

ORWELL ASTRONOMICAL

SOCIETY IPSWICH

Charity No 271313

FEBRUARY 2000



"THE FORECAST WAS CLEAR SKIES WITH
THE CHANCE OF AN ODD SHOWER."

Society News

1 Next Committee Meeting

The next committee meeting will be held on Saturday 19th February 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
AstroFest	Kensington Town Hall Hornton Street London	4 th & 5 th February
Ipswich Museum Event		February
Lecture Meeting	Deep sky Exotica by Nick Hewitt Friends Meeting House 20:00 start	11 th February
Lecture Meeting	Short talks by members Friends Meeting House 20:00 start	31 st March
Visit to Norwich AS observatory	To be arranged.	March /April
Visit to Cambridge AS and Braintree AS	These were proposed at the AGM	Nothing arranged yet
BAA Winchester Weekend		14 th to 16 th April
Lecture Meeting	Twinkle Twinkle Little (Neutron) Star by Paul Roche Friends Meeting House 20:00 start	19 th May
BAA Exhibition Meeting	London Guildhall University	24 th June
Summer Barbecue	To be arranged	
Summer Excursion	No date fixed yet. No venue fixed yet	
Open Weekend	Date to be fixed.	October
Equinox Star Party	Thetford Organiser; Loughton A.S	25 th October
Christmas Meal	Provisionally set for the 13 th	

3 Membership subscription for 2000

Subscriptions for 2000 will be due from 1st of January, for members who have not already paid. The rates for the new year will be:-

Junior & OAP	£9.00
Adult	£13.00
Family	£15.00

A renewal form is included with the January newsletter. It would be appreciated if you could return this so that the society membership records can kept up to date.

Please make cheques & P.O.'s payable to the:-

ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

Please return all subscriptions to

Martin Cook

Ipswich
IP4 5PZ

4 New Committee for the Year 2000

The committee for this year is: -

- Dave Payne Chairman
- Roy Gooding Secretary
- Ken Goward Treasurer
- Martin Cook
- Eric Sims
- Joe Walsh
- James Appleton
- Ted Sampson
- Gary Coleman

Night Sky

All times GMT

Sun

The sun will be rising approximately between 07:50 to 06:50

The sun will be setting approximately between 16:50 to 17:30

Moon

New Moon	1 st Quarter	Full Moon	3 rd Quarter
5 th	12 th	19 th	27 th

Mercury Mercury is in the evening sky this month. Its greatest eastern elongation is on the 15th, when it will be at 18° from the sun. Magnitude -0.5

Venus Venus remains in the morning sky, but is slowly approaching the sun in the morning twilight.

Mars Mars will be visible in the evening sky until June. During this period it will be moving eastwards, keeping it relative to the sun, in the same part of the sky. By mid month it will be setting at about 21:00. Magnitude 1.2.

Jupiter Jupiter will be visible of the evening sky this month. It will be setting at 22:30 by the end of the month. Magnitude -2.2

Saturn Saturn remains visible in the evening sky this month. At the end of the month Saturn will be setting around 23:00. Magnitude 0.5

Uranus Uranus will be setting in conjunction with the sun on the 6th

Neptune Neptune returns to the morning sky this month. It will be rising about an hour before the sun. Magnitude 7.8

Roy Gooding

AN ORWELL PARK OBSERVER OF DISTINCTION

PART TWO

Continuing a brief biography of Edward Howard Collinson F.R.A.S.

Armed with the 10" reflector on loan from the BAA, Collinson had no further need to use the Orwell Park refractor and set up a roll off observatory in his back garden in Felixstowe (probably in the Trimley area, but I have no confirmation as such?) Although his main interest was in Mars and Jupiter, their poorly placed periods caused a lot of 'down time' which he used to continue his meteor work and making observations of some of the fainter variable stars.

In 1938 he married Miss Eileen Woodhead (the couple produced two children) but the dark clouds of war were gathering and Collinson's observational opportunities became few and far between as he served on various wartime legal committees, including relief work in London by arranging hostel accommodation for victims who were bombed out of their homes.



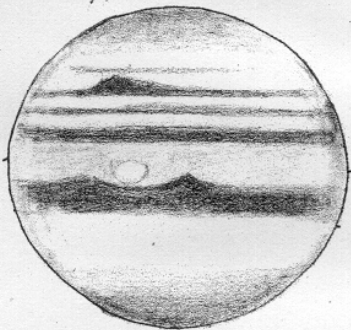
The 10" reflector in Collinson's roll off observatory at Felixstowe in 1935

When peace returned in 1945, Collinson became involved in the newly formed Ipswich & District Astronomical Society, having moved to Playford, eventually becoming their chairman before the society folded in the 1950's. The IDAS did have the use of the Orwell Park Observatory on an occasional basis, although it (the observatory) was in a very sorry state by then following its (miss)treatment by the army. As an aside, a former IDAS member, Mike Allen, joined OASI at last year's open weekend. Whilst chatting with him he was able to recall the observatory in those days (Mike was a junior member) and related how, to keep warm in a very draughty equatorial room, observers would string hot water bottles around the insides of their overcoats! Perhaps even more blood curdling, in view of contemporary knowledge, he also recalled how they cut & filed their way through Asbestos tubing to fashion home made telescope tubes!!

Observations of Jupiter 1947.

May 27^d 9^h 0^m

Seeing fair considering low altitude.
1" Eyepiece + Barlow



$$\omega_1 = 105^\circ.6 \quad \omega_2 = 146^\circ.8$$

N.E.B. d. proj. Sedge transit 9^h 0^m = ~~$\omega_2 = 146^\circ.8$~~ $\omega_1 =$

S.T.B. Broad with hump p. cm. lazy patch connecting with
S.S.T.B.

S.E.B._s Suspected gap near cm. at 9^h 15^m = $\omega_2 = 155^\circ.8$.

S.T.Z. Bright.

All belts a neutral tint.

Extract from Collinson's log, showing a drawing observation of Jupiter, using his 10" reflector at Playford, 1947 May 27th.

Collinson was also increasingly involving himself in the affairs of the British Astronomical Association, serving on the Council and giving valued legal assistance in drawing up emergency regulations when war had broken out. In 1952 he was invited to become President (held for periods of two years) in which post he served assiduously, delivering Presidential Addresses on Astro Photography and the planet Mars. He also organised a very successful joint BAA/RAS expedition to view the 1954 total solar eclipse in Sweden. Immediately at the end of his Presidential term he served on the Council of the Royal Astronomical Society and also the National Committee for Astronomy for the Royal Society. His meticulous observational work on Mars had done much to make his reputation and, upon the death of the BAA Mars Section Director in 1956, Collinson was invited to take on the post and was its Director until 1979, when the section was controversially absorbed into a Terrestrial Planets Section. His period of office lasted into the early unmanned probes era and, over that 23 year period of office, our understanding of the planet was profoundly changed. In 1973 Collinson retired from his legal practice as the senior partner and, a year before, had moved home to Snape. However, when his wife passed away in 1979 he moved back to Playford and set up a new observatory for his long serving 10" reflector in the back garden of a bungalow (The Ridge) which, coincidentally, is just a few yards along from the former country home of Sir George Biddell Airy (7th Astronomer Royal). There has been speculation that Collinson was a founder member of OASI - but - I have been unable to unearth any evidence to support this. (*Unless any long standing member cares to contradict me and thereby refine our knowledge??*) Indeed, having trawled at length through our archives, I can only find his membership starting in 1980, which would seem to tie in with his return to the local Ipswich area after his wife's death. Anyway, the archives indicate that he remained a member of our society until his own death in 1990.

The 'twilight years' of Edward's life were spent mostly making variable star estimates with binoculars and Solar observations with a 3" refractor he'd owned since the 1920's. He stopped using the 10" in 1984 and it was returned to the BAA. In 1989 Edward suffered a stroke and was more or less immobilised. This put an end to his observational work, but he continued a full involvement with the amateur astronomy world via his many friends. At this time he also generously donated all his equipment and his extensive collection of books to the BAA. He passed away on 24th October 1990 and, to quote directly from his obituary in the BAA journal (written by Dr Richard McKim) 'the BAA lost a gentleman astronomer'. So, too, did the Orwell Astronomical Society. In his honour, a framed copy of Collinson's BAA Presidential Portrait now hangs on the wall of the spiral stairs at the Orwell Park Observatory. Ken Goward

Information sources:

The Journal of the BAA (Various)

OASI Archives.

Collinson's photographs & observing logs held by Dr Richard McKim (Director of the BAA Mars Section) *I am indebted to Richard for his considerable help in producing this article.*

Under an English Heaven., the life of George Alcock. Author Kay Williams. Genesis Publications 1995.

A History of Astronomy. Author David Leverington. Springer-Verlag 1995.

THE LEONID METEORS IN 1999 AND PROSPECTS FOR 2001

The regular November Leonid meteor shower is not the only shower that can produce a spectacular meteor storm. The Draconids for example occasionally produced storms – but the most famous meteor storms in history are storms of Leonids. The term ‘storm’ is not rigorously defined but generally it corresponds to rates of several 1000s of meteors per hour. In 1966 rates of perhaps 100,000 an hour were seen in parts of North America. When rates reach these levels they are incredibly spectacular for every eyewitness from the serious seasoned meteor observer to the non-astronomer in the street.

The Leonid shower occurs when the Earth passes through the trail of dust left by Comet Temple-Tuttle. Most of the dust is close to the comet and hence when the comet is at its furthest from the Sun (and hence the Earth) very low rates are seen and when the comet is at its nearest – which happens every 33 years - the rates seen are much higher.

Temple-Tuttle made its closest approach to the Sun (Perihelion) in 1998 and that November produced an unusual and spectacular display of very bright meteors (fireballs) which many OASI members saw. Unfortunately, because it peaked a day earlier than predicted, many people missed it or decided to stop watching not long after midnight when activity was just building up in the expectation that the best display would occur on the next night. I was in Exmoor where overcast sky obscured our view on both nights.

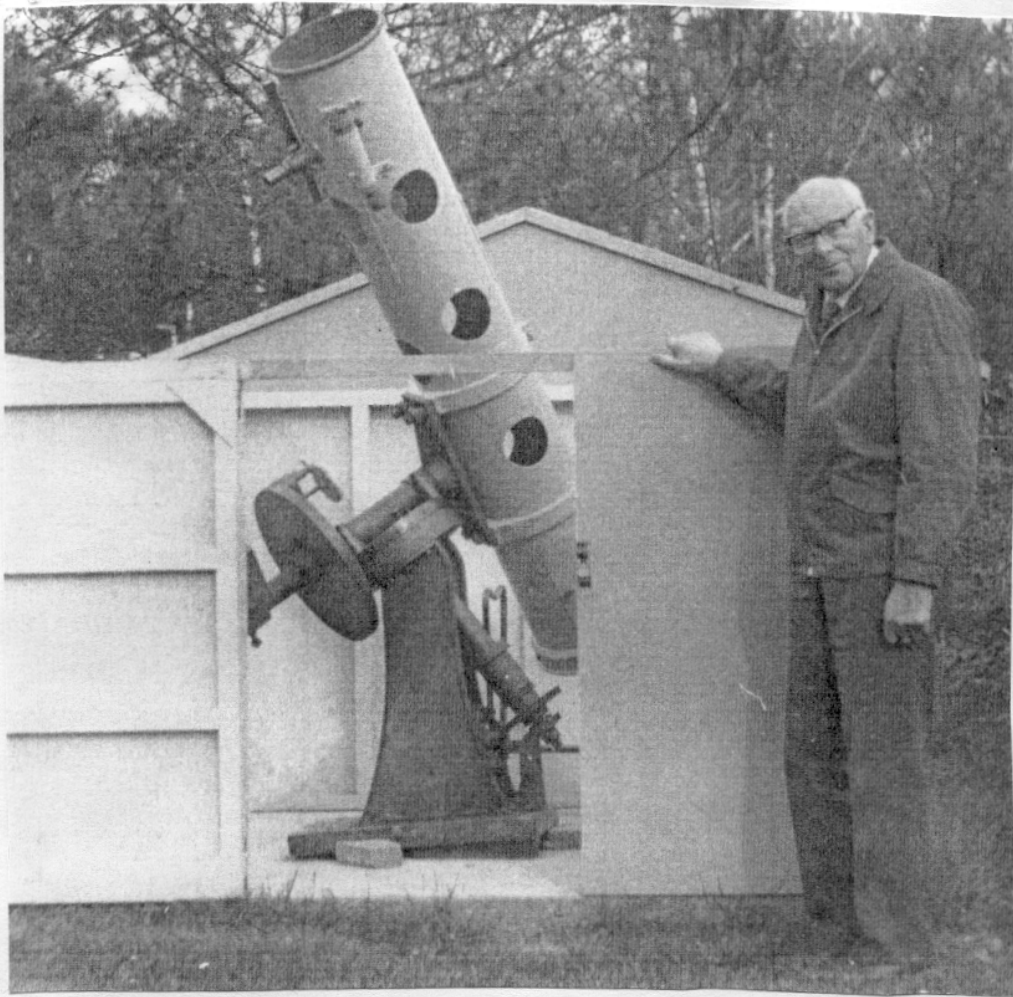
Subsequent professional analysis suggested that 1999 would produce even higher rates (though fewer fireballs). In fact, the predictions made by David Asher of the Armaugh Observatory and Rob McNaught of the Australian National University were very accurate, with the predicted peak time within a few minutes of the observed peak. The actual rates were higher than their cautious predictions at more than 5000 ZHR. ZHR - Zenithal Hourly Rate – is the standard measure for meteor activity.

OASI member Nigel Evans was one of those in the right place - in the Sinai Desert. Most of the UK was under cloud except for parts of the north-east of England and eastern Scotland. From Field View in East Barsham an Astronomy

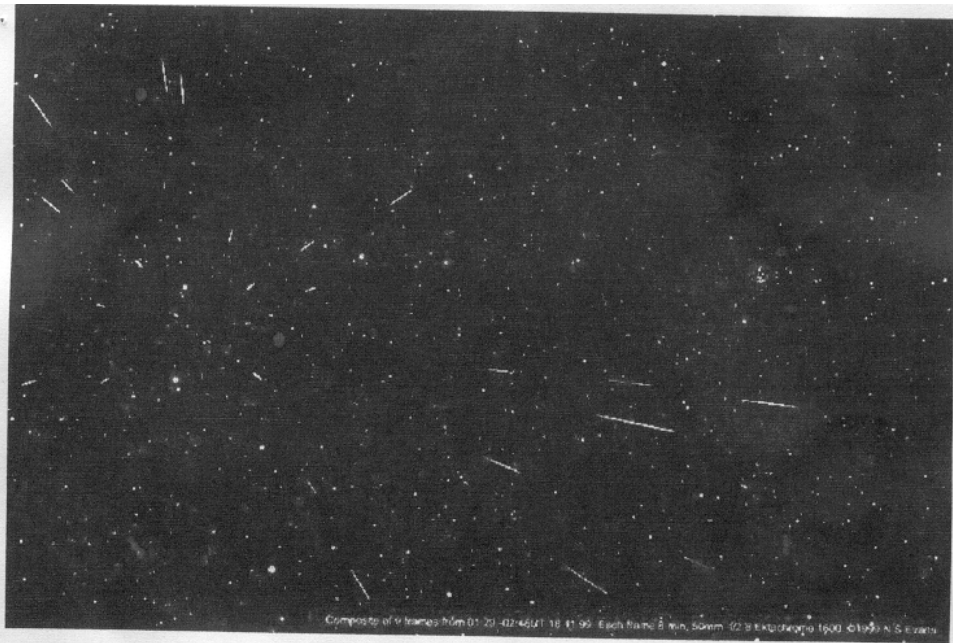
B&B in North Norfolk I had better luck last year and we had a large gap in the cloud passing over at around the peak time of 2am. The conditions meant we didn't see the storm rates that other locations saw, but we were seeing 5 to 10 meteors a minute at the peak which was an impressive sight.

Asher and McNaught's analysis suggests that the 2000 shower will be less active but the greatest activity (>10,000 ZHR) will be seen in 2001 and 2002 and will be worth looking out for even with the Moon being relatively full.

Pete Richards



Edward Howard Collinson at his back garden observatory in Playford in 1983. Photo by Dr Richard McKim.



Composite of 9 frames from 01:29-02:46 UT 18.11.99. Each frame 2 min, 50mm. © 1999 Nigel Evans

A composite of 9 frames made with a 50mm lens from the Sinai Desert between 01:29-2:46 UT 18.11.99

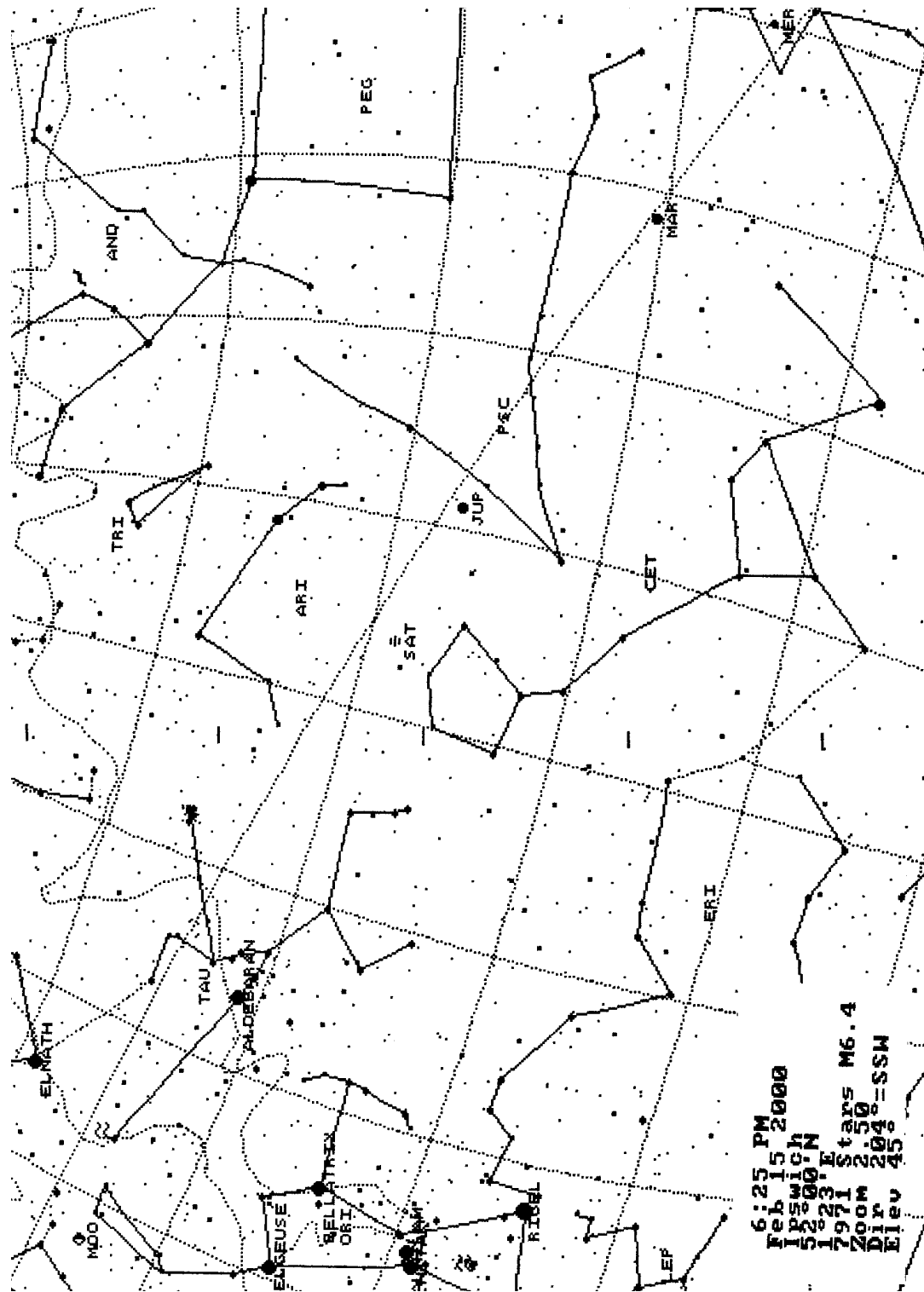
Photo by Nigel Evans

OCCULTATIONS DURING FEBRUARY 2000

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 or R	Date & Time (UT)	Lunar Phase	Sun Alt (°)	Star Alt (°)	Min Dist (rad)	Star	Mag
D	11 Feb 20:10	0.37+	-29	32	0.38S	ksi 2 Cet	4.3
R	21:11	0.37+	-38	23			
D	13 Feb 19:00	0.59+	-18	54	0.06S	ZC 627	6.6
D	13 Feb 20:50	0.60+	-35	46	0.38N	55 Tau	6.8
D	13 Feb 22:46	0.60+	-48	31	0.73N	63 Tau	5.6
D	16 Feb 00:01	0.82+	-51	40	0.76N	16 Gem	6.2
D	16 Feb 00:20	0.82+	-51	37	0.22S	nu Gem	4.1
D	16 Feb 19:26	0.89+	-22	50	0.73N	56 Gem	5.1
D	16 Feb 21:48	0.90+	-41	58	0.31N	61 Gem	5.9

James Appleton



6:25 PM
 Feb 15 2000
 13° 50' N
 52° 23' E
 1971 S tars M6.4
 200m 294' SSM
 Elev 45'

Astronomy Workshop - February

The next astronomy workshop will take place on Wednesday Feb 9th at 7.30, in the school science classroom. The subject will be 'Telescope making - an introduction'. People who attended the January workshop will know that we had to switch the Jan and Feb subjects due to the presenters being on other unavoidable duties.

The **small telescopes night** will take place in the observatory on the following Monday, February 14th, from 7.30, whatever the sky.

Observing Programme For February

Dates	Observing Director	Activities
Mondays ^{14th} from 7.30pm	T Sampson	General Observation
Tuesdays from 7.30pm	G Coleman	Group Visits
Wednesdays from 8.00pm	M Cook D Payne	Nebular & Faint Objects
Thursdays from 7.30pm	G Coleman	Group Visits
Fridays from 7.30pm		Double Stars

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 19th February in the club room at the observatory at 7.30pm. All members are welcome to attend.

2. Workshop

Wednesday February 9th 7.30pm.

3. Lecture Meeting

Nick Hewitt B.A.A. President "Deep Sky Exotica" at the Friends Meeting House Fonnereau Road, on Friday 11th February 2000 at 8.00pm. Admission free.

4. Workshop

Wednesday March 8th 7.30pm. Lunar occultations - the amateurs opportunity.

1999 COMMITTEE

	Home Phone	Work Phone
CHAIRMAN	D Payne	
SECRETARY & WORK PARTY ORGANISER	R Gooding	
TREASURER	K Goward	
MECHANICS	M Cook	
NEWSLETTER CO-ORDINATOR	E Sims	
BEGINNERS MEETING CO-ORD	T Sampson	
DARK SKIES & VISIT CO-ORD	G Coleman	
EQUIPMENT CURATOR	J Walsh	
LIBRARIAN	J Appleton	
CO-OPTED MEMBER		
LECTURE CO-ORDINATOR	P Richards	
JOURNAL ARTICLES TO	E Sims	Ipswich Suffolk IP1 4HA
CORRESPONDENCE ADDRESS	R Gooding	OASI Secretary Ipswich Suffolk IP1 6AE
MEMBERSHIP	M. Cook	Ipswich IP4 5PZ

Society Contact Details

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Secretary	R Gooding	
Contact details for the full committee are on the inside back page.		

e-mail queries: ipswich@ast.cam.ac.uk
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