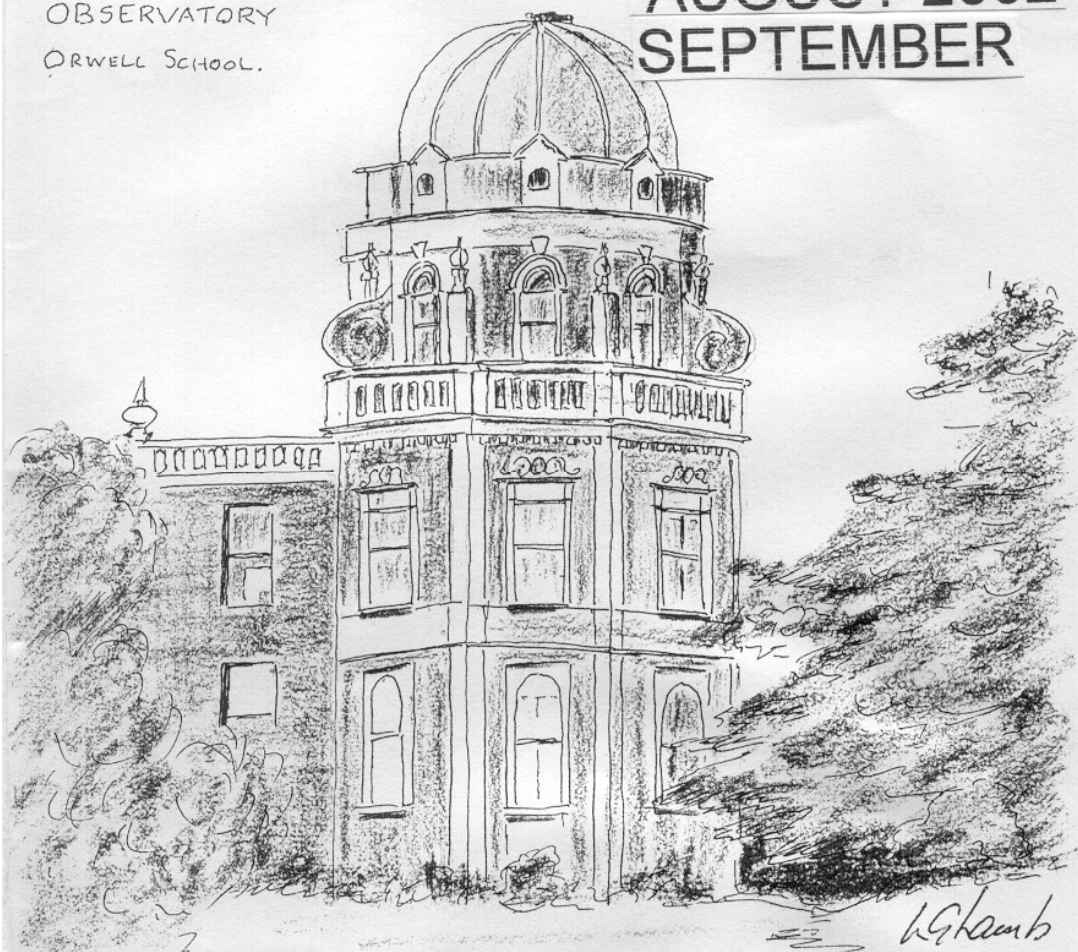


# ORWELL ASTRONOMICAL SOCIETY IPSWICH

Charity No 271313

## AUGUST 2002 SEPTEMBER

OBSERVATORY  
ORWELL SCHOOL.



# ORWELL

ASTRONOMICAL SOCIETY ~ IPSWICH

## Society News

### 1 Next Committee Meeting

The next committee meeting will be held on Saturday 7<sup>th</sup> September at 19:30 in the clubroom. This is an open meeting and any one who is interested is invited to attend.

### 2 Events for 2002

Event	Details	Date
Equinox Star Party	Thetford Organiser Loughton A.S	6 <sup>th</sup> to 13 <sup>th</sup> September
Summer Excursion	Destination is Oxford	Saturday 14 <sup>th</sup> September Leaving Crown street at 08:00
BAA Exhibition Meeting	Cavendish Laboratory Cambridge	Saturday 21st September
Lecture Meeting Friend's Meeting House, Fonnereau Road	Nik Szymanek: Imaging the Universe	Friday 18 <sup>th</sup> October 20:00
FAS Convention	Lecture Theatre 1 in the Ken Edwards Building, University of Leicester	Saturday 19 <sup>th</sup> October
Open Weekend	Members help will be needed again this year, to prepare the displays.	Saturday 9 <sup>th</sup> and Sunday 10 <sup>th</sup> November
Christmas Meal	Provisional date	11 <sup>th</sup> December

### Events for 2003

First Presidential Lecture	Dr. Allan Chapman The Victorian Amateur Tradition At Orwell Park School	Friday 7th March 2003
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This events list, is updated monthly, so watch this space.

### 3 Summer Excursion to Oxford



Date Saturday 14<sup>th</sup> September

The coach will be booked to leave the Crown street coach lay-by at 08:00 (opposite the back of M & S).

The more members, who attend, will reduce the unit cost per person.

If you are interested please contact Roy Gooding, or add your name to list on the observatory notice board.

Please see Ken Goward's itinerary for the day. If you have not been to Oxford, now is the time to change that. The excursion is open to all, and not is just limited to members

**4 Request for Photographs**

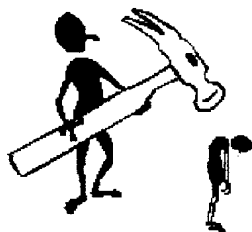
The first Public Open day the OASI staged as held in 1972. I am provisionally planning a "30 years of Public Open Days" Exhibition for the Open Weekend in November. If any one has any photographs of old Open Days in the 1970's 1980's and 1990's I ( Roy Gooding ) would like to borrow them, in order make copies.

**5 Year Two of the Library Rebuild**

The Observatory will not be closed during the summer.

**But**

Its that time of year again when the observatory refurbishment commences. Work will restart on completing the new society Library. 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.

Once the walls have been finished the new library cabinets will be assembled

I will be resuming the observatory painting. Starting with the walls of the room at the base of the stair well.

Members who attend will be encouraged to lend a hand. If you intend to come along to the observatory during July and August please come in old clothes.

**Sun**

The sun will be rising approximately between 04:20 and 05:00  
The sun will be setting approximately between 19:40 and 19:00

**Moon**

<b>3<sup>rd</sup> Quarter</b> 1 <sup>st</sup>	<b>New Moon</b> 8 <sup>th</sup>	<b>1<sup>st</sup> Quarter</b> 15 <sup>th</sup>	<b>Full Moon</b> 22 <sup>nd</sup>	<b>3<sup>rd</sup> Quarter</b> 31 <sup>st</sup>
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**Mercury** Mercury has moved back in to the evening sky this month, but will be too close to the sun to be observed .

**Venus** Venus reaches greatest eastern elongation on the 22<sup>nd</sup> . Venus will be setting at about 1 hour after sunset by the end of the month. Magnitude -4.4.

**Mars** Mars will be in conjunction with the sun on the 10<sup>th</sup>.

**Jupiter** Jupiter will be rising at about 02:00 towards the end of the month. Magnitude -1.8.

**Saturn** Saturn will be rising before midnight by the end of the month. Magnitude 0.1.

**Uranus** Uranus will be at opposition on the 20<sup>th</sup> . Magnitude 5.7

**Neptune** Neptune will be at opposition on the 2<sup>nd</sup> . Magnitude 7.8

Meteor Showers

Shower	Maximum	Limits	ZHR
α Cygnids	July 21 <sup>st</sup> to August. 21 <sup>st</sup>	July to August	5
Capricornids	July 8 <sup>th</sup> July 15 <sup>th</sup> July 26 <sup>th</sup>	July to August	5
δ Aquards	July 29 <sup>th</sup> August 6 <sup>th</sup>	July 15 <sup>th</sup> to August 20 <sup>th</sup>	20 10
α Capricornids	August 2 <sup>nd</sup>	July 15 <sup>th</sup> to August 20 <sup>th</sup>	5
ι Aquarids	August 6 <sup>th</sup>	July to August	8
Perseids	August 12 <sup>th</sup>	July 23 <sup>rd</sup> to August 20 <sup>th</sup>	80

Meteor source is the BAA Handbook

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## Night Sky (September)

All times GMT

### Sun

The sun will be rising approximately between 05:20 and 05:50

The sun will be setting approximately between 18:40 and 17:50

### Moon

New Moon	1 <sup>st</sup> Quarter	Full Moon	3 <sup>rd</sup> Quarter
7 <sup>th</sup>	13 <sup>th</sup>	21 <sup>st</sup>	29 <sup>th</sup>

**Mercury** Mercury will be at greatest eastern on the 1<sup>st</sup> and will be at inferior conjunction on the 27<sup>th</sup>. The planet will not be observable this month.

**Venus** Venus reaches greatest brightness this month at -4.5, on the 26<sup>th</sup> but will be setting less than an hour after sunset.

**Mars** Mars has now moved back into the morning sky. However it will be in the twilight sky this month.

**Jupiter** Jupiter will be rising at about 01:00 towards the end of the month. Magnitude -2.0

**Saturn** Saturn will be rising at about 21:30 by the end of the Magnitude 0.1.

**Uranus** Uranus is Capricornus and will be setting by about 02:00 by the end of the month. Magnitude 5.7

**Neptune** Neptune is also in Capricornus and will be setting by about 01:00 at the end of the month. Magnitude 7.8

### Meteor Showers

Shower	Maximum	Limits	ZHR
Piscids	September 8 <sup>th</sup>	September to October	10
	September 21 <sup>st</sup>		5
	October 13 <sup>th</sup>		?

Meteor source is the BAA Handbook

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## OCCULTATIONS DURING AUGUST

Only one stellar occultation occurs during the month under favourable circumstances. The table provides details for Orwell Park Observatory; these will be similar at nearby locations.

D / R	Date & Time (UT)	Lunar Phase	Sun Alt (°)	Star Alt (°)	Min Dist rad	Star	Mag
D	21 Aug 21:08	0.99+	-16	12	0.06S	33 Cap	5.4

James Appleton

## OCCULTATIONS DURING SEPTEMBER

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 (°)	Min Dist rad	Star	Mag
D	02 Sep 00:40	0.30-	-29	13	0.44N	5 Gem	5.8
R	01:29		-27	20			
D	13 Sep 19:10	0.50+	-9	11	0.49S	theta Oph	3.3
R	20:15		-18	6			
D	14 Sep 19:22	0.61+	-11	11	0.37N	ZC 2657	6.9
D	19 Sep 20:50	0.97+	-25	19	0.38S	tau 1 Aqr	5.7
D	19 Sep 22:30	0.97+	-34	24	0.33N	tau 2 Aqr	4.1

James Appleton

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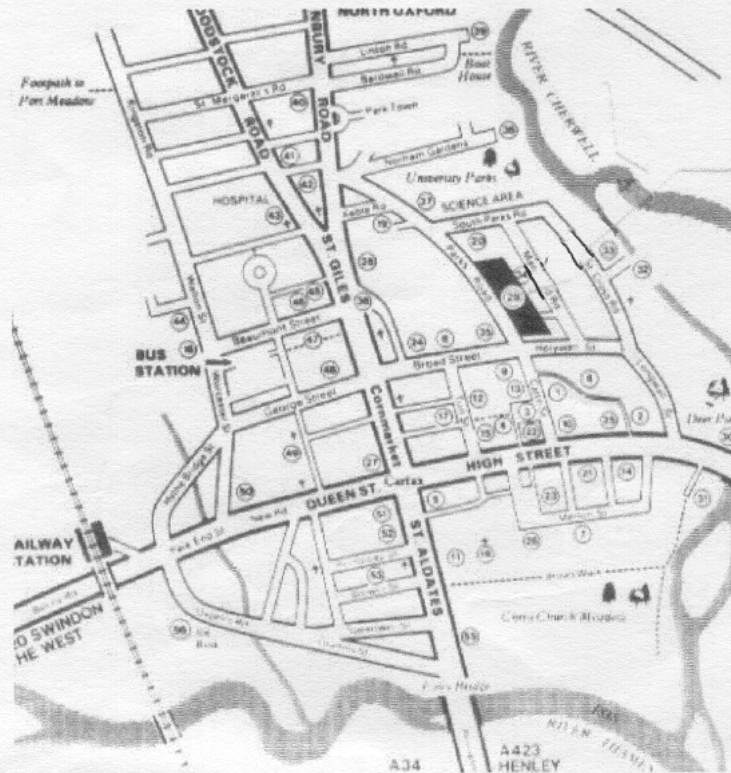
# OASI ANNUAL OUTING

## 2002 Saturday 14<sup>th</sup> September

Following on from last year's successful outing, this year we will be travelling further afield again – to the city of dreaming spires – OXFORD.

Our coach will drop us in the city centre and the day will be free for members to do as they wish in this most pleasant and historic of places. There are a multitude of attractions to visit, from the recently refurbished Museum of the History of Science<sup>i</sup>, any amount of historic colleges and buildings (not least the Sheldonian Theatre and the Bodleian Library) through to countless antiquarian book dealers/art shops and the most excellent of shopping centres. Numerous pubs and restaurants abound to delight any palate – or why not bring along a picnic and enjoy the tranquility of the banks of the River Thames (Isis) or Cherwell...

The below map is intended to demonstrate the plethora of attractions within less than a square mile...



### Key

#### Places of interest

- |                         |                             |                          |
|-------------------------|-----------------------------|--------------------------|
| 1. Hertford College     | 20. Rhodes House            | 39. Wolfson College      |
| 2. St. Edmund Hall      | 21. University College      | 40. St. Hugh's College   |
| 3. Radcliffe Camera     | 22. St. Mary's Church       | 41. St. Antony's College |
| 4. Brasenose College    | 23. Oriel College           | 42. St. Anne's College   |
| 5. Town Hall            | 24. Balliol College         | 43. Somerville College   |
| 6. Trinity College      | 25. The Queen's College     | 44. Ruskin College       |
| 7. Merton College       | 26. Corpus Christi College  | 45. St. Cross College    |
| 8. New College          | 27. Carfax Tower            | 46. Ashmolean Museum     |
| 9. Sheldonian Theatre   | 28. St. John's College      | 47. Playhouse Theatre    |
| 10. All Souls College   | 29. Wadham College          | 48. Apollo Theatre       |
| 11. Christ Church       | 30. Magdalen College        | 49. St. Peter's College  |
| 12. Exeter College      | 31. Botanic Garden          | 50. Nuffield College     |
| 13. Bodleian Library    | 32. St. Catherine's College | 51. Information Centre   |
| 14. Examination Schools | 33. Law Library             | 52. Post Office          |
| 15. Lincoln College     | 34. Mansfield College       | 53. Pembroke College     |
| 16. Worcester College   | 35. New Bodleian Library    | 54. St. Hilda's College  |
| 17. Jesus College       | 36. Martyr's Memorial       | 55. Police Station       |
| 18. Oxford Cathedral    | 37. University Museum       | 56. Ice Rink             |
| 19. Keble College       | 38. Lady Margaret Hall      |                          |

## SEAT BOOKINGS ARE BEING TAKEN NOW

ON A FIRST COME FIRST SERVED BASIS BY OUR  
SECRETARY, ROY GOODING...

Tel [REDACTED] – or - Email [REDACTED]  
Or catch him on a Wednesday evening at the observatory.

## AN EXCELLENT DAY OUT FOR THE WHOLE FAMILY!!!

<sup>i</sup> The Museum of the History of Science houses an unrivalled collection of historic scientific instruments in the world's oldest surviving purpose-built museum building, the Old Ashmolean on Broad Street, Oxford. By virtue of the collection and the building, the Museum occupies a special position, both in the study of the history of science and in the development of western culture and collecting. The museum has recently reopened after a three-year refurbishment.

## ATTENTION INTERNET ASTRONOMERS!

OASI has maintained an Internet Web site since early 1995. Anyone with Internet connectivity can access the OASI Web site at the following url:

<http://www.ast.cam.ac.uk/~ipswich/>

The point of the Web site is to advertise OASI into the Internet at large and to act as a "shop window" for the Society. OASI has attracted several new recruits in recent years by means of the Web site.

In order to keep the Web site fresh and interesting for visitors via the Internet, it needs a constant supply of new material. Please get in touch with me if you have any astronomical material that would be of interest to a wide audience, and I will upload it to the Web site. Suitable material would potentially include: reports or sketches of astronomical observations, astro-photographs, descriptions of equipment that you have constructed (whether successful or not!) or views or arguments on any topic of current astronomical interest. I can easily host any of the following onto the Web site: photographs and drawings, text (printed or typed), handwritten material and most computer files.

At present, the Web site is structured into a number of main subject areas accessible from a permanently visible navigation frame. (The areas also contain internal links to one another.) The main subject areas are as follows:

**Home Page** This comprises a brief introduction to OASI together with photos of Orwell Park Observatory and of our main telescopes (Tomline Refractor, Transit instrument, 25cm Dobsonian and the main mirror of the proposed 48cm Millennium Telescope). It also contains an email link to enable anyone viewing the page to contact OASI (via me) electronically with minimal difficulty.

**Society & Observatory** A set of Web pages about OASI, Orwell Park Observatory, and historical aspects of astronomy in East Anglia and beyond. Information on OASI includes: the Society's constitution, membership fees for 2002, a list of committee posts, the two booklets given to members, *Information for New Members* and *Tomline Refractor Operating Manual* and an article on the appointment of Dr Allan Chapman as Honorary President and James Airy, Elizabeth Amati and Nicole Airy Swengley as honorary members. The Web pages on Orwell Park Observatory include factual current and historical information about the Observatory and an account of the ceremonial naming of the Tomline Refractor on 18 May 2001. Web pages on history include information on E H Collinson (past president of the BAA who observed at Orwell Park 1930-35), Roland Clarkson (famous lunar observer who used Orwell Park Observatory during the early 1950s), George Calver (Master Mirror Maker who lived and worked in East Anglia), G B Airy (7<sup>th</sup> Astronomer Royal who held a country retreat in Playford, Suffolk) and information on

the Society for the History of Astronomy (SHA).

### Events

This includes details of the following:

- Weekly Wednesday club evenings.
- Lecture meetings.
- Telescope training sessions.
- Committee meetings.
- Group visits to Orwell Park Observatory.
- Social events, e.g. Summer BBQ, Christmas meal.
- Other miscellaneous events and activities, e.g. presidential lecture, Millennium Telescope project team meeting, etc.

### Observations

Members of OASI have kindly sent me reports of their observations and I have hosted these on the Web site to give a flavour of some of the more advanced activities undertaken by members. At present, the Web site hosts the following observing reports:

- Costa Rica annular solar eclipse, 2001 (Mike Harlow, Sue Brown, Paul Whiting).
- Lunar occultation of Saturn, 2001 (James Appleton, Ted Sampson, Ken Goward, Mike Whybray, Mike Harlow, Pete Richards, Paddy O'Sullivan, Dave Payne, Martin Cook).
- Lunar eclipse, 2001 (Nigel Evans).
- Zimbabwe total solar eclipse, 2001 (Mike Harlow).
- Aurorae, 1989, 1991 and 2000 (Dave Payne, Darren Payne, Bob Newman, Roy Gooding, Mike Harlow, Ken & Lorraine Goward, Nigel Evans, Neil Morley, Pete Richards, James Appleton, Garry Coleman, Martin Cook).
- UK total solar eclipse, 1999 (Nigel Evans, Alan Smith, Mike Whybray, Pete Richards, Dave Payne, Mike Nicholls, James Appleton, Roy Gooding, Ken & Lorraine Goward and family, Nigel Golfin).
- Noctilucent clouds, 1996, 1997 and 1999 (Mike Harlow).
- Leonids, 1998 and 1999 (Mike Harlow, Sue Brown, Michael Barriskill, Pete Richards, Neil Morley, Nigel Evans).
- Close approach of Venus and Jupiter, 1999 (James Appleton, Martin Cook, Gary Coleman, Mike Harlow).
- Sumatra annular solar eclipse, 1998 (Mike Harlow).
- Venezuela total solar eclipse, 1998 (Mike Harlow).
- Jovian satellite phenomena, 1997 (James Appleton).
- Comet Hale Bopp, 1997 (Mike Harlow, Nigel Evans, Alan Smith, Neil Morley).
- Comet Hyakutake, 1996 (Mike Harlow, Gary Marriott, Ric Pecce).
- Supernova 1993J in M81, 1993 (Dave Payne, Ric Pecce).
- Tour of the Solar System in one evening, 1989 (Dave Payne).



**Gallery** A display of members' astronomy photographs where full observing reports are not available. Currently, this contains 33 images covering a wide variety of subject areas, dating from 1983 to 2002, by the following members of OASI: Roy Gooding, Martin Cook, Sue Brown, James Appleton, Nick Sullivan, Mike Harlow, Ric Pecce and Alan Smith.

**Campaign for Dark Skies (CfDS)** This contains an article on light pollution with a number of links to other Web sites for more information on how to combat it.

**Open Weekend** Latest information on the next Open Weekend (Sat 09 - Sun 10 November 2002). Note that the theme for 2002 will be *Lunar Matters*, and that PPARC have provisionally confirmed that they will be able to provide us with samples of Moon rock to display.

**Night Sky** Summary information on the night sky for the month ahead, including a summary observing guide for the Moon and planets, a sky chart and a list of meteor showers.

**Occultations** An explanation of occultations and how they are predicted together with predictions of lunar and planetary occultations for Orwell Park and links to other Web sites with information on occultations.

**Telescope Making** Latest information on progress of the Millennium Telescope, a summary of other optical instruments constructed by members, a detailed description by Les Lamb of construction of a 220mm reflector and links to other Web sites on telescope making

**Miscellaneous Articles** This area contains the following articles:

- Choosing a first telescope or binoculars (based on articles by Robin Scagell and Ted Sampson).
- Review of Helios ST80 wide field short tube refractor (Neil Morley).
- An eclipse chaser writes... (Nigel Evans).
- Introduction to the Solar System (based on articles by Joe Walsh).
- Be cool - stay warm, or what to wear during winter observing sessions (Pete Richards).
- One small step: retrospective look at the Apollo Moon landings (Ken Goward).
- How far can you see with your telescope? Or, distant quasars visible from Orwell Park Observatory (James Appleton).

**Astronomy Links** Miscellaneous links to other astronomical Web sites. Currently, this area contains links to the following Web sites:

- National astronomy societies.
- UK National Astronomy Week, 23-30 August 2003.

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- Astronomy societies in the East Anglian region.
- Astronomy magazines.
- NASA.
- BBC (*The Sky At Night*).
- Weather forecast for Ipswich.
- Miscellaneous (Web sites providing general information on astronomy).
- Astronomical equipment suppliers.
- Society for the History of Astronomy (SHA).

Please contact me if you have any ideas for improving the Web site in terms of content, format, layout, organisation, or in any other way. You can email me at the address below, or via the Web site.

James Appleton  
[Redacted]

### Astronomy Workshops – 5<sup>th</sup> Series.

Another series of Astronomy Workshops has now been planned for 2002/3. The style and format is much as before, with an informal and interactive emphasis, usually meaning that contributions from 'the floor' are welcomed almost at any time in the presentation. The venue, thanks to the support of Orwell Park School, will be as before ie; the science classroom, which is on the ground floor. We will try to remember to put out the signs each week to enable new members to find it. Usually they will be held on first Wednesday in the month – excepting November and January – from 7.45 to 9.00 pm. We will advertise the date time and topic each month in the Newsletter. The complete list of nine workshops will be published on our website.

**The first workshop will be on Wed Sept 4<sup>th</sup> at 7.45. The topic – 'The ETX 125 and other telescopes' The presenter will be Ted Sampson.**

### Small Telescopes Night

The observatory will be open for the use of our smaller telescopes once per month, on the Monday following the Astronomy Workshops – unless it coincides with a bank holiday. This date will also be published in the Newsletter. This night gives another opportunity for any member to use the telescopes on the balcony, with others there to give advice and encouragement.

**The first S.T.N. will therefore be held on Monday Sept 9<sup>th</sup>.**

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2002 COMMITTEE

Home Phone Work Phone

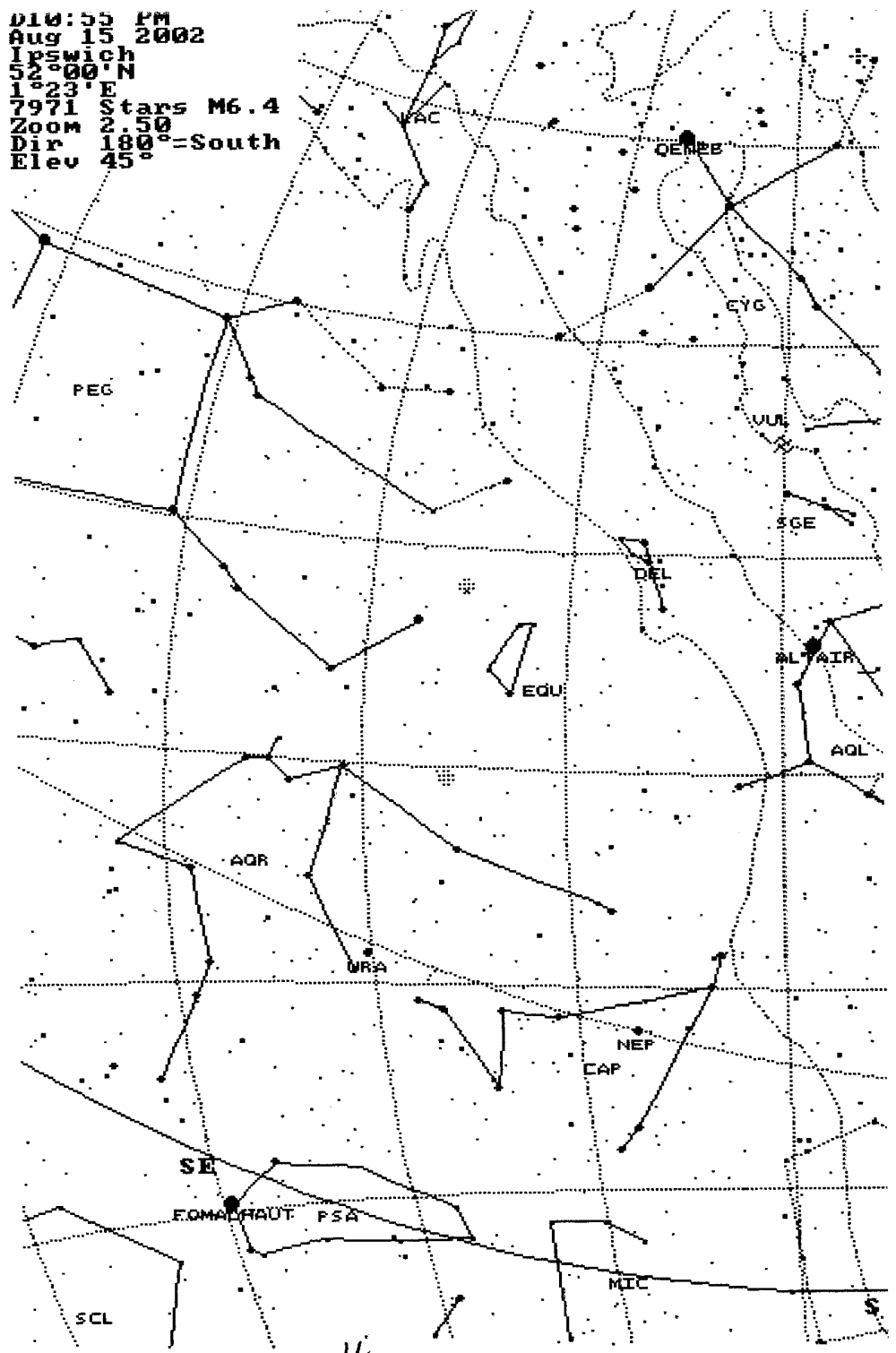


CHAIRMAN D Payne  
 SECRETARY & WORK PARTY ORGANISER R Gooding  
 TREASURER & PUBLICITY K Goward  
 MECHANICS M Cook  
 NEWSLETTER CO-ORDINATOR E Sims  
 ASTRONOMY WORKSHOP T Sampson  
 VISIT CO-ORDINATOR G Coleman  
 EQUIPMENT CURATOR J Walsh  
 LIBRARIAN M Whybray  
 CO-OPTED MEMBER P Richards  
 LECTURE CO-ORDINATOR & DARK SKIES

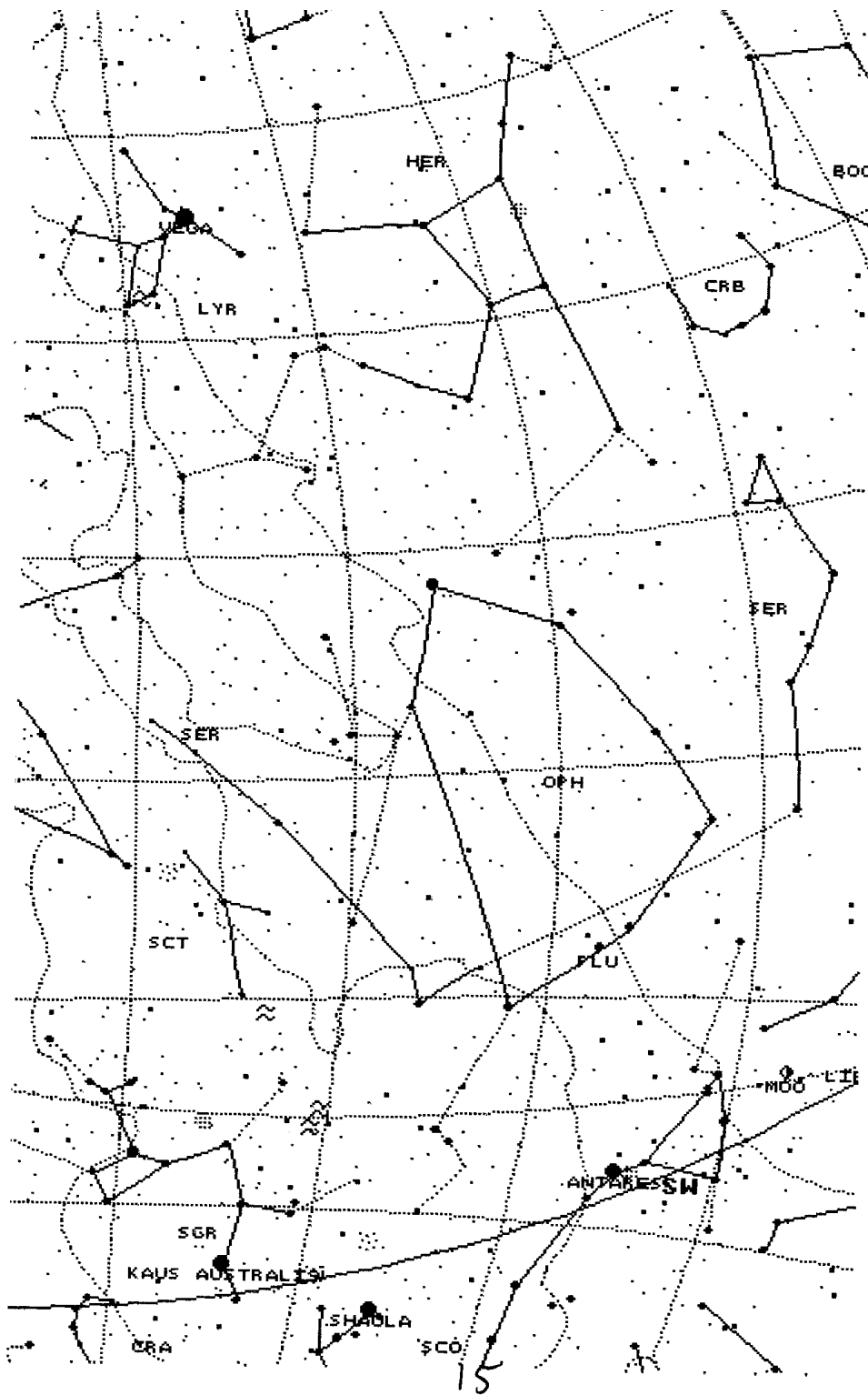
JOURNAL ARTICLES TO CORRESPONDENCE ADDRESS E Sims Ipswich Suffolk IP1 4HA  
 R Gooding OASI Secretary Ipswich Suffolk IP1 6AE  
 MEMBERSHIP M. Cook Ipswich IP4 5PZ

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Dir 18.50s M6.4  
 Elev 45.00m South  
 14.55 PM  
 Aug 15 2002  
 Ipswich  
 52°55'N  
 1°13'W



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## Observing Programme For August & September

Dates	Observing Director	Activities
Monday 9th September		Small Telescopes Night
Tuesday		Nothing Booked
Wednesdays 7th 14th 21st 28th August 4th 11th 18th 25th September	from 8.00 M Cook D Payne	Nebular & Faint Objects
Thursday 12th September - 19th September -	24th Ipswich Cubs 24th Ipswich Scouts	Group Visit
Friday		Nothing Booked

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

### Special Events

#### 1. ASTRONOMY WORKSHOP 4TH SEPTEMBER

The 5th series of Astronomy Workshops starts Wednesday September 4th at 7.45. The topic is " the ETX 125 and other telescopes" The presenter will be Ted Sampson,

#### 2. COMMITTEE MEETING 7th SEPTEMBER

The next Committee Meeting is to be held on Saturday the 7th of September at 7.30pm in the club room at the observatory. All members are welcome to attend.

#### 3. LECTURE MEETING 18TH OCTOBER

A lecture is to be held at the Friends Meeting House in Fonnereau Road Ipswich on 18th October 2002 at 8.00pm. Admission free.

### Society Contact Details

	<u>Home Phone</u>	<u>Work Phone</u>
Chairman	D Payne	[REDACTED]
Secretary	R Gooding	[REDACTED]
Contact details for the full committee are inside the back page.		

e-mail queries: [ipswich@ast.cam.ac.uk](mailto:ipswich@ast.cam.ac.uk)  
 WWW address: <http://www.ast.cam.ac.uk/~ipswich/>