



# The Newsletter

of the

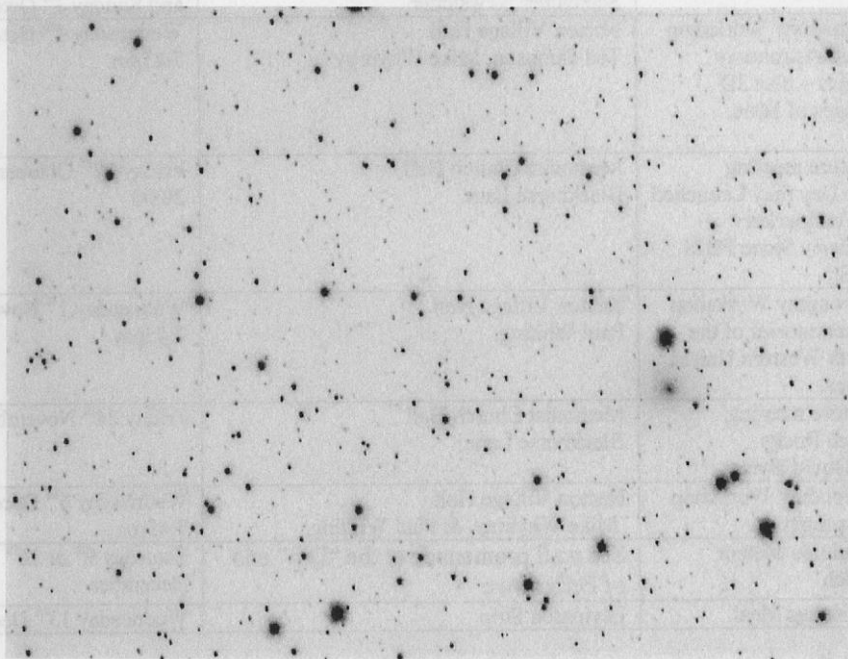
## Orwell Astronomical Society (Ipswich)



Registered charity No 271313  
[www.oasi.org.uk](http://www.oasi.org.uk)

2006 October

No 412



ABOVE – An image taken on 29<sup>th</sup> August at 22.46UT by Mike Harlow with his new 16cm Schmidt camera with CCD detector. The image field is 75 x 56 arcmin, two minutes exposure, and shows Comet Barnard clearly with a point-like nucleus and very diffuse coma. North is to the top

The comet could not be seen visually at the time.

Comet Barnard is presently tracking through Draco for the next few weeks but fading as it goes.

# Society News from the Secretary

(Roy Gooding)

## 1 Next Committee Meeting

No date fixed.

## 2 Events for 2006

Meeting	Venue	Date
Open Weekend	More information in the August / September Newsletter	Saturday 30 <sup>th</sup> September and Sunday 1 <sup>st</sup> October
Astronomy Workshop More Astronomy Basics – plus 3D images of Mars.	Nacton Village Hall Ted Sampson, Mike Whybray	Wednesday 4 <sup>th</sup> October 7:45pm
Lecture meeting The Day they Launched a Woodpecker By Jerry Stone FBIS FAS	Methodist Church Hall Blackhorse Lane	Friday 27 <sup>th</sup> October 20:00
Astronomy Workshop Observatories of the South Western United States.	Nacton Village Hall Paul Whiting	Wednesday 1 <sup>st</sup> November 7:45pm
Lecture meeting Space Rocks By David Byrant	Methodist Church Hall Blackhorse Lane	Friday 24 <sup>th</sup> November 20:00
Astronomy Workshop Quiz night	Nacton Village Hall Mike Whybray, & Paul Whiting	Wednesday 6 <sup>th</sup> December 7:45pm
Geminids Meteor Watch	Sea wall promenade at the “Dip” end of Felixstowe	Saturday 9 <sup>th</sup> or 16 <sup>th</sup> December
Christmas Meal	Levington Ship	Wednesday 13 <sup>th</sup> December

This event list will be updated through out the year

## Events for 2007

Meeting	Venue	Date
Lecture Meeting Nik Symanek	Methodist Church Hall Blackhorse Lane	Friday 2 <sup>nd</sup> March

## 3 Access into the School Grounds and Observatory Tower

The gate code is [redacted]. If the Black door entrance at the base of the observatory tower is locked, you will have to phone someone in the observatory to let you in. My mobile number is [redacted] (Roy Gooding)

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**4 Society's 40<sup>th</sup> Anniversary Year 2007**  
*Some random thoughts open for discussion.*

2007 will be the 40<sup>th</sup> anniversary year for the Orwell Astronomical Society. A number of events will be held throughout the year to celebrate this. At present, any plans are at a very preliminary stage

- A joint meeting with the BAA in January is in the preliminary planning stage. This meeting will be on Saturday 20<sup>th</sup> January 2007
- All events could be prefixed with "40<sup>th</sup> Anniversary"
- A society meal could be held during the year.
- A formal Astronomical Convention could be held.
- A more informal exhibition meeting could be held that is aimed more for the general public.

If you have any ideas that can be considered please contact me.

**5 Equipment Wish List**

At the March committee meeting, a wish list for additional society equipment was discussed.

Item under consideration	Comments
Laptop PC	Purchased
Eyepiece Cupboard	Purchased
Eyepieces for the small telescopes	
Webcam and equipment for CCD imaging.	Purchased
Coronado solar telescope	
Barlow Lens	
2" Right Angle Mirror Diagonal	
Laser Collimator	
AC587 1.25" Universal Eyepiece Protection Kit	
AC598 Jumbo Eyepiece Protection Kit	
Orion (USA) Soft Rubber Eyeguards	

**6 Society Email Distribution list**

Society information is often distributed at an earlier date than can be achieved by the monthly Newsletter. If you would like to be received society emails, please forward your name and email address to

**7 Welcome to New Members**

No new members have joined since the last Newsletter



# Open Weekend

<b>SATURDAY 30<sup>th</sup></b>	<b>September</b>	<b>From 7:00pm to 10:00pm</b>
<b>SUNDAY 1<sup>st</sup></b>	<b>October</b>	<b>From 7:00pm to 10:00pm</b>



The annual fund raising event this year is on **Saturday 30<sup>th</sup> September and Sunday 1<sup>st</sup> October.**

**As ever, as much help as possible is required. I will put up a rota list on the club room notice board.**

## 9 Lecture Meeting Venue

Our town lecture venue is now at the Methodist Church, in Blackhorse Lane. The church has a car park, bigger enough to take about 30 cars, in Black Horse Lane Alternatively there is a Park & Display car park at the top of Black Horse Lane, next too the Town Council Offices. This is about 100 yards form the church.

Black Horse Lane has only one entrance, which is from Elm Street. This is just past the Police Station, if you are arriving from Civic Drive. The church car park is on the right, just past the Black Horse pub.

Meeting starts at 20:00, doors open at 19:30

## 10 Observing Projects for 2006 Geminids Meteor Watch

The next meteor watch will be the Geminids in December. The maximum will be on Thursday 14th December. I would suggest arranging two possible meteor watch evenings. Saturday 9<sup>th</sup> or Saturday 16<sup>th</sup>. Doubling up may increase the chances of clear skies.

The venue will on the sea wall promenade at the "Dip" end of Felixstowe.

Directions for those who do not know this part of Old Felixstowe

- From the Hamilton Road roundabout, take the turning into High Road East
- Once you are parallel with on top of the cliff, there are two car parks available.
- The first one is behind the trees, on the right, just past the open area of grass, where Brackenbury Fort was once located. The steps down to the promenade are behind the Refreshment hut.
- The second car park is also on the right, up the hill on the other side of the "Dip", (hence the name). There are several ways down from this car park to the sea wall promenade.

- The promenade from the first car park gives the darker sky. The streetlights along High Road East can not be seen from here neither were Felixstowe dock lights visible, though the evening on which I checked this out was a little hazy.
- The meeting time will be arranged nearer the date.

The Moon will not be any trouble as it is at third quarter on the 12<sup>th</sup> and new on the 20<sup>th</sup>  
 If you are interested please contact Roy Gooding or James Appleton

**11 Christmas meal Wednesday 13<sup>th</sup> December**

The venue this year is at the Ship in Levington. As their restaurant is quite small, with a maximum number of 24, it will be a first come first served.

Cost is £23.50. A deposit of £10 is required.

**Starters**

- Tomato and Sweet Pepper Soup Topped With Basil Crème Fraiche
- Baked seafood in Cream Sauce with Crisp Parmesan Topping
- Salad Nicoise and Hot Smoked Salmon
- Prawn Crayfish and Melon Salad with Ginger Marie Rose Sauce
- Baked Brie Served with Peppered Fruits and Raspberry Vinaigrette

**Main Course**

- Turkey and Chesnut Stuffing with Traditional Accompaniments
- Beef Fillet with Asparaghus, Croquette Potatoes and Red Wine Sauce
- Baked Duckling with Apple & Mulled Wine Red Cabbage and Croquette Potatoes
- Local Woodpigeon, upon Potato Rosti, Mushroom Brandy Sauce
- Rump of Lamb upon Potato Rosti, Cream Caper and Mint Sauce
- Fillet of Salmon and Scallops
- Risotto of Asparagus, Mushrooms, Spinach, with Parmesan Shavings upon Tomato Coulis

**Desserts**

- Christmas Pudding with Rum Butter and Brandy Sauce
- Dark and Light Chocolate Mousse with Raspberries and Fresh Fruit Coulis
- Baked Date, Fig and Treacle Tart with Vanilla Cointreau sauce
- Brandy Snap Basket of Roast Pears and Cinnamon Ice Cream
- Fruits and Berries in Rose Wine Jelly with Creme Fraiche
- Selection of Cheeses

**Night Sky (October)**

All times GMT

**Sun**

The sun will be rising approximately between 06:10 and 07:00  
 The sun will be setting approximately between 17:50 and 16:30

**Moon**

Full Moon	3 <sup>rd</sup> Quarter	New Moon	1 <sup>st</sup> Quarter
7 <sup>th</sup>	14 <sup>th</sup>	22 <sup>nd</sup>	29 <sup>th</sup>

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- Mercury** Mercury will be at greatest eastern elongation on the 17<sup>th</sup>, but will not be observable during this period.
- Venus** Venus will be at superior conjunction on the 27<sup>th</sup>.
- Mars** Mars will be in conjunction with the sun on the 23<sup>rd</sup>.
- Jupiter** Jupiter is in Libra, it will be setting shortly after sunset this month.
- Saturn** Saturn will be rising before midnight by the end of the month. Magnitude 0.5
- Uranus** Uranus is on Aquarius, and will be setting at about 01:30, by the end of the month. Magnitude 5.7
- Neptune** Neptune is in Capricornus, and will be setting at about 23:00 at the end of the month. Magnitude 7.8

### Meteor Showers

Shower	Maximum	Limits	ZHR
Piscids	October 13 <sup>th</sup>	September to October	?
Orionids	October 20 <sup>th</sup>	October 16 <sup>th</sup> - 27 <sup>th</sup>	25

Meteor source is the BAA Handbook

## OCCULTATIONS DURING OCTOBER

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.

Date	Time (UT)	D /R	Lunar Phase	Sun Alt (d)	Star Alt (d)	Mag	Star
02 Oct	21:44:26	D	0.75+	-36	13	7.5	ZC 3062
03 Oct	19:46:54	D	0.84+	-22	20	6.4	ZC 3197
07 Oct	04:20:20	D	1.00+	-17	18	6.0	60 Psc
14 Oct	05:14:52	D	0.48-	-10	62	5.3	76 Gem, c Gem
30 Oct	17:45:12	D	0.59+	-12	17	8.2	Hip 105924
30 Oct	17:55:55	D	0.59+	-14	18	7.8	ZC 3140
30 Oct	21:28:02	D	0.61+	-44	12	8.5	Hip 106415

# Plummer – The Longitude Enigma

Paul Whiting *FRAS*

Where exactly is Orwell Park Observatory? This was the first question J.I. Plummer asked himself when he was first employed by Col Tomline to run the new observatory there.

More specifically Plummer needed to calculate the observatory longitude to be able to calculate the local time and hence accurately measure the position of stars and comets. To enable him to do this he had at his disposal a “small transit instrument” as he himself called it in his first annual report published in the *Monthly Notices of the Royal Astronomical Society (MNRAS)* in 1875. The first estimate he published in *MNRAS*<sup>1</sup> was  $0^{\circ} 4' 55.8''\text{E}$ . Four years later he refined his estimate using the “Moon and culminators method”, publishing the revision in *MNRAS* as  $0^{\circ} 4' 57.75''\text{E}$ <sup>2</sup>. He also commented that this revised figure was a whole 2 seconds out from the Ordnance Survey value at the time.

All very well and good, but the current GPS value for the observatory longitude is  $1^{\circ} 13' 50.0''\text{E}$  more than 68 minutes difference!

According to the Ordnance Survey map for Ipswich and Colchester (sheet 68) for 1838, Orwell Park Observatory is at longitude  $1^{\circ} 13' 58.8''$ , only 8” or so out from the modern GPS value.

Was Plummer this inept in his calculations? Unlikely as he was congratulated for his mathematical stellar positional reduction capability during his time at Hong Kong Observatory later in his career. Was there an editorial or printing problem at the Royal Astronomical Society? Again unlikely as he published similar values on two occasions four years apart. The spotlight of suspicion must now fall upon the accuracy or otherwise of the Orwell Park transit instrument, although this does not explain the comment about the 2 second discrepancy with the Ordnance Survey.

Plummer did make several references to the inaccuracies of the transit telescope in his monthly reports.

In his 1875 report Plummer made a comment to the effect that the observatory did not have an accurate meridian instrument and that his longitudinal calculations were completed with some difficulty<sup>3</sup>. He also published a paper on an effect he had noticed of regular annual fluctuations of the accuracy of the transit instrument, while obtaining true time. He put this down to the thermal influences from “the mass of brickwork” that was the support of the “Equatoreal (sic) Telescope” (the Tomline Refractor)<sup>4</sup>.

So what was going on? Perhaps re-juvenating the transit scope may throw some light on the enigma. Watch this space.

1 Plummer, J. Colonel Tomline’s Observatory, Orwell Park, Ipswich. *MNRAS*. 1875. **35**. 194-195.

2 Plummer, J. Colonel Tomline’s Observatory, Orwell Park. *MNRAS*. 1879. **39**. 253.

3 Plummer, J. Colonel Tomline’s Observatory. *MNRAS*. 1890. **50**. 211.

4 Plummer, J. On the Supposed Influence of a Mass of Brickwork upon the Errors of a Transit Instrument in its Neighbourhood. *MNRAS*. 1878. **38**. 367-369.

# ASTRONOMY WORKSHOPS

Mike Whybray

It is Autumn again soon (or is it already?!), and time to start a new series of Astronomy Workshops. As many of you know, these are run over the Autumn and Spring months, and led by anyone in the society who cares to have a go. The level ranges from ones suitable for absolute beginners in astronomy, up to more esoteric subjects such as the physics of light, and cosmology. The delivery style is up to the person running it and ranges from a lecture to an interactive discussion.

Up to now we have run these in the Science Classroom at Orwell Park school, but last season's new security and parking arrangements caused significant problems - so various alternative venues and evenings were discussed including village halls, and the Methodist Chapel in Ipswich. After canvassing opinion I've decided to run the first three at least of this season in Nacton Village Hall, sticking to a Wednesday night. The rationale is that the hall is near the school so people have pretty much the same journey to make, on the same day, and can also go on to the Observatory afterwards if they like.

Another downside of the school classroom was lack of tea/coffee facilities, but the hall has these. The aim is that after the talk there will be plenty of space, and time, for people to make a cuppa and have a bit of a social chat after the workshop, rather than feeling the need to vacate the premises. I'll arrange tea and coffee supplies, and biscuits, and will invite small donations to defray this expense.

As further innovation, the December workshop isn't a workshop at all – it is really a pub quiz with an astronomical section! Still in the planning stage so details shown below subject to change!

**The workshops will run on the first Wednesday of the month, starting at 7:45pm.**

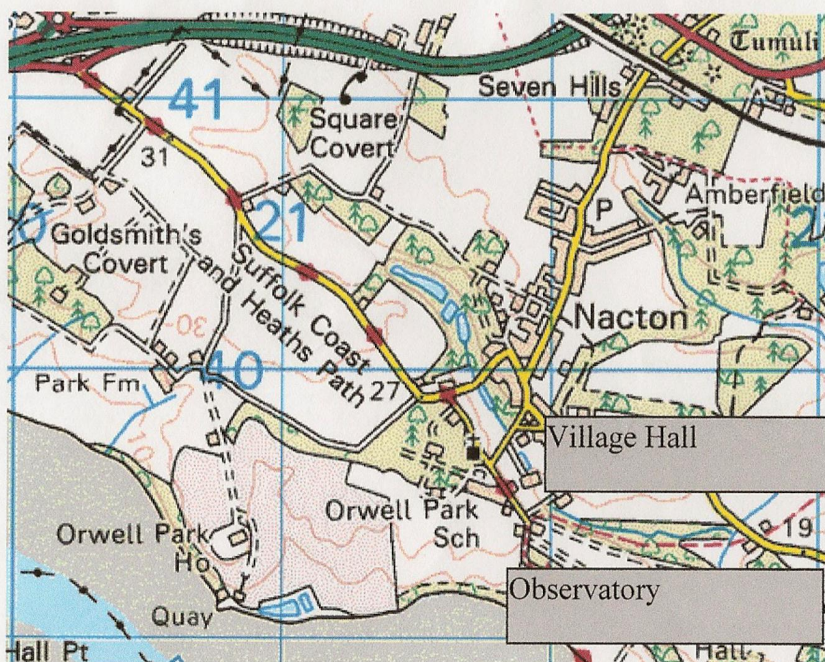
**Venue: NACTON VILLAGE HALL (next to the small village school).**

The normal (target) running time will be an hour, though special ones such as Decembers will be longer. The first 3 workshops are below:

Date	Title	Presenter
4 <sup>th</sup> October 2006	<b>More Astronomy Basics – plus 3D images of Mars.</b> Ted will do another version of his introduction to astronomy for beginners, leading into a viewing session of some stereo images of Mars using our computer projector and coloured glasses (recently obtained and we've just got to try them out!).	Ted Sampson, Mike Whybray



<p>1<sup>st</sup> November 2006</p>	<p><b>Observatories of the South Western United States.</b> Paul has been out an about again and brings back travellers tales and pictures.</p>	<p>Paul Whiting</p>
<p>6<sup>th</sup> December 2006</p>	<p><b>Quiz Night.</b> Details to be firmed up, but expect a pub quiz type format with a mix of general knowledge and astronomical questions. Bring along your own drinks (wine, beer etc. are OK!) and some snacks. I expect to form up teams on the night to get a reasonable balance of numbers and expertise.</p>	<p>Mike Whybray, Paul Whiting, Anyone else who can help out...</p>



### **ADVANCE NOTICE**

We are delighted to announce that next year's OASI 40<sup>th</sup> anniversary celebrations will begin on **Saturday 20<sup>th</sup> January** with a joint **BAA/OASI** all-day **BACK TO BASICS WORKSHOP** in Ipswich town centre.

A top flight list of guest speakers will give talks on a wide range of observing matters and the event will be supported by trade stands and displays.

Full details and a ticket application form will appear in the November edition of the Newsletter but, for now, make a date in your diaries!

# Summary of Committee Meeting Held 17 June 2006

**Present:** Roy Gooding, Mike Whybray, Paul Whiting, Eric Sims, Pete Richards, James Appleton, Ted Sampson, Bill Barton, Nicky Gillard, Mike Harlow, Sue Brown

**Apologies:** Ken Goward, Garry Coleman, Neil Morley, Martin Cook

In Ken's absence, Roy chaired the meeting.

## 1. Chairman's Report

No report.

## 2. Secretary's Report – Roy Gooding

Since the last committee meeting, Roy has received seven enquiries from people interested in joining OASI.

Roy has sent the OASI annual report to the Charities Commission.

The 2006 Open Weekend will be held on the weekend of 30 September – 01 October. The Moon is near First Quarter, but no planets are visible. The event will be relatively low-key, with no major displays.

## 3. Treasurer's Report – Garry Coleman

Garry was not present at the meeting but had sent a report in advance.

Garry indicated that due to family circumstances he was unable to give the post of Treasurer the attention which he would like, and tendered his resignation with effect from the 2007 OASI AGM. The Committee noted with thanks Garry's sterling service to OASI in recent years.

In broad terms, OASI finances are reasonably healthy, and the Committee agreed that it would be appropriate to spend some funds for the benefit of members.

#### **4. Membership**

No report.

#### **5. Training and Workshops – Mike Whbray**

Mike has seven volunteers to present at the 2006-07 series of workshops. He will hold the first few workshops of the next season in Nacton Village Hall.

The Committee discussed holding a social event. Mike and Ted Sampson indicated that they would be willing to organise an OASI quiz evening.

#### **6. 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 members of OASI.

#### **7. Equipment & Maintenance – Neil Morley**

Neil was not present at the meeting but had sent a report in advance.

Neil had drafted an extensive list of potential equipment purchases. Anyone with suggestions/requests for purchases should contact any Committee member. The Committee will then consider all suggestions and organise purchases accordingly. (One possible purchase which generated considerable discussion during the meeting was a Coronada PST – a Hydrogen alpha telescope for solar observing.)

Paul Whiting had updated the software on the OASI laptop PC.

The Committee agreed that Paul Whiting should purchase stereo viewers for some CDs of Mars topography which he had obtained from Norwich AS.

#### **8. Security & Safety – Bill Barton**

Bill had completed a safety inspection on 14 June 2006 and had found nothing significant amiss. He will undertake another inspection later in the year.

## **9. Library – Mike Whybray**

The Committee noted with thanks that Monica Lustig had donated some books to the OASI library.

Mike will purchase a copy of *Atlas of the Moon*, by Antonin Rühl to replace OASI's previous copy which has disappeared.

The eyepiece cupboard had been installed in the library and is now in use.

## **10. Visits – Paul Whiting**

Three visits are booked for the 2006-07 season: Colchester Engineering Society, Stowmarket WI and a Brownie Pack.

Paul had received a request for a “private viewing at a prestigious Observatory” as a 30<sup>th</sup> birthday present! This has been arranged for Friday 30 June.

## **11. Lectures – Pete Richards**

Pete has two possible lectures under consideration: a lecture on meteorites (the lecturer also sells meteorites); and a talk by a regular astronomy lecturer.

## **12. Observing Projects**

Potential observing projects for the remainder of 2006:

- Lunar occultation of the Pleiades, early hours of the morning on 04 December 2006.
- Geminid meteor watch in December.

## **13. Events**

Roy is re-arranging the postponed visit to Herstmonceux, tentatively for 16 or 23 September.

Xmas Meal at the Levington Ship on Wed 13 December. Roy Gooding is making the arrangements.

The BAA *Back to Basics Workshop* will be held on Saturday 20 January 2007 in the Methodist Church Hall. In the evening, there will be a visit to Orwell Park Observatory.

2007 is OASI's fortieth anniversary year. Roy Gooding would like to organise an event to mark the anniversary – anyone with suggestions for an event should contact Roy.

#### **14. Date of Next Meeting**

Saturday 16 or 23 September 2006, starting at 8:00pm in the Methodist Church Hall. The date will be finalised later to avoid clashing with the Herstmonceux trip. As always, all members of OASI are welcome to attend.

#### **More Information**

Please contact any member of the committee if you would like any more information on the above committee meeting or any other aspect of the running of OASI.

James Appleton  
30 July 2006

## **PERSEIDS 2006 OBSERVING REPORT**

The Perseids maximum for 2006 was predicted for 20:00 UT on 12 August. Circumstances were not favourable, however, as the Moon was only three days past full. In the event, thick cloud and intermittent heavy rain throughout 12 August led to the meteor watch being called off in the early evening. However, two members of OASI did manage to attempt observations as follows:

- Pete Richards observed from Congresbury (North Somerset) 22:45-23:15 UT on 12 August. Skies were clear until 23:10 when clouds rolled in. Peter counted no (zero) meteors.
- Mike Harlow observed from Newbourne, near Ipswich, 21:15-21:35 UT on 13 August (i.e. the day after predicted maximum). Mike saw one Perseid.

James Appleton



# TOMLINES



Letters, viewpoints, astronomical observations and thoughts from the membership

**From the Chairman** *Kenneth J. Goward FRAS*

After a prolonged absence through illness it is my privilege to metaphorically re-occupy the chair and resume something like normal society activity. At the outset, on behalf of my family may I express our sincere gratitude for all your good wishes and support during a most trying time for us. By no means am I fully recovered, but at least I now feel able to move forward positively, although the 100 steps up to the dome still presents a challenge... May I also express my gratitude to the Committee for keeping the society business running smoothly and it seems obvious that OASI functions well enough, despite my meddling!

It will not have escaped your notice that we have a revised Newsletter style, which we hope meets with your approval? Moreover, the very page you are reading – **Tomlines** – is intended to be **YOUR** occasional page for comment, for **your** letters, for anything **you** want to raise and even for **your** moans! Anything, in fact, that you don't want to write up as an article – one liners are welcome too. Contributions should come to the Chairman via email ( ) or telephone for SHORT passages ( ) or post to my home @ , Tuddenham St Martin, Ipswich IP6 9BJ - or hand to Eric Sims. Please don't pull your punches – we are able to suffer the slings and arrows AND your contribution will not be edited down or otherwise adapted to be 'on message'. – unless you've written an equivalent to War and Peace, of course!

To start the ball rolling, it has been mooted that – *perhaps* – we concentrate a little too much on historical aspects of astronomy, possibly at the expense of observational matters. What do you think? Are we a little tilted towards matters historical because of our splendid Victorian Observatory? Opinions please...?

Now that's enough prattling on from me  
**LET'S HAVE YOUR INPUT????j**

# OASI Committee Contacts & Responsibilities

Kenneth J. Goward FRAS	Chairman	☎		Press & Publicity with Secretary.
Roy Gooding	Secretary	☎		<b>MAIN POINT OF SOCIETY CONTACT</b> Press Publicity with 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	☎		Tomline Refractor Tutoring. Social Activities.
Eric Sims	Committee	☎		Newsletter.
Mike Whybray	Committee	☎		Librarian & Workshops.
Paul Whiting FRAS	Committee	☎		Visits by outside groups.
Bill Barton FRAS	Committee	☎		Safety & Security.
Peter Richards	Co-opted	☎		Lecture Meetings. School Lighting liaison. Email Distribution Lists.

# Diary for October

<p><b>Sunday</b> 1<sup>st</sup> (and Saturday 30<sup>th</sup> September)</p>	<p><b><u>PUBLIC OPEN WEEKEND</u></b> Full details may be found in the Secretary's news notes – <b>VOLUNTEERS ARE NEEDED TO ASSIST DURING THE EVENING AT THIS, THE MAIN OASI FUND-RAISING EVENT OF THE YEAR.</b> ☎ Roy Gooding (mobile)</p>
<p><b>Monday</b> 16<sup>th</sup> &amp; 23<sup>rd</sup> <b>From 8pm</b> NB STONS for 2006/7 will be Scheduled on two Mondays per month around no moon periods</p>	<p><b><u>SMALL TELESCOPES OBSERVING NIGHTS</u></b> (STONS) Observations around Neptune and Uranus in Aquarius and Capricornus. ☎ Paddy O'Sullivan</p>
<p><b>Wednesday 4<sup>th</sup></b> <b>7.45pm</b> <b>NACTON VILLAGE HALL</b> <b>NEW VENUE</b></p>	<p><b><u>ASTRONOMY WORKSHOP</u></b> <i>The 2006/7 series begins with a quick revision of astronomy basics and a 3D look at Mars.</i> <b>Presented by Ted Sampson</b> ☎ Mike Whybray</p>
<p><b>Wednesday</b> 4<sup>th</sup> 11<sup>th</sup> 25<sup>th</sup> from 8pm</p>	<p><b><u>OBSERVATORY CLUB NIGHTS</u></b> ☎ Martin Cook (mobile) ☎ Roy Gooding (mobile)</p>
<p><b>Friday</b> 27<sup>th</sup> at 8pm <b>Methodist Hall</b> <b>Blackhorse Lane</b> <b>Ipswich</b></p>	<p><b><u>LECTURE MEETING</u></b> <b><i>'The Day They Launched the Woodpecker'</i></b> An entertaining, but true, history of space exploration. <b>Presented by Jerry Stone FRAS FIBS</b> <i>Jerry is one of the leading speakers on space Exploration, having lectured on the subject since 1969. Since 1975 he has presented public exhibitions and in the 1980s was a curator of Astronomy, Space and Exploration At the Science Museum. He is presently a Director of the Mars Society, Vice-Chair of the Space Education Council and Chairman of the Letchworth &amp; District Astronomical Society.</i> ☎ Peter Richards</p>

## Society Primary Contacts

Chairman: Kenneth J. Goward FRAS ☎ (daytime & evenings)  
Secretary: Roy Gooding ☎ (daytime) (evenings)  
E-Mail queries [ipswich@ast.cam.ac.uk](mailto:ipswich@ast.cam.ac.uk)

## Society Trustees

Mr Roy Adams Mr David Brown Mr David Payne

## Society Honorary President

Professor Allan Chapman D.Phil MA FRAS

## Observatory Telephone Number

Meeting nights only

[Redacted]