



ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

Registered Charity No 271313

www.oasi.org.uk

NEWSLETTER 2005 JUNE



On the occasion of his latest OASI Presidential Lecture in April, Professor Allan Chapman had the opportunity to cast an admiring eye over our newly completed 19" Millennium Telescope (MMT). Allan, pictured with our design team Paddy O'Sullivan and Neil Morley, was most impressed with the functionality of the new instrument.

First light has been achieved and eyepiece images are described as - **SPECTACULAR!** A full report on the MMT will appear in this newsletter in due course...

Image courtesy of Martin Moberley

SOCIETY NEWS FROM THE SECRETARY

Roy Gooding

1 Next Committee Meeting Saturday 3rd September 2005

The next committee meeting will be held on Saturday 3rd September 20:00 at the observatory. This is an open meeting and any one who is interested is invited to attend.

2 Events for 2005

Meeting	Venue	Date
BAA Exhibition Meeting	The Cavendish Laboratory Madingley Road Cambridge	Saturday 25 th June
Society Barbecue At Mike and Sue's garden	Newbourn Bucklesham Ipswich	Saturday 16 th July
Astronomy Workshops	The new workshop season is in the planning stage. Mike Whybray has taken over from Ted Sampson.	
FAS Convention	Institute of Astronomy Cambridge	Saturday 1 st October
Norwich Astronomical Society 60th Anniversary Astronomy Conference	In Norwich More information below	Saturday 8th October
Winter lectures	Two lectures are in the planning stage. Possibly on Large Telescopes and the Cassini – Huygens mission	To be fixed
Christmas Meal	Venue to be fixed	Wednesday 14 th December

2 Society Equipment Inventory

I would like to compile an inventory of society member's astronomical equipment. If you would like to participate please supply me with a list of what observational equipment you have. This inventory list with the relevant names will remain with in the society. Though the total numbers of each class of instrument maybe added to the Society Web site.

3 Welcome to New Members

Two members have joined in May

Mr. Michael Argent

Mrs Dee Mcleavy

4 Norwich Astronomical Society's 60th Anniversary Astronomy Conference

Date Saturday 8th October
Venue John Innes Centre Norwich
Admission £15 per person which includes refreshments
Buffet lunch £5.50 extra
Opening times 09:30 to 16:30

Programme

Dr. Robin Catchpole "From the Solar System to the edge of the Universe"
Dr. David Whitehouse "Astronomy in the Media"
Prof. Paul Murdin "The Reality of Black Holes"
Final lecturer TBC
Trade Stands will be present.
There will be space for displays from other societies

Members who would like to go to this event please contact Roy Gooding, and I will order tickets

5 Astronomy Workshops 2005 / 2006 Season

The new season of workshop meetings is in the planning stage. Ted Sampson has hand over the co-ordination of these meetings to Mick Whybray. Any questions you may have about the new season please contact Mick. If you would like to volunteer to be a principle speaker for any of these meetings please also contact Mike

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	13 Jun 21:06	0.39+	-6	27	Hip 52893	7.4
D	17 Jun 21:23	0.77+	-8	22	Hip 67541	7.5
D	19 Jun 22:27	0.93+	-12	14	42 Lib	5.0

Night Sky (June)

All times GMT

Sun

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

Moon

New Moon	1 st Quarter	Full Moon	3 rd Quarter
6 th	15 th	22 nd	28 th

- Mercury** Mercury is at superior conjunction on the 3rd, before moving back into the evening sky. Mercury will pass close to Venus on the 26th and 27th of the month
- Venus** Venus becomes more prominent in the evening sky this month. It will be setting about 90 minutes after the sun at the end of the month. It will be close to Saturn on the 25th, and Mercury on the two following evenings. Magnitude -3.9
- Mars** Mars is visible in the morning sky this month. It will be rising at about 00:00 by the end of the month. Magnitude +0.3
- Jupiter** Jupiter is presently in Virgo. It will be setting by about 00:00 by the end of the month. Magnitude -2.0
- Saturn** Saturn lost in the evening twilight this month. It will be setting at about 21:00 by the end of the month. Magnitude 0.2
- Uranus** Uranus is presently in Aquarius. It will be rising at about 23:00 at the end of the month. Magnitude 5.7
- Neptune** Neptune is presently in Capricornus. It will be rising at about 22:00 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

Summary of Committee Meeting Held 16 April 2005

Present: Ken Goward, Roy Gooding, Eric Sims, Mike Whybray, Bill Barton, Martin Cook, James Appleton

Apologies: Paul Whiting, Garry Coleman, Neil Morley, Ted Sampson

1. Chairman's Report – Ken Goward

Orwell Park School had requested a meeting/telephone call with Ken Goward to inform him of new security arrangements at the School. At the time of writing (early May 2005), the School had not in fact contacted Ken again to provide the promised information.

2. Secretary's Report – Roy Gooding

Since the last committee meeting, Roy had dealt with 12 enquiries, some of which have resulted in visits to Orwell Park Observatory.

3. Membership – Martin Cook

Currently 94 members including nine honoraries. Some long term members have yet to renew membership for 2005.

4. Training and Workshops - Ted Sampson

There had recently been a little informal training in use of the Tomline Refractor, but no requests for formal training.

Ted Sampson had indicated that he wanted to step down from organising Astronomy Workshops, and Mike Whybray agreed to take over as Workshops Co-ordinator.

5. Web Site – James Appleton

The Web site continues to act as a useful external “shop window” for OASI, generating a handful of enquiries about membership every month.

As always, James welcomes fresh material for the Web site from any members of OASI.

6. Equipment & Maintenance – Neil Morley

Neil Morley will install an eyepiece cupboard in the Plummer Library.

At long last, the mirror for the Millennium Telescope is complete. Neil will display the completed Millennium Telescope at the OASI Presidential Lecture on 22 April 2005.

Roy Gooding will organise the following maintenance work during the 2005 summer season:

- Sand and varnish the floor of the Dome.
- Tidy the room at the foot of the Observatory stairwell.

Martin Cook will examine options for purchase of a Webcam and new PC for use in the Dome. Martin will also consider a possible long term project to construct a reflecting telescope around a 200mm mirror ground by members of OASI in 1998. The reflector would be attached to the Tomline Refractor (in place of the 100mm guide scope) and could be used for astro-imaging (possibly using a Webcam).

7. Security & Safety – Bill Barton

Ken Goward welcomed Bill Barton to the Committee. Bill agreed to take responsibility for security & safety (taking over from Monica Lustig). Bill aims to undertake safety inspections twice annually.

8. Library – Mike Whybray

Mike has completed cataloguing the library stock and will soon make the catalogue available – the library holds approximately 300 items in total.

Mike will subscribe to the new *Sky At Night* magazine which comes out on 24 May.

Mike has ordered some half price books from the SPA: *Atlas of Neptune*, *Yearbook of Astronomy* for 1999 and 2000.

Mike will consider weeding the library (particularly in regard of old magazines and BAA Journals) and donate any surplus items to the SHA.

9. Visits – Paul Whiting

The 2004-05 visits season is now closed, and Paul thanked the few dedicated members who had helped with visits over the last 6 months.

The Flamsteed Society is visiting Orwell Park on Sat 14 May. Ken Goward will provide a slideshow on the Observatory and then escort the visitors to Playford to see Airy's grave and Arthur Biddell's house. Members of OASI are welcome to attend – contact Ken Goward if interested.

10. Lectures – Pete Richards

The Committee was happy with the new venue for OASI talks (Museum Street Methodist Hall).

Pete Richards aimed to arrange another members' talks evening.

On Friday 22 April, Allan Chapman will deliver the next OASI Presidential Lecture, in the *Orangerie* at Orwell Park School. After the lecture, the school will provide a cheese & wine reception.

11. Observing Strategy

James Appleton had sent a compilation of OASI's observations of the TOV to the BAA for inclusion in the *BAA Journal* June 2005 special edition on the ToV.

The committee agreed to support observations of Gamma Virginis – a double star currently close to periastron (see the article by Ken Goward in the April 2005 *OASI Newsletter*).

Neil Morley was considering a radio-astronomy project to count meteors via FM signals from distant stations reflected by ionisation trails.

Bill Barton described how evenings in late June offer a close approach of Venus and Mercury (best 28-30 June). This offered the possibility of a project to see the planets together in the same telescopic field of view.

12. Date of Next Meeting

Saturday 03 September, starting at 8:00pm, in the Observatory.

Please contact any member of the committee if you require any further information about the above committee meeting or any other aspect of the running of OASI.

James Appleton

06 May 2005

Astronomy Workshops

The 7th series of Astronomy Workshops concluded on Wed May 4th, with an interesting and entertaining presentation by Paul Whiting on the topic of 'Debris of the solar system'.

Having very much enjoyed 7 years coordinating the workshops I have decided to stand down, and make way for new ideas. Mike Whybray has agreed to take on the coordinator role, and I can't think of anyone who would do it better. He has been an enthusiastic supporter since early days in attending, presenting, and giving technical support. Mike would like to hear from anyone willing to help with the next series. So please put your name on the list on the society notice board, or contact him direct.

I would like to thank all those who have supported the workshops in the past 7 years by attending, presenting, or generally being encouraging – or all three, and wish Mike the best of luck for what is to come. I will still be around! Ted Sampson.

A BUSY, BUT ENJOYABLE TIME FOR OASI

In recent weeks we have had cause to celebrate some noteworthy and enjoyable events.

Early April saw the long-awaited completion of our new Millennium Telescope (MMT) after more than five years of effort by many members – most notably Mike Harlow, Neil Morley, Paddy O’Sullivan, Martin Cook and Garry Coleman. First light has been achieved and, despite an almost full moon, the 19.5” (F4.5) instrument gave some superb views. Martin Cook snapped the lunar surface directly through the eyepiece using a hand held digital camera



Some minor matters remain to be sorted out, eg; provision of a box to prevent accidental damage to the main mirror, plus a storage system and the agreement/adoption of ‘best practices’ for observations by members. OASI has a powerful new tool at its disposal and we look forward to its coming ‘on stream’ in the next few weeks.



Paddy at the MMT eyepiece with the Moon above.
Image by Martin Cook.

On Friday 22nd April we were delighted to welcome Professor Allan Chapman back to Orwell Park to deliver his second OASI Presidential lecture. Held in the Orwell Park school hall, Allan's lecture focussed on the Great Ladies of Astronomy (aka ladies of the night!) and he treated his audience to the better part of two hours delightful discourse on Mary Somerville, Caroline Herschel, Agnes Clerke, Richarda Airy and others. As ever, Allan's talk was punctuated by amusing anecdotes – not least the mention of crowded roads leading away to the west of London on a Friday evening for the weekly exodus away from the pace and grime of the city. Nothing new in that, except that he was referring to the late 18th century and how the Highwaymen would avoid this 'rush hour' as the roads were too crowded! At the conclusion of Allan's talk he was presented with an OASI Transit of Venus commemorative plate by the Chairman before the assembly partook of wine and nibbles generously provided by the school, to whom we are very grateful.



Allan with Peter Grimer, who commissioned the ToV plates.

Image by Martin Mobberley.

Allan was delighted with the plate and says that it now sits proudly on the mantelpiece in the dining room of his house in Oxford. He asks that his gratitude for the gift and his best wishes be passed on to all members. Allan says that he always looks forward to his lectures to OASI and appreciates hospitality he receives.

On Saturday 7th May 35 OASI members and guests enjoyed the second trip by OASI to the National Space Centre at Leicester. Our Secretary, Roy Gooding, organised a splendid day out to this fascinating venue and, despite having visited the venue just four years ago, much had changed within the displays and there was a day's worth of exhibits to see.

Many of our party also found time to visit the adjacent Abbey Pumping Station with its steam engines and other exhibits, although the Sanitation display was the cause of much – *earthy* - amusement...!



The impressive (real) Soyuz Spacecraft on display over the museum entrance area. Image by Garry Coleman.

Amongst the displays was this late 18th century portable equatorially mounted 2" triple achromatic refractor by premier instrument maker, Jesse Ramsden (below), which has a link to Suffolk. This was one of five instruments sold to the likes of Sir Joseph Banks and Sir George Shuckburgh. This instrument is believed after recent research by SHA members to have originally been supplied to Birmingham industrialist Matthew Boulton, the leading light of the Lunar Society. It was unearthed from a dusty storeroom at the Athenaeum club in Bury St Edmunds in 1928 and was sold to the Science Museum to raise much-needed funds to keep the Athenaeum running at that time.



The Suffolk-linked Ramsden Equatorial. Image by Garry Coleman.

All in all a splendid day out – and a venue we will undoubtedly return to again. Martin Cook took the below image of Britain's Blue Streak Rocket Booster, which is dramatically suspended over the museum dining area and serves as a salutary reminder of British engineering achievement and of Politicians failure to see any futures beyond the next election!!



On Saturday 14th May 25 members of the Royal Observatory, Greenwich based Flamsteed Astronomical Society visited Orwell Park. Flamsteed AS may be thought of as functioning in an almost parallel way to OASI, insofar as its members have a responsibility for running the ROG and demonstrating/maintaining the instruments therein. Their visit began with lunch in the Shepherd & Dog before adjourning to the school, where our Chairman, Ken Goward, presented a slide show of the history of the Orwell Park Observatory and its connections to Greenwich via the Airy family and Ransomes of Ipswich. Afterwards Garry Coleman conducted our guests on a tour of the Observatory, fielding a plethora of questions from our enthusiastic visitors.

The afternoon culminated in a visit to Playford village to see over Hall Farmhouse, the place of Sir George Airy's upbringing and which to this day retains many original features the future 7th Astronomer Royal would have known. Within nearby St Mary's Church Ken Goward articulated a short history of the church and a tour of the various Airy-related artefacts. To close a bouquet of flowers bearing the combined logos of OASI and Flamsteed AS was placed upon the Airy family tomb.



Jane Bendall, Secretary of Flamsteed AS places a joint floral tribute on the Airy graves at Playford Churchyard.

Image by Garry Coleman

Our visitors greatly enjoyed their afternoon and they will be extending an invitation to OASI to visit the ROG as their guests and – *hopefully* – have some exclusive access to the 28" Refractor there. Watch this space...

Kenneth J Goward FRAS
Chairman

BINOCULARS – a good first choice

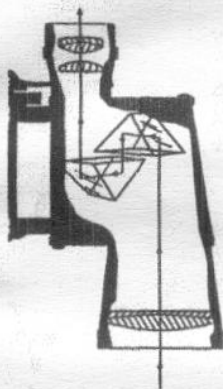
RE are many beautiful sights, such as the star
of the Milky Way, star clusters such as the
Pleiades and Hyades, and ghostly comets, which can
be truly appreciated in low-power, wide-field
binoculars. These compact, simple devices are the
best choice in portable, easy-to-use equipment, and
most observers use them to complement their tele-
scope observations.

Binoculars are usually marked with figures such as
7 × 35, 10 × 50, or 10 × 50. The first figure is the
magnification, and the second is the aperture of the
objective lenses in millimetres. For general observing,
7 × 35 or 10 × 50 binoculars are equally useful. If
you find the weight of 50-mm binoculars a problem,
try 40-mm or even
35-mm models.

Old binoculars with
magnifications greater
than 12, which will be
difficult to hold steady,
are not recommended,
unless you have a partic-
ular need for a specialist
instrument.

Zoom binoculars
should be avoided, too,
because they generally have
narrow fields of view and
poor optics. Good binoc-
ulars will have coloured
coatings on the optics,
either to non-reflective
coatings on spectacles,
which improve the image
brightness by increasing
the transmission of light.

Some cheap mail-order binoculars economise by
using prisms that are too small, which severely limit
the field of view. Look into the front lens – you
should see a small circle of light through them. If the
circle is cut off or square, you are losing light. Also
be aware that very cheap models may have spurious
reflections in the barrels to give the impression that they
contain prisms when they do not. Such instruments
are simply opera glasses with a straight-through
optical system, having a very restricted magnification
and field of view.



*Binoculars contain prisms
that fold the light path,
thereby making them
more compact than
telescopes*



*A small reflecting telescope
on an equatorial mount*



*A typical small refractor on a
simple stand, with a star diagonal
at the eyepiece end.
All diagrams by John Lewis*

OASI COMMITTEE CONTACTS & RESPONSIBILITIES

Kenneth J Goward FRAS	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 FRAS	Committee	☎		Visits by outside groups.
Bill Barton FRAS	Committee	☎		Safety & Security
Peter Richards	Working under Committee direction but not Co-opted			Lecture Meetings.

DIARY FOR JUNE

WEDNESDAY

OBSERVATORY CLUB NIGHTS

1st 8th 15th 22nd 29th

☎ Martin Cook [REDACTED]

SOCIETY PRIMARY CONTACTS

CHAIRMAN Kenneth J Goward FRAS ☎ [REDACTED] (daytime & evenings)

SECRETARY Roy Gooding ☎ [REDACTED] (daytime) [REDACTED] (evenings)

E-MAIL QUERIES ipswich@ast.cam.ac.uk

Contact details for the full Committee may be found on the inside back page

Society Trustees

Roy Adams David Brown David Payne

Hon President

Professor Allan Chapman D.Phil MA FRAS

OASI members are reminded that the **BAA Exhibition Meeting** will be held at the Cavendish Laboratories, Cambridge on **Saturday 25th June** from 11am to 6pm. Because OASI is a BAA Affiliated Society you do not have to be an individual BAA member to attend. Various Astronomy groups and lectures will support the exhibition, along with Trade Stands and displays. Refreshments available.

Worth a visit...

See www.britastro.org.uk