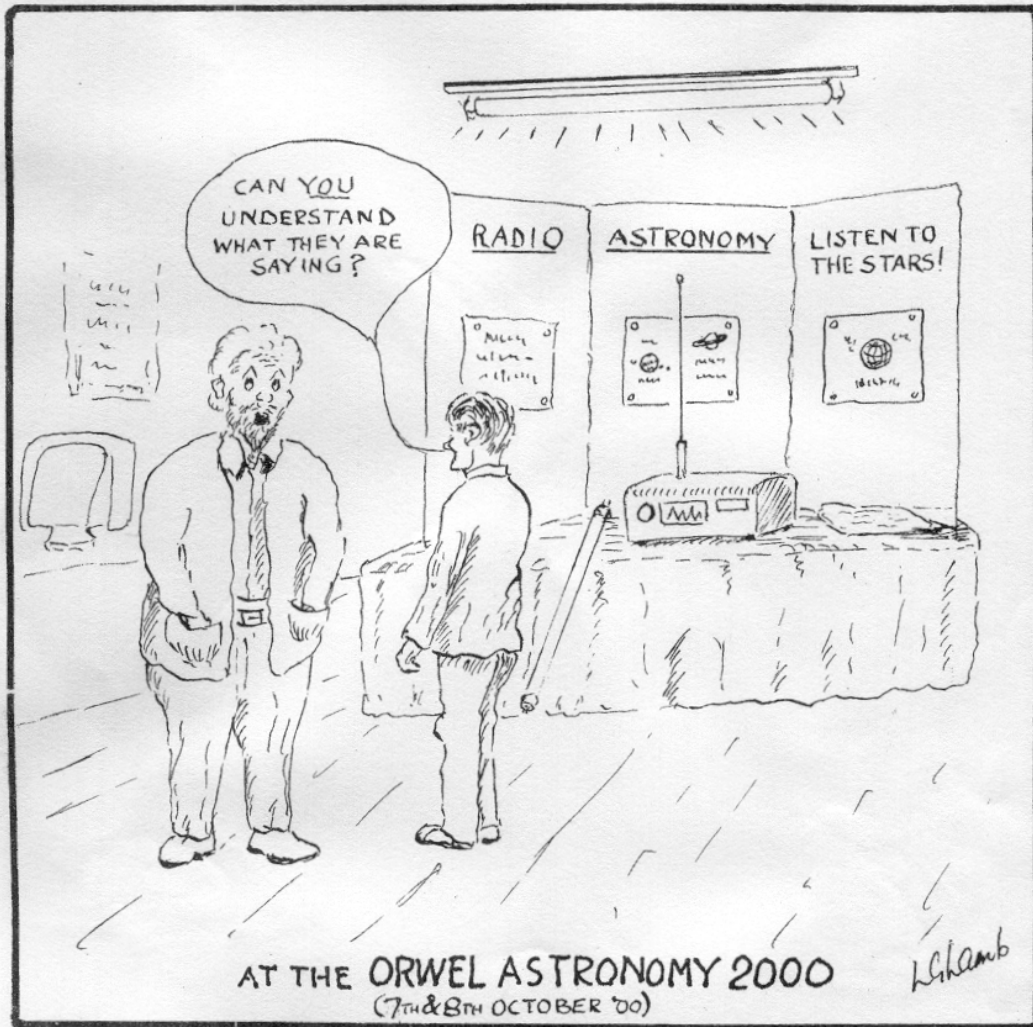


ORWELL ASTRONOMICAL SOCIETY IPSWICH

Charity No 271313

NOVEMBER 2000



Society News

1 Next Committee Meeting

The next committee meeting will be held on Saturday 18th November from 19:30 in the clubroom. This is an open meeting and any one who is interested is invited to attend.

2 Events for 2000

Event	Details	Date
Lecture Meeting	Mars and the Amateur Astronomer, Richard McKim, Director of the BAA Mars Section.	Friday 24 th November
Christmas Meal	Wilford bridge Melton	December 13 th from 20:00
Allan Chapman Talk	Orwell Park School	18th May 2001

Christmas Meal

It was decided at the last committee meeting to opt for the Wilford Bridge pub again. The date is Wednesday 13th December from 20:00. There are only a limited number of places available. The cost will be £15.95. A £5 deposit is required by mid November. Please contact Roy Gooding

Night Sky

All times GMT

Sun

The sun will be rising approximately between 07:00 to 07:50
The sun will be setting approximately between 16:40 to 16:00

Moon

1 st Quarter	Full Moon	3 rd Quarter	New Moon
4 th	11 th	18 th	25 th

Mercury Mercury is at greatest western elongation on the 15th (19°). The planet will be rising about 2 hours before the sun in mid month. In the second half of the month Mercury will be in southeast Magnitude -0.5

Venus This month Venus becomes very prominent in the evening, as it moves away from the sun. Magnitude -4.0

Mars Mars will be rising at about 03:00 at the end of the month. Magnitude 1.8.

Jupiter Jupiter is at opposition on the 28th. It will be setting till about sunrise Magnitude -2.8

Saturn Saturn is opposition on the 19th. Magnitude -0.1
Uranus Uranus will be setting at about 21:00 by the end of the month.
 Magnitude 5.7
Neptune Neptune will be setting at about 20:00 by the 31st. Magnitude 7.8

Meteor Showers

Shower	Maximum	Limits	ZHR
Taurids	November 3 th	October 20 th to November 30 th	10
Leonids	November 17 th 08h	November 15 th to 20 th	500-1000?

Meteor source is the BAA Handbook

Roy Gooding

OCCULTATIONS DURING NOVEMBER 2000

One stellar occultation occurs during the month under favourable circumstances. The table provides disappearance and reappearance times for Orwell Park Observatory; these will be similar at nearby locations.

D or R	Date & Time (UT)	Lunar Phase	Sun Alt (°)	Star Alt (°)	Min Dist (rad)	Star	Mag
D	13 Nov 02:05	0.98-	-46	52	0.68S	delta 1 Tau	3.8
R	02:58	0.98-	-38	47			

James Appleton

Astronomy Workshop

The next astronomy workshop will take place on Wednesday Nov 8th from 7.45 - 9.00 pm in the usual venue - the school science classroom. The subject is 'Features of the Moon' and will be led by Garry Coleman.

Please bring any moon maps or information likely to be useful: the moon rock has alas been returned to NASA.

Are you being served?

Being on duty at this years open weekend was for me a rather different experience from the previous two since I joined the society, due to the 'exhibition area' on the ground floor - (although I know this has been done in times past).

I was placed, along with Les Lamb and our respective telescopes, in the corridor leading from the visitors entrance, to the main exhibiting room, where the real excitement was going on - moon rock, computer displays, and radio astronomy. As people filed along towards the main event, it seemed that most of them thought we just happened to be there because nobody had cleared us out of the way after the school had closed on Friday.

Because we didn't think we were there simply for the good of our health, some attempt to attract attention to our exhibits seemed a reasonable idea.

The situation was rather like that of an assistant in a gents outfitters, lurking amongst the racks of suits, hoping for the chance to spring into action with our tape measures. But what should our opening gambit be? It was easy for Les. 'This is the only telescope like it in the world' he could say. 'I made it out of an old bathroom mirror'.

I tried 'this telescope is a Dyson, it doubles up as a vacuum cleaner during the day'.

Once into this pro-active attitude, we found that we could delay the inevitable march to the moon rock by as much as five minutes. Some asked intelligent questions like 'How heavy is it?' My response was to allow them to lift the telescope off the tripod and find out. I explained that I normally had a wheelbarrow to put it into, but hadn't the room in the car to bring it.

There were a few difficult moments. You had no idea when accosting anyone with this informed line of patter of their level of understanding of matters astronomical. And some were slow in giving any clue. Having explained to a young lady that the light comes in this end, bounces back and forth a few times, and comes out of the eye piece magnified, she told me that she had recently completed a thesis on spherical and astigmatic aberrations. I told her I had 'O' level physics.

But it was great fun. Next year I'll bring my sample of water from Mars and set up a stall in the gents toilet. Maybe some busking to the queue on the stairs would be worth trying. Ted Sampson.

GOING GREEN?

A recent regular Radio 4 environmental programme – ‘costing the Earth’ – highlighted the problem of light pollution. Some additional local research I undertook also revealed some interesting information.

Although there is a serious problem with light pollution, major progress has been made recently in controlling and reducing light pollution in many areas locally and nationally. Much of the concern about skyglow as well as other forms of light pollution and much of the work to reduce it has been due to people who are not astronomers: conservationists, naturalists, environmentalists and individual residents and local communities in areas blighted by light pollution. Recently a resident’s association was formed in Birmingham to fight a light pollution problem there.

The Council for the Protection of Rural England has worked with the astronomical community’s Campaign for Dark Skies in lobbying for the reduction of light pollution. The International Dark Skies organisation – based in the US – works on a global basis for the reduction of light pollution. The CPRE is particularly concerned about the loss of rural tranquillity due to encroaching light pollution as are many people living in the countryside. It should be recognised, however, the light pollution is a problem in many urban areas as well. Joy Griffiths, a local officer for CfDS, reminded fellow astronomers in Astronomy Now that they should add their voice to those of non-astronomers.

Recent medical research has shown that, as well as detrimental psychological effects due to night-time artificial light there is an adverse physiological effect which reduces the body’s resistance to disease. Some people working in the areas of security and safety have recognised that although lighting is often used effectively light pollution can be a hazard to safety and security in some situations.

In the natural world some of the damaging effects on flora and fauna are now recognised apart from the general one of the loss of the characteristics of the nocturnal environment. Some daytime creatures can suffer damaging effects from the introduction of artificial daytime in some places.

There are inevitably vested interests trying to deny or undermine opposition to light pollution. Concern is growing, however. The professional community involved in the provision of lighting, however, has recognised the problem and the Institute of Lighting Engineers has been instrumental in defining solutions which reduce the amount of light pollution. The ILE also produce guidelines on the reduction of light pollution.

A particular concern at the moment is a proposed relaxation in advertising controls in the countryside which could see illuminated bill boards appearing in some rural locations. Another area for concern is that, though the nuisance caused by badly directed light can be recognised in law as causing a nuisance it is not yet officially listed as a statutory nuisance. With the global environment high on the agenda it is important to recognise the contribution to acid rain and global warming due to the energy used. It has been estimated that the wasted light alone (not the total usable light) is equivalent to 2 generating stations. It is worth noting that much of the badly directed light going straight up simply carries on going up. It doesn’t create skyglow, it doesn’t illuminate anything which is visible – it’s simply wasted.

In the 21st century technology and environmental education will dramatically reduce the level of light pollution from 20th century levels. How soon that happens depends on how quickly people respond to the problem.

If you have any concerns about light pollution you could write to your local council, MP or perhaps the Secretary of State for the Environment or the PM.

If you write to an MP you can address a letter to them at: House of Commons, London SW1A 0AA.

If you live in Suffolk your county council is: Suffolk County Council, St Helen Ct. County Hall, Ipswich, IP4 2JS.

For the OASI the committee handles light pollution issues. A member is also elected each year to act as a co-ordinator. This year it’s me: Pete Richards. If you have any questions, comments or ideas please use my contact details in the journal or e-mail me on [REDACTED].

ORWELL ASTRONOMY 2000

A RESOUNDING SUCCESS!!

Even the severest of cynics amongst us would have to concede the fidelity of the above heading. Over the course of two evenings, several hundred visitors were treated to the wonders of the science of astronomy by means of interactive displays and 'hands on' at the eyepieces of several telescopes. Obviously, the 10" Refractor was the main draw for the public but it was rivalled this year by the chance to see lunar rock and meteorite samples.

Despite a lousy deal on the weather for Saturday, we had an attendance of about 150. The sky cleared just in time on Sunday and we eventually lost count of visitor numbers! If it's any kind of performance indicator, the cash tin had almost £600 in it by the close of the show. We signed on six new members during the weekend and more have joined since (a very warm welcome to all our new friends).

The old chestnut of queuing for the 10" still hasn't been cracked (despite many hours spent discussing possible solutions at planning meetings) and, at one point, visitors had to wait for about 1½ hours. Obviously, we WILL need to revisit this enigma before next year's open weekend.

The event was staged because a small but dedicated team collaborated to present a very appealing show to members and visitors alike. About 20 or so enthusiastic members were able to volunteer and give of their time to man it. BUT – without the support of the school head, Andrew Auster, the business manager, David Gilkes and teacher, Rob Hodges, the event could never have taken place anyway.

THANK YOU ALL

A selection of comments received after the show:

Mrs Moore of Brandeston.

"As one of the many visitors to the Open Weekend at the Orwell Park Observatory, may I convey very grateful thanks and appreciation to your astronomical society for the wonderful experience that it was. Not only were all the exhibits and displays well set out and accessible, but the helpful and friendly explanations by your helpers made everything really enjoyable; their patience was much appreciated"

Mr Bolton of Newbury, Berks.

"Astronomy and particularly amateur astronomy, has two sides to the coin: Astronomy being done and astronomy being promoted. It was great to see the evidence of the former amid such a huge number of people enjoying the latter. While the Observatory was the magnet, the interest of the people in the rest of the displays was obvious. The financial return for the society must have been encouraging and the return in terms of good will for, and interest in, astronomy will also have been significant"

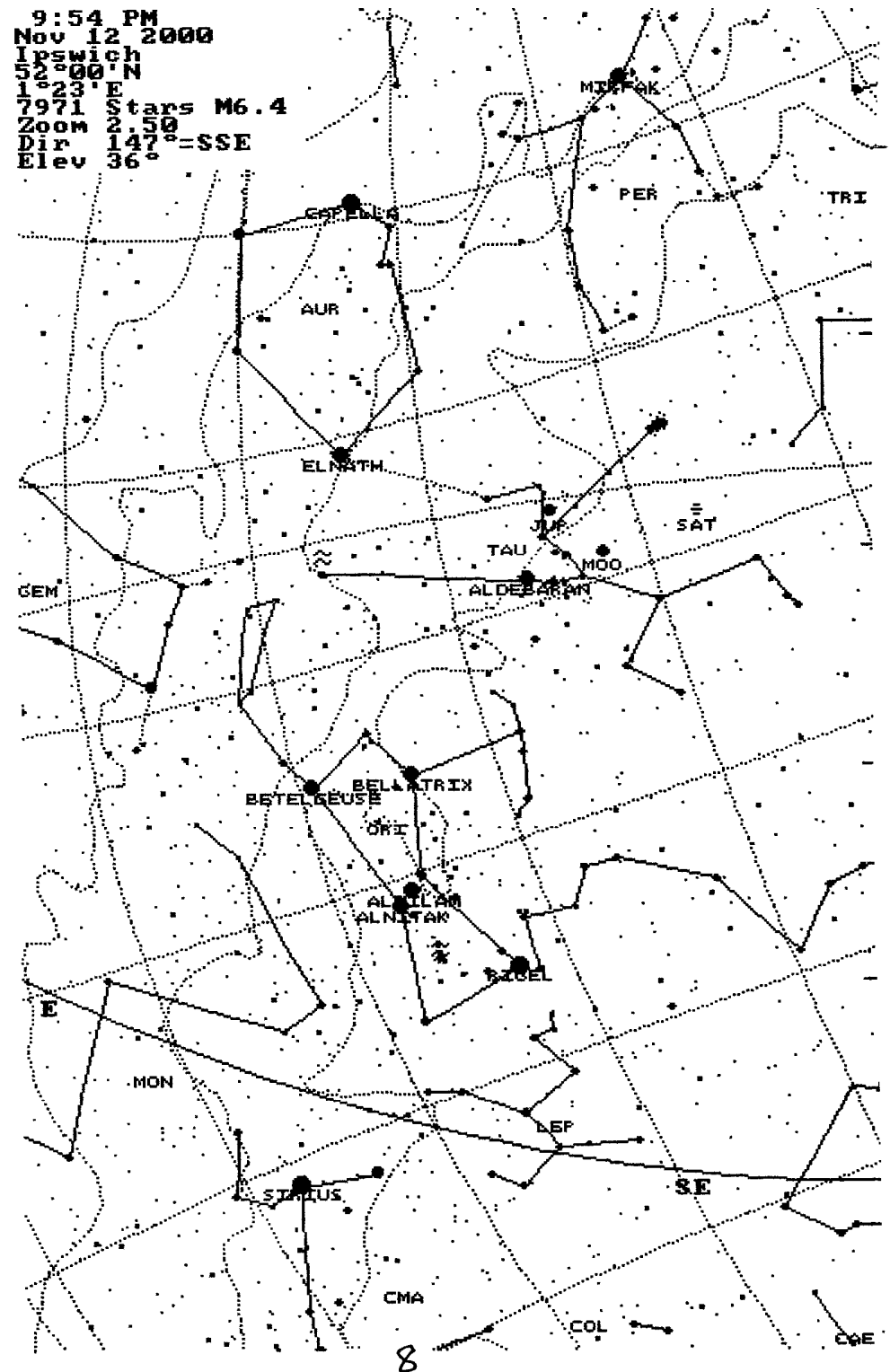
Andrew Auster, Headmaster, Orwell Park School.

"What a wonderful few days it has been for the Astronomical Society. I wish to congratulate you and your Colleagues on the excellent Open Weekend"

I think it fair to say that all OASI members who attended, either as an exhibitor, volunteer or visitor, felt a certain sense of pride in our achievement.

Ken Goward, Coordinator for OA2K – looking forward TO OA2.001K (I think?)

9:54 PM
Nov 12 2000
Ipswich
55°00'N
1°23'E
7971 Stars M6.4
Zoom 2.50
Dir 147° = SSE
Elev 36°



NEW LIBRARY BOOKS

Following the recent OASI Open Weekend, Springer-Verlag very kindly donated the following books to the OASI library. Our thanks go to Springer-Verlag for their generosity.

***Practical Astrophotography*, by J R Charles, Springer-Verlag London Ltd, 2000.**

This is the latest volume in Springer's *Practical Astronomy* series (edited by Patrick Moore) and it maintains the same format and high standard of earlier volumes in the series.

The book begins with a simple explanation of the basic principles of cameras and telescopes and then moves on to describe the various configurations for astrophotography. Subsequent chapters provide detailed descriptions of techniques for photographing all manner of astronomical phenomena, together with sections on diagnosing problems and on darkroom techniques.

The book's approach is thoroughly practical and it should be useful to anyone who is starting out in astrophotography or is aiming to improve basic skills.

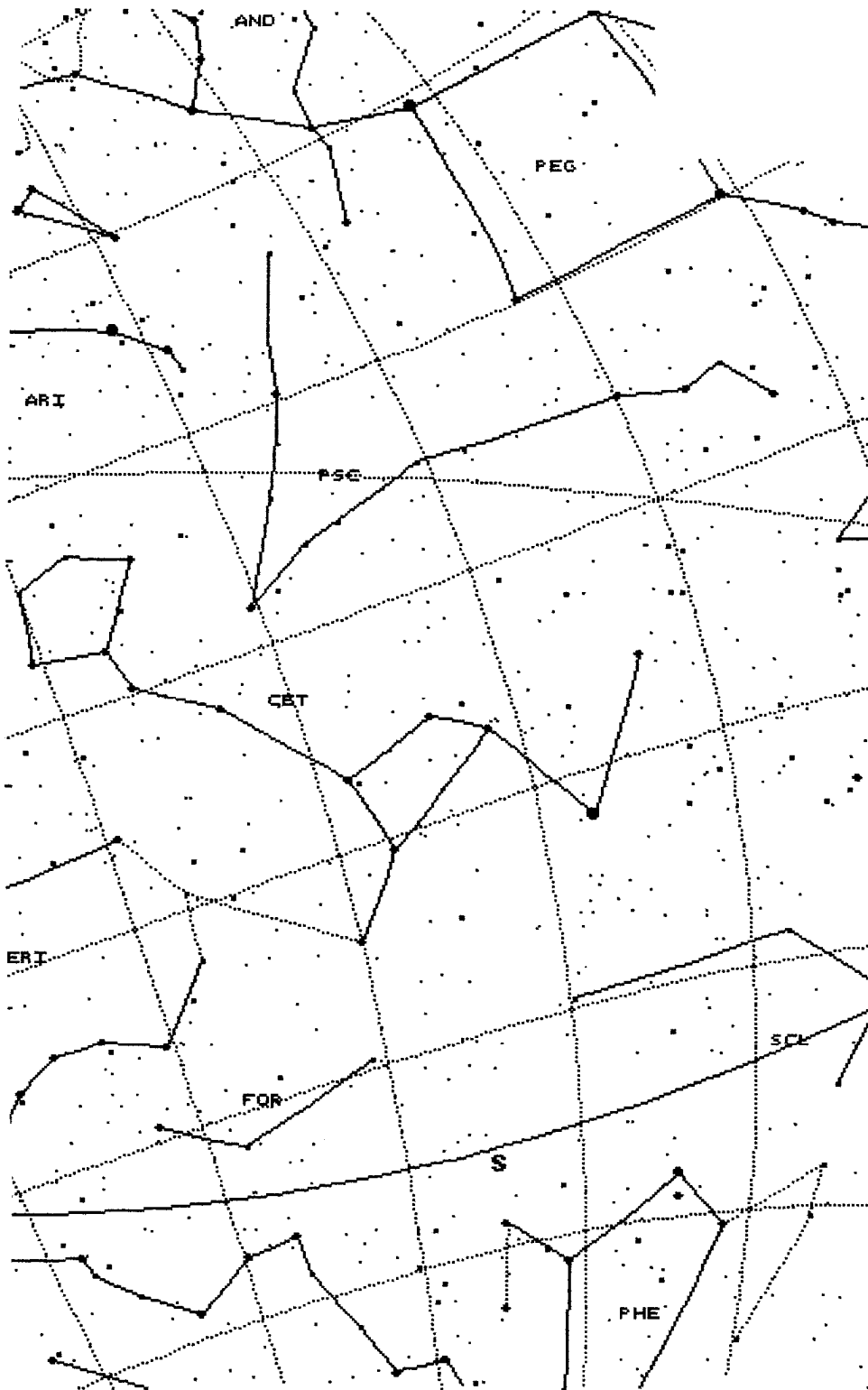
***Deep Sky Observing – The Astronomical Tourist*, by S R Coe, Springer-Verlag London Ltd, 2000.**

This is another volume in Springer's *Practical Astronomy* series which again maintains the same format and high standard of other volumes in the series.

The author has been observing deep sky objects from dark locations with large telescopes for over 20 years and he has written this book to give other observers the benefit of his experience. The first eight chapters deal with observing techniques and equipment and have a very practical approach. The remainder of the book (roughly two-thirds of it) provides detailed observing notes for a large number of deep-sky objects. The notes include descriptions of each object through various telescopes together with finder charts, sketches and photographs. The objects range from easy to extremely difficult. The book should be useful to any observer looking for potentially challenging observing targets.

***AstroFAQs*, by S F Tonkin, Springer-Verlag London Ltd, 2000.**

FAQ stands for *Frequently Asked Question*. This book (yet another in Springer's *Practical Astronomy* series) is a question-and-answer guide to basic astronomy. Chapters cover: choosing and using binoculars, telescopes and eyepieces; optics; observing; and celestial co-ordinates. This book is likely to appeal to the relative newcomer to astronomy.



Structures In Space – Hidden Secrets Of The Deep Sky, by B Abrams and M Stecker, Springer-Verlag London Ltd, 2000.

The authors are skilled astrophotographers, and they have written this book as a showcase for their very best astrophotographs. A concise commentary accompanies the photographs. The photographs themselves are superb, and illustrate the very best work that the modern amateur is capable of.

The library is housed in the Orwell Park Observatory. It holds a selection of astronomy books, videos and magazines. All members of OASI are welcome to use the library. Please contact me with requests for purchases of books, videos and software, or if you would like to donate any good-quality astronomy material to the library.

James Appleton

Observing Programme For November

Dates	Observing Director	Activities
Mondays from 7.30pm	T Sampson [REDACTED]	General Observation
Tuesdays from 7.30pm	G Coleman [REDACTED]	Group Visits
Wednesdays from 8.00pm	M Cook [REDACTED] D Payne [REDACTED]	Nebular & Faint Objects
Thursdays from 7.30pm	G Coleman [REDACTED]	Group Visits
Fridays from 7.30pm		Miscellaneous

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. Committee Meeting

The next committee meeting is going to be held on Saturday 18th November in the club room at the observatory at 7.30pm. All members are welcome to attend.

2. Christmas Meal

The Christmas meal is to be held at the Wilford Bridge public house Melton near Woodbridge. The meal is booked for 8.00pm on Wednesday the 13th of December.

2000 COMMITTEE

CHAIRMAN
SECRETARY &
WORK PARTY ORGANISER
TREASURER & PUBLICITY
MECHANICS
NEWSLETTER CO-ORDINATOR
BEGINNERS MEETING CO-ORD
& VISIT CO-ORD
EQUIPMENT CURATOR
LIBRARIAN

D Payne
R Gooding
M Cook
E Sims
T Sampson
G Coleman
J Walsh
J Appleton

Home Phone Work Phone



CO-OPTED MEMBER
LECTURE CO-ORDINATOR
& DARK SKIES

P Richards

JOURNAL ARTICLES TO
CORRESPONDENCE ADDRESS

E Sims [REDACTED] Ipswich Suffolk IP1 4HA
R Gooding OASI Secretary

MEMBERSHIP

[REDACTED] Ipswich Suffolk IP1 6AE
M. Cook [REDACTED] Ipswich IP4 5PZ

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Society Contact Details

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Chairman	D Payne [REDACTED]	[REDACTED]
Secretary	R Gooding [REDACTED]	[REDACTED]

Contact details for the full committee are inside the back page.

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