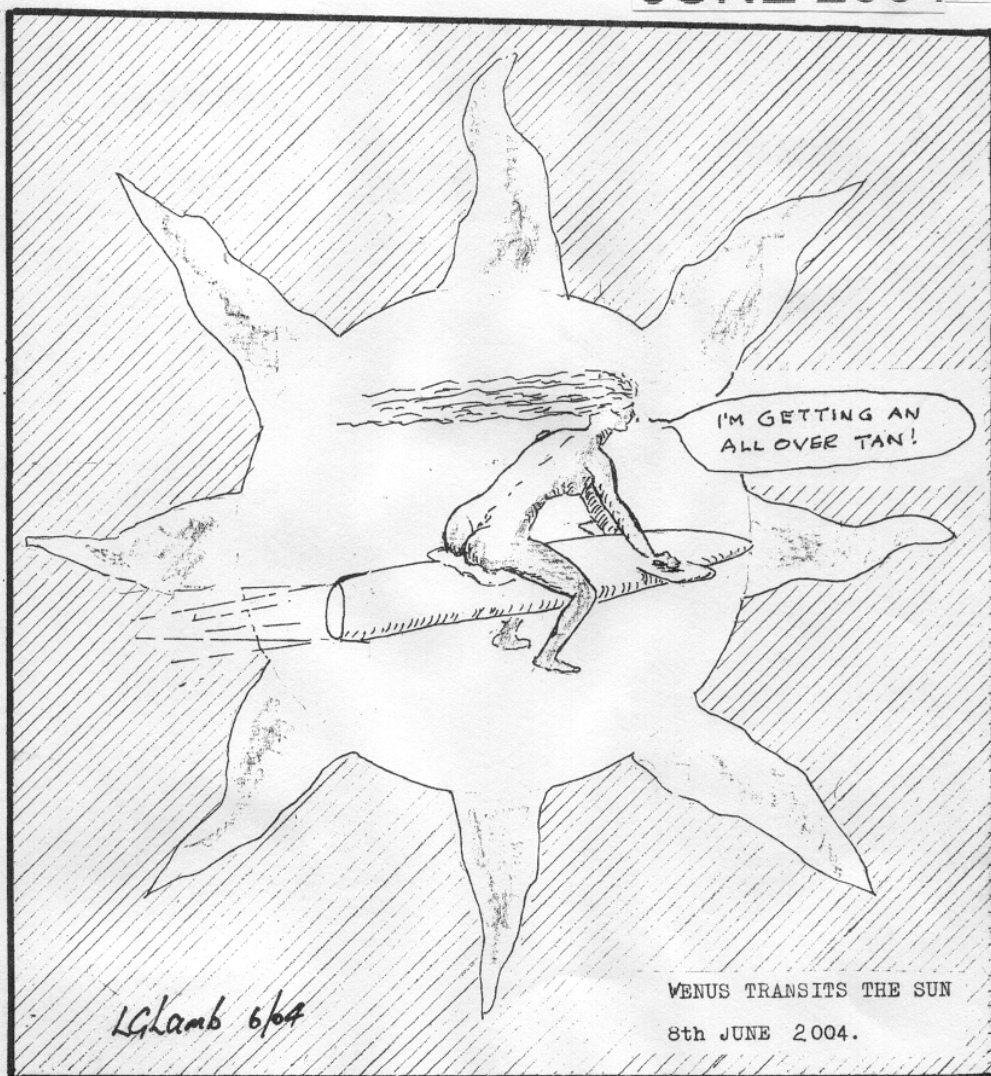


ORWELL ASTRONOMICAL SOCIETY IPSWICH

Charity No 271313

JUNE 2004



Society News

1 Next Committee Meeting Saturday 5th June 2004

The next committee meeting will be held on Saturday 5th June at 19:30 in a classroom in the courtyard. This is an open meeting and any one who is interested is invited to attend

2 Events for 2004

Meeting	Venue	Date
The Web society Annual Meeting	Institute of Astronomy Cambridge	June 19 th from 10:30
BAA Exhibition Meeting	The Cavendish Laboratory Cambridge	June 26 th 11:00 to 18:00
Summer Barbecue	Mike Whybray's garden. His address is [redacted], Nacton, IPSWICH	Saturday 10 th in July From 15:00 See poster for more details
Equinox Sky Camp	Kelling Heath Leisure Park Weybourne, Holt, Norfolk To book phone 01263 588181	Friday 10 th to 19 th September
Astronomy Workshops	The new session is the planning stage.	
FAS Convention	Institute of Astronomy Cambridge	Saturday 2 nd October
Christmas Meal	Red Lion Martlesham	15 th December at 20:00

3 FAS Convention Saturday 2nd October

Venue: The Institute of Astronomy,
Madingley Road Cambridge

This annual event is well worth attending, especially if you have not been before. There are a limited number of tickets available (180) Tickets cost £7. If you would like to come please contact me (Roy Gooding) and I will order the tickets.

Lecture Programme

Speaker	Lecture
Prof. Douglas Gough	TBA
Dr. Paul Murdin	The Reality of Black Holes
Guy Hurst	Supernovae
Dr. Cathie Clark	Formation of stars and Brown Dwarfs

Several trade stands will also be present.

4 Proposal to hold "Find Your Way Round the Night Sky" Meetings



In recent months several new members have joined OASI. They mentioned that they are interested in Astronomy, but being beginners, they have only limited knowledge. One of their reasons to join us was to find like-minded people, with a greater knowledge than they have. Finding their way around the night sky held a high priority.

At our public Open Weekends I usually take visitors outside to show them the night sky, and identifying the principle constellations. All that is required for this is the

naked eye and binoculars.

I would like to do something similar for any members who would like to increase their identification of the constellations. As everyone knows the observatory tower is not a good site for viewing the whole sky

A possible venue could be the picnic site at Nacton shores. This is only a few minutes walk from the observatory car park.

If any one is interested in doing this, please contact me (Roy Gooding)

The first meeting would not start until September.

3

5 New Decorating Season

Its that time of year again when the observatory refurbishment commences. When you attend Wednesday evenings any helping hand would be appreciated. Help is requested to man (or woman) the power tools, hammers, and paint brushes.



Members who attend will be encouraged to lend a hand. If you intend to come along to the observatory during summer period please come in old clothes Volunteers are needed for the following jobs

Observatory Maintenance Jobs for 2004

This list is based on last years one

Location	Jobs	Names	Completed
Computer room	New eyepiece cupboard	Neil Morley	
Transit room	Paint door panels		
	Rebuild telescope pillar		
Observatory	Construct new RA drive control		
	Repair gutter		
	Paint door frame at the top of the stairs		
	Build set of mobile stairs for telescope	Martin Cook	
	Stain and varnish floor		
Belvedere	Paint all balcony doors. Use white Ranch paint		
	East balcony		
	Paint balcony door, inside		

4

	and outside.		
	South east balcony Paint balcony door, inside and outside.		
	South balcony Paint balcony door, inside and outside Door needs repairing.	Garry Coleman	
	South west balcony Paint balcony door, inside and outside.		
	West balcony Paint balcony door, inside and outside.		
	Complete painting the stone work		
Bottom room	Varnish door	Roy Gooding	
	Make good room walls, stabilise and paint	Roy Gooding	

OCCULTATIONS DURING JUNE

The table lists stellar occultations which occur during the month under favourable circumstances. The data relates to Orwell Park Observatory, but will be similar at nearby locations.

D / R	Date & Time (UT)	Lunar Phase	Sun Alt (°)	Star Alt (°)	Star	Mag
D	02 Jun 22:31	1.00+	-14	11	22 Sco, i Sco	4.8
D	22 Jun 22:24	0.22+	-12	8	ZC 1479	6.4
D	24 Jun 22:51	0.41+	-13	9	ZC 1693	7.5

James Appleton

5

Night Sky (June)

All times GMT

Sun

The sun will be rising approximately 03:40
The sun will be setting approximately 20:15

Moon

Full Moon	3 rd Quarter	New Moon	1 st Quarter
3 rd	9 th	17 th	25 th

Mercury Mercury will be at superior conjunction on the 18th. It will be setting at about 1½ hours after the sun by the end of the month. It may be visible low down in the NW at magnitude -1.

Venus Venus will be at inferior conjunction on the 8th, when it transits the sun.

Source BAA Handbook

	UT
Ingress exterior contact	5:13.5
Ingress interior contact	5:32.8
Egress interior contact	11:06.6
Egress exterior contact	11:25.9

By mid month Venus will reappear in the early NE morning sky. It remains a morning sky object for the rest of the year

Mars Mars has moved into Cancer this month. By months end it will be setting about 2 hours after the sun this month. Magnitude 1.8.

Jupiter Jupiter remains in Leo, setting at about 23:30 at the end of the month. Magnitude -1.9

Saturn Saturn will be low down in the western sky after sunset this month. By the end of the month it will be setting less than 1 hour after the sun. Saturn will be at magnitude 0.1

Uranus Uranus rises at about 23:00 at the end of the month. Magnitude 5.7

Neptune Neptune rises at about 22:30 at the end of the month. Magnitude 7.8

Meteor Showers Meteor source is the BAA Handbook

Shower	Limits	Maximum	ZHR
Ophiuchids	May 19 th to July	June 9 th June 19 th	5

6

Venus – the other story.

While most thought was being given to the transit of Venus predicted to take place on June 8th 2004, I joined two of our members, Bill Barton and Garry Coleman, in attempting to observe the lunar occultation of Venus taking place on Friday May 21st, at 12.09 BST – just after midday in broad daylight. Both the moon and Venus can be observed during the day at certain times in their orbits: the former quite easily, and with the naked eye, the latter, with a small telescope if you know where to look. On May 21st at 12.09 they would be in the same place, but only 22 degrees from the sun, the moon being only two days old and coinciding with the planets position. This was not going to be easy to see in the sun's glare, and would have been quite difficult (and maybe a little dangerous) in ones back garden. Observing with the Tomline refractor through the shutter in the observatory dome was therefore the preferred site – so that's where we assembled at 1100 BST on Friday May 21st.

Bill had pre-calculated using data from the BAA handbook the RA and DEC of both the sun and Venus, and therefore the difference between the two bodies – thus arriving at the position of Venus, and that of the occultation. A trial run of this method on Wednesday evening at the dome had successfully located Venus. So clear sky permitting, the method should work on the 21st.

The sky was clear briefly before 12.00 enabling us to project the sun onto white card; the RA was read on the telescopes RA setting circle (from that amazing brass drive wheel at the telescopes base), and the telescope was moved in RA the pre calculated difference with Venus – 1hr 46 min, and 6 degrees north in DEC. Alas by this time, the sky had clouded, and so it remained from 12.09 to 13.19 BST, the full period of the occultation. We hadn't actually seen Venus to confirm our calculations. However, Bill being very dogged, persuaded Garry and me to keep the telescope aimed at the chosen spot with the drive engaged, for another half hour, because 'a clear patch of sky was coming'. And he was right. The sky cleared, and we had hit the spot. Venus was there, with the moon a couple of degrees past. OK, we had missed the occultation. But we had done everything possible, and would have seen it if clear. In my opinion, and I may be biased, it was a more difficult and interesting observing project than the transit will be!! But I will be there for that as well on June 8th. Ted Sampson.

THE TRANSIT OF VENUS

Members can hardly be anything but aware of the upcoming Transit of Venus on Tuesday 8th June, not only from information supplied in the last edition of this newsletter – coupled with Peter Hingley's excellent recent lecture to us on the subject, but also the extensive coverage manifest in the astronomical press.

OASI members will be observing the event from Orwell Park (Observatory will be open from approx 05.45BST) and a summary of facilities available to any member wishing to join us is listed below:

The **Tomline Refractor** will be fitted with a purpose made projection screen throughout the entirety of the event, from which we hope to make accurate recordings of the four critical timings, which are predicted* for our location viz:

	Predicted time UT	Predicted time BST
Ingress (1 st /exterior contact)	05.19	06.19
Ingress (2 nd /interior contact)	05.39	06.39
Greatest transit	08.22	09.22
Egress (3 rd /interior contact)	11.03	12.03
Egress (4 th /exterior contact)	11.23	12.23

* Timings taken from *The University of Central Lancs web site*
www.transit-of-venus.org.uk

It is also expected that we shall be darkening down the interior of the dome by screening some of the shutter area and that the transit will be time lapse recorded by a camera on a tripod adjacent to the projection screen.

In the **clubroom (Belvedere)** area at least three instruments will be utilised: The **Meade ETX 125EC** will be fitted with a Meade Solar Filter for direct observation. The **10" (250mm) Dobsonian Reflector** will be stopped down and a Mylar filter will be utilised.

Bill Barton will be bringing along his own **Hydrogen Alpha** observing equipment – remember, no Venus Transit has ever been observed in Ha before.

James Appleton and Monica Lustig have kindly agreed to act as Observing Directors for the event, with technical assistance provided for the Tomline Refractor by Martin Cook and for the ETX & Dobsonian by Paddy O'Sullivan and Gerry Pilling.

PLEASE REMEMBER
As stated on the back cover, the school pupils are sitting important examinations on transit day and our quietness is essential!

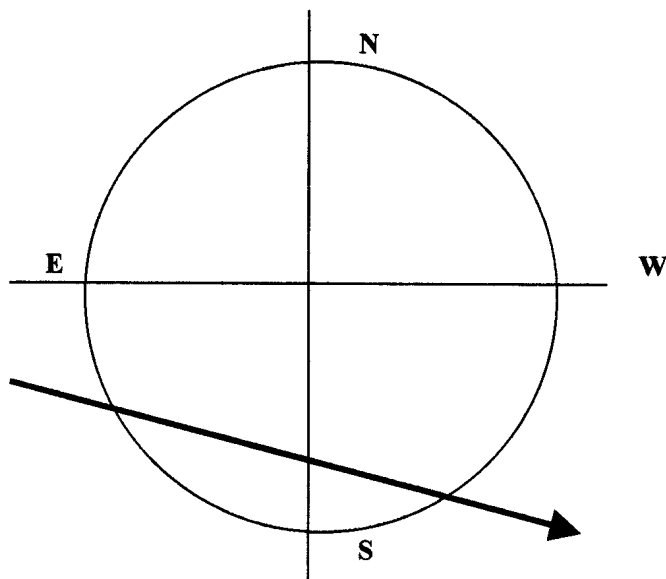
Phenomena to watch for

Sunspots are likely to be visible elsewhere on the solar disk and latest positions of spots can be obtained from the Soho spacecraft images available at:

<http://sohowww.nascom.nasa.gov/data/realtime>

Black drop effect. This is the apparent stretching of the disc of Venus as it makes its interior contacts. At one time thought to be caused by Venus' atmosphere, but is generally agreed nowadays to be the result of a combination of poor optics and small apertures.

APPROX PATH OF TRANSIT OVER THE SUN'S DISK



BEWARE

NEVER ATTEMPT TO OBSERVE THE SOLAR DISK WITH THE UNAIDED EYE OR WITH ANY OPTICAL DEVICE NOT FITTED WITH A PROPER SOLAR FILTER.

To close, I am sure our Hon President, Prof Allan Chapman, will not mind me quoting from a message he sent to the recent AGM of the Society for the History of Astronomy:

'Good luck observing the Transit of Venus. Let us not forget that when Jeremiah Horrocks and William Crabtree predicted, observed and correctly interpreted the first transit of Venus ever beheld by the eye of man on 24th November 1639, they became not only Britain's first research astronomers working in the tradition of Tycho Brahe, Galileo and Kepler, but took the continental discoveries to a new height of originality and excellence. And it is not for nothing that John Flamsteed, the first Astronomer Royal, Sir William Herschel and Sir George Biddell Airy saw them as initiators of the great tradition of British Astronomical Science'.

NB The Transit will also be covered live on BBC 2 during the course of the morning from Greenwich Park, where the Royal Observatory has jointly arranged for banks of suitably equipped small aperture telescopes to be available for public use.

Let's hope it isn't cloudy...!

A DAY OF CELEBRATION

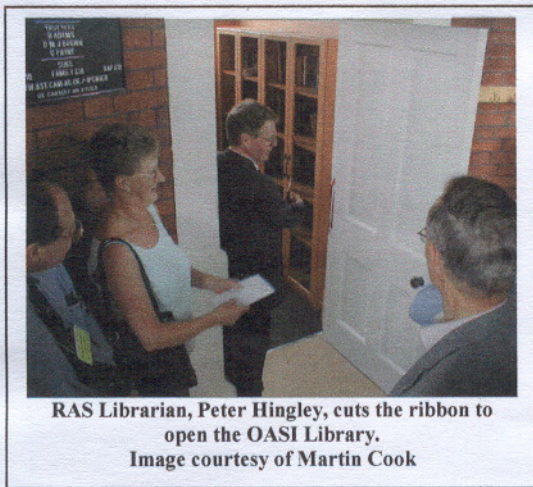
Kenneth J Goward FRAS

On Saturday 15th May a goodly number of OASI members and invited guests gathered at the Observatory for the formal opening of our refurbished Library by Mr Peter Hingley, Librarian of the Royal Astronomical Society. At our invitation, Peter had delivered a fascinating topical lecture *'Transits of Venus – the big picture'* to society members the preceding evening at the Friends Meeting House in Fonnereau Road, Ipswich.

Saturday's events began before noon with a mouth-watering buffet in the equatorial room and the dome shutter was opened to allow sunshine to flood onto the happy throng. Our guests included members of the Airy family, the school's Headmaster and representatives from the Old Royal Observatory, Greenwich, Institute of Astronomy, Cambridge and the University of Cambridge Library. It was pleasing to see former OASI member, St John Robinson and his wife too – St John had returned home to the northwest at Christmas after three years of contract work locally, but as a mainstay of the labour involved in the conversion of the lift shaft – it wouldn't have been the same without him!



OASI members and guests enjoy a splendid buffet under the Tomline Refractor.
Image courtesy of Martin Cook



RAS Librarian, Peter Hingley, cuts the ribbon to open the OASI Library.
Image courtesy of Martin Cook

At 12.30pm OASI Librarian, Mike Whybray, invited Peter to cut a ceremonial ribbon to formally open the library and to dedicate it in the name of Colonel Tomline's Astronomer, John Isaac Plummer. As Mike succinctly summed up the moment *'The librarians of one of the world's smallest astronomical libraries invites the librarian of one of the world's largest!'* Peter's retort was that he was fascinated by the concept of a library being built in a redundant lift shaft and that he had been intrigued to see whether we held either very tall books or exceptionally high bookcases!!

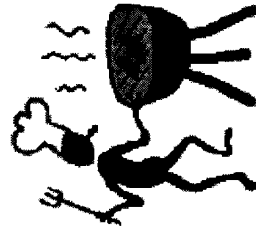
In the pleasant surroundings of the Headmaster's study, Peter then delivered a second lecture 'Astronomers and Oddities' to members and guests. The lecture was a very humorous account of some of the characters involved in the early days of the RAS and an overview of the society's work.

At the close of Peter's lecture and after teas and photographs on the school lawn, our guests were taken on to Playford to visit the Airy family graves and Hill Farm, where Sir G B Airy (7th Astronomer Royal) largely grew up. Brian Seward, the Playford village historian, gave our guests a brief talk on the circumstances in which the Airy family and others came to reside in Playford. Floral tributes were placed on the graves of the 7th Astronomer Royal, his son Wilfrid Airy (designing engineer at the Orwell Park Observatory) and Wilfrid's daughter, Anna, who was an artist of international acclaim.

All in all it was lovely day in beautiful weather. It was a celebration of all the hard work by many OASI members – it was plain good fun!

Our thanks go to those members who so freely gave of their time and effort in variety of ways to arrange and facilitate such a splendid ceremony, to the Orwell Park School for being so accommodating on the day, to the Royal Astronomical Society for funding Peter Hingley's trip to OASI and – not least – to all those members who toiled for so long to build us such a fine facility.

NB We now have a splendid library containing an excellent range of books, including Wilfrid Airy's personal scrapbook (generously donated by the Airy family) and other book gifts from the Royal Astronomical Society, Institute of Astronomy, Cambridge and the Society for the History of Astronomy. Recently purchased additions to our diverse range of titles include 'Introduction to Astronomy' by John Isaac Plummer (in whose name our Library is dedicated) and 'Popular Astronomy', derived from the six lectures given by Sir George Airy at Ipswich in 1848. Please note, however, that Wilfrid's scrapbook and the latter mentioned books are not available for loan.



Orwell Astronomical
Society Ipswich



Summer Barbecue

Saturday 10th July 3pm till about 8pm

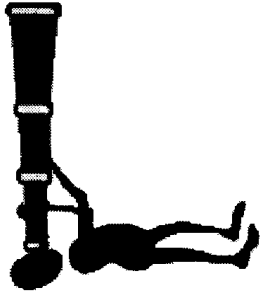
█, Nacton

Bring whatever you fancy to barbecue (meat, fish, veggies, bananas etc.). Rolls, salads, soft drinks and plates, cutlery, and glasses will be provided. Bring your own alcohol!

We've got a slide, swing and sandpit for the kids (use at own risk).

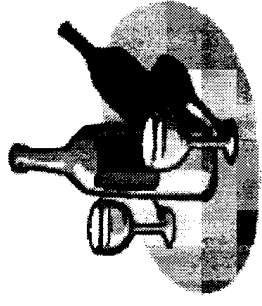
Note - there is a small pond, but well overlooked.

We have 10 garden chairs but to guarantee a seat bring your own!
Mike & Andrea Whybray. (█)



Directions:

From the Old Felixstowe Road, turn into Nacton Village, go under the railway bridge and



Or, from the Observatory if that is your reference point, go straight out of Orwell Park gates, down and up the hill, turn left at the top then bear right at the war memorial. (

Parking:

One or two cars can squeeze onto the drive. Other will have to park on the road – best position is on the opposite side to the house, Alternatively, there

Obituary Notice

It is with sadness that we have to announce the death of

Dr. Roy Tremlett.

During his time as a member of Orwell Astronomical Society, Roy's astronomical interests were wide ranging.

As a professional educator, Roy was always very keen to introduce the public, especially young people, to the wonders of astronomy. Roy will most certainly be missed.

OASI COMMITTEE RESPONSIBILITIES

Kenneth J Goward	Chairman	Press Publicity with the Secretary. Open Weekend.
Roy Gooding	Secretary	Main point of Society Contact. Press Publicity with the Chairman. Observatory Decoration. Visits by potential new members.
Garry Coleman	Treasurer	Finance. Supervision of Grant Applications.
James Appleton	Committee	Committee Meeting Minutes. Web site.
Martin Cook	Committee	Membership. Tomline Refractor Maintenance.
Neil Morley	Committee	Equipment Curator.
Ted Sampson	Committee	Workshops. Tomline Refractor tutoring.
Eric Sims	Committee	Newsletter
Mike Whybray	Committee	Librarian.
Paul Whiting	Committee	Visits by outside groups.
Monica Lustig	Committee	Safety & Security
Peter Richards	Working under Committee direction but not Co-opted	Lecture Meetings.

DIARY FOR 2004 JUNE

TUESDAY
8th

TRANSIT OF VENUS OBSERVATION

5.45am to 1pm

☎ James Appleton

ALL OASI MEMBERS ARE WELCOME TO ATTEND, BUT PLEASE BEAR IN MIND THAT THE SCHOOL PUPILS WILL BE SITTING IMPORTANT EXAMINATIONS ON THAT DAY. QUIETNESS IS ESSENTIAL.

WEDNESDAY

OBSERVATORY CLUB NIGHTS

2nd, 9th, 16th, 23rd, 30th from 8pm

☎ Martin Cook

SOCIETY PRIMARY CONTACTS

CHAIRMAN Kenneth J Goward FRAS ☎ (daytime & evenings)
SECRETARY Roy Gooding ☎ (daytime) (evenings)
E-MAIL QUERIES ipswich@ast.cam.ac.uk
WEB SITE www.ast.cam.ac.uk/~ipswich
Contact details for the full Committee may be found on the inside back page

Registered Charly No 271313

Society Trustees

Roy Adams David Brown David Payne

Hon President

Professor Allan Chapman D.Phil MA FRAS

N.B. Astronomy Workshops will recommence in the autumn.

If any member wishes to present a topic, please contact

Ted Sampson ☎

Would members please note that due to attachments necessarily being fitted to the Tomline Refractor in preparation for the Transit of Venus Observation

(See article inside)

The instrument will be unavailable for normal use from

Wednesday 2nd until Wednesday 9th

Instruments normally utilised on the balconies, however, will be available as usual during this period.