



The Newsletter



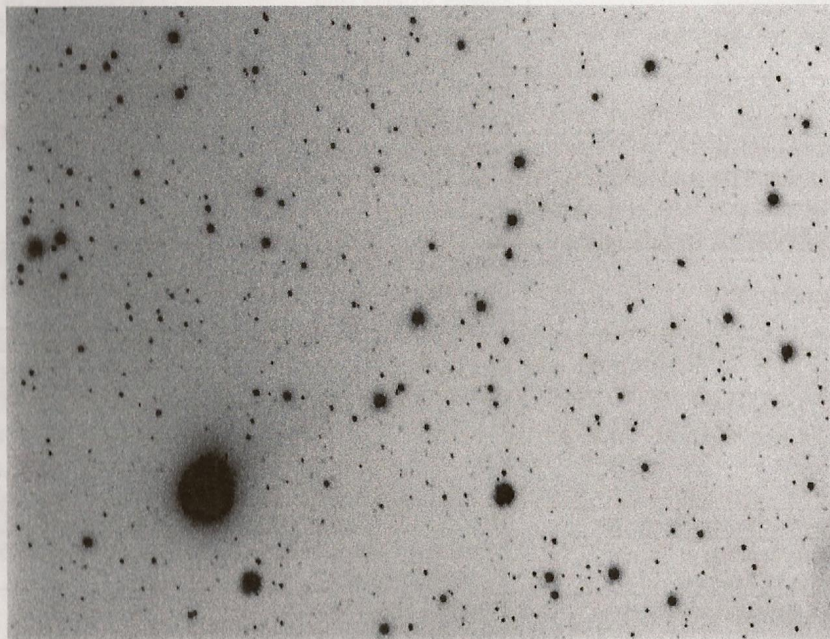
of the Orwell Astronomical Society (Ipswich)

Registered charity No 271313

www.oasi.org.uk

2007 February

No 416



COMET SWAN

Imaged by Mike Harlow from his home at Buckelsham, Suffolk

2006 2nd November 18.48UT

Mike obtained his image two days before full Moon and in the orange sky glow of Ipswich after a frustrating period when the object had been too low and obscured by what he describes as the largest Ash Tree in Suffolk!

MX916 CCD on 6" F/2.6 Schmidt camera, 60 second exposure

Society News (Roy Gooding)

1 Committee Meeting

No date has been fixed for the next Committee meeting.

2 Events for 2007

This event list will be updated through out the year

Meeting	Venue	Date
AstroFest 2007	Kensington Town Hall Horton Street London	9 th & 10 th February
OASI Workshop Millennium Telescope	Nacton Village Hall Various members of the construction team	Wednesday 14 th February 19:45
Lecturer Meeting Nick Symanek	Methodist Church Hall Black Horse Lane	Friday 2 nd March 20:00
OASI Workshop The Meade ETX And other Telescopes Gerry Pilling	Nacton Village Hall	Wednesday 7 th March 19:45
SPA Convention 2007	Institute of Astronomy Cambridge Maddingley Road	Saturday 10 th March 10:00 to 17:30
40 th Anniversary Open Weekend		Preliminary dates only March 24 th and 25 th
OASI Workshop RA and Dec. Celestial Co- ordinates Paddy O' Sullivan	Nacton Village Hall	Wednesday 4 th April
BAA Winchester Weekend	Details in BAA Journal	April 7 th & 29 th
Lecture Meeting Dr. Allan Chapman	Methodist Church Hall Black Horse Lane	Friday 4 th May
NSC Leicester Exhibition Meeting	National Space Centre Leciester	30 th June
Summer Barbecue	To be decided	To be decided
FAS Convention	Birmingham	October
Autumn Workshop	To be planned	To be planned
Lecture Meeting Dr. David Whitehouse	Orwell Park School	Friday 16 th November
Christmas Meal	To be planned	Wednesday 12 th

3 Welcome to New Members

Ray Challoner
Michael Whitman-Rivers

4 Access into the School Grounds and Observatory Tower

Please use the third gate into the school grounds, this is the gate behind the Gym. 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) alternatively the Observatory mobile is [REDACTED] during meeting hours.

5 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

6 New Session of Night Sky Section Meetings

If there is sufficient interest again I will restart meetings of the Night Sky Section. These will follow the same format as last year. The venue will again be on Nacton shores. No formal dates will be set, as meetings will take place on an ad hoc basis on Wednesdays. All you have to do is to ask me, and we can go down to Nacton shores for an observing session.



I would recommend bringing along a pair of binoculars, a torch and suitable footwear for walking down a potentially muddy lane. For those who are new to the society, here is a little background for the reason I implemented these meetings last year. New members have often mentioned that they are interested in Astronomy, but being beginners, they have only limited knowledge. One of their reasons to join us was to find like-minded people, with a greater knowledge than they have. Finding their way around the night sky held a high priority.

7 Observing Projects for 2007

Graze Occultations

Date	Star	Track Time
Tuesday 2 nd October	ZC797	01:34:12
Thursday 1 st November	ZC1221	01:53:24
Sunday 30 th December	μ Leo	03:04:37

Other Occultations

Pleiades	
Date	Time
23 rd February	22:30
6 th August	23:30
27 th October	23:30
21 st December	21:00

Venus	
Date	Time
18 th June	14:03

Luna Eclipse Mid eclipse 23:21 to 23:21, 3rd March

Meteor Watches

Showers	Maximum Date	Moon Age	Observing Date
Lyrids	April 22 nd	4 days	Saturday 21 st
η Aquarids	May 4 th	18 days	Saturday 5 th
Perseids	August 13 th	27 days	Saturday 11 th
Geminids	December 14 th	5 days	Saturday 15 th

Night Sky (February)

All times GMT

Moon

Full Moon	3rd Quarter	New Moon	1st Quarter
2 nd	10 th	17 th	24 th

Object	Date	2 Times		Mag.	Notes
		Rise	Set		
Sun	1	07:45	16:52		
	28	06:54	17:42		
Mercury	1	08:27	18:22	-0.5	Mercury is at greatest eastern elongation on the 17 th
	28	06:15	16:48		
Venus	1	08:44	18:58	-4.0	Venus is in Pisces this month
	28	07:49	20:26		
Mars	1	06:21	13:58	1.3	Mars is in Capricornus this month and may be visible in morning twilight
	28	05:42	13:59		
Jupiter	1	04:10	12:12	-2.0	Jupiter is in Ophiuchus this month
	28	02:43	10:39		
Saturn	1	17:33	08:27	0.0	Saturn is at opposition on the 10 th
	28	15:34	06:37		
Uranus	1	08:53	19:42	5.7	Uranus is in Aquarius
	28	07:09	18:04		
Neptune	1	08:05	17:27	7.8	Neptune is in conjunction on 28th
	28	06:21	15:47		

OCCULTATIONS DURING FEBRUARY

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	UT	D R	Lunar Phase	Sun Alt (d)	Star Alt (d)	Mag	Star
04 Feb	02:44:37 03:56:15	D R	0.97-	-43 -33	45 38	3.8	Rho Leo
19 Feb	18:20:10	D	0.06+	-11	14	5.8	XZ Psc
20 Feb	18:44:26	D	0.13+	-14	24	5.9	62 Psc
20 Feb	19:07:26 20:02:46	D R	0.13+	-18 -26	21 12	4.4	Delta Psc
22 Feb	19:02:38	D	0.32+	-16	46	7.2	Hip 12319
22 Feb	20:55:11 21:55:45	D R	0.33+	-33 -40	30 21	5.7	Mu Ari
23 Feb	22:51:03 23:32:42	D R	0.45+	-45 -47	24 18	5.4	Celaeno
23 Feb	22:55:45 23:52:23	D R	0.45+	-45 -48	24 15	4.3	Taygeta
23 Feb	23:10:15	D	0.45+	-46	22	7.2	1799-0184-1
23 Feb	23:13:33	D	0.45+	-46	21	3.9	Maia
24 Feb	00:01:21	R	0.46+	-48	14		
23 Feb	23:14:26	D	0.45+	-46	21	5.8	Asterope
24 Feb	00:09:18	R		-48	13		
23 Feb	23:17:06	D	0.45+	-46	21	6.4	Asterope
23 Feb	23:39:29	D	0.46+	-47	17	6.8	ZC 548
24 Feb	00:27:03	D	0.46+	-47	11	7.0	ZC 557
24 Feb	19:33:19	D	0.55+	-20	61	6.6	ZC 701
26 Feb	00:57:54	D	0.68+	-46	26	5.6	ZC 885
26 Feb	01:15:49	D	0.68+	-45	23	7.5	Hip 27613
26 Feb	02:15:09 02:33:27	D R	0.68+	-40 -38	15 12	4.6	136 Tau
26 Feb	02:49:31	D	0.69+	-36	10	7.0	Hip 28033
26 Feb	18:57:08	D	0.75+	-14	62	7.3	1888-1358-1
27 Feb	00:23:50	D	0.77+	-46	39	6.7	ZC 1042
28 Feb	02:05:46	D	0.86+	-40	30	7.1	ZC 1180
28 Feb	03:04:52	D	0.86+	-33	20	7.1	Hip 38287

James Appleton

Geminids Meteor Field Trip

James Appleton and Roy Gooding

Meteor watches were a well established part of society activities from the mid 1070s to the mid 1980s. In recent years these events have lapsed. In mid 2006 it was decided to restart meteor watches. The first one scheduled , was for the Persied show in August. This was cancelled due too cloudy skies. The Geminid watch was arranged for Saturday 9th December. The venue chosen was on top of the cliff, behind the refreshment hut, along High Road East Felixstowe.

Observations:

- 20:10 Arrived and set up. The sky was clear and Moonless with the Milky Way easily visible.
- 20:30 We watched the Moon rise over the sea on the SE horizon. The Moon was shinning through a layer of haze, which gave it a lovely deep orange colour. Members could almost discern the moons changing altitude, as it rose above horizon.
- 20:51 Martin Cook observed a Geminid meteor heading Gemini to the Pleiades. Duration < 1 second Magnitude 4?
- 21:03 Martin Cook observed a sporadic meteor, heading from Ursa Major to Gemini. Very brief duration.
- 21:42 Geminid meteor, heading from the middle of Gemini due south. Duration ~ 0.5 second. Magnitude 2 ?
- 22:25 Stopped observing

During the observing period the following objects were observed with a selection binoculars (10 x 50, 8 x 40) M31, M34, M35, M36, M37, M28, M42, M45, Hyades, Sword Handle cluster M33 doubtful

Members who attended the meeting were

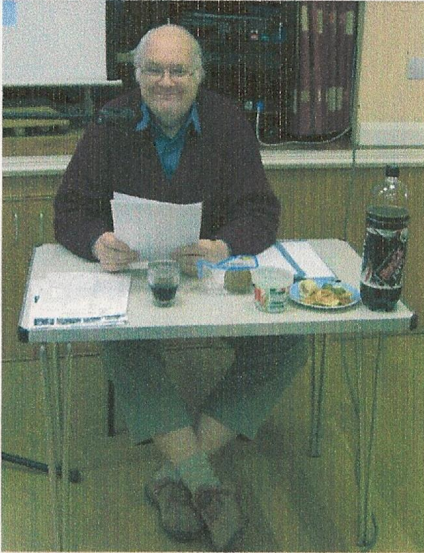
James Appleton, Martin Cook, Roy Gooding, Eric Sims, Pete Richards, Nicky Gillard, John Spicer, Carol Spicer, Paul Whiting, Gerry Pilling, Geoffrey Shepherd, Chris Shepherd

If you are interested in attending a meteor watch this year, three meetings are planned, to watch the η Aquarids, Perseids and Geminids

Astronomy Workshops

6th December 2006: Quiz Night

The December Quiz Night worked well, with eighteen contestants in four teams teams answering a mix of questions compiled by Paul Whiting, who also acted as Quizmaster. Six rounds of general knowledge were interspersed with three on astronomy, plus a picture quiz. The hall was nicely hung with Christmas decorations, and plentiful food and drink was brought along by members to make it a really enjoyable evening. The four teams jostled for position through the night but on the last round Team Pringles slipped in front to win, with each team member getting a large box of Celebrations chocolates to take away. Paul organised a raffle which meant that as a whole the evening even made a small profit! General conclusion – great fun, let's do it again next year! Some pictures from the event...



Left: Paul Whiting well stocked up for the arduous job of Quizmaster

Below: Teams in action



The victorious Team Pringles...



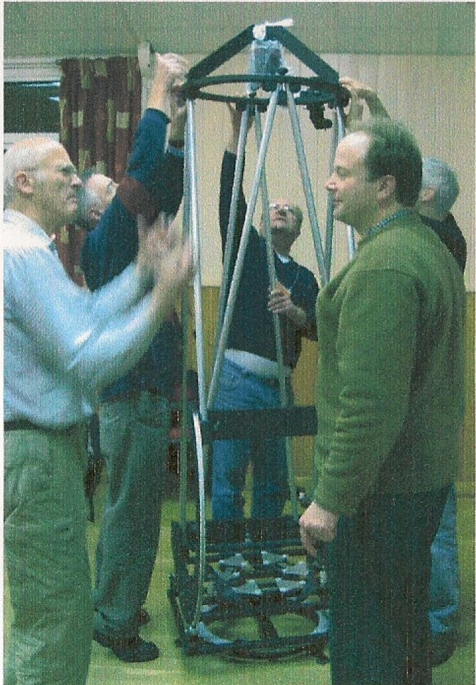
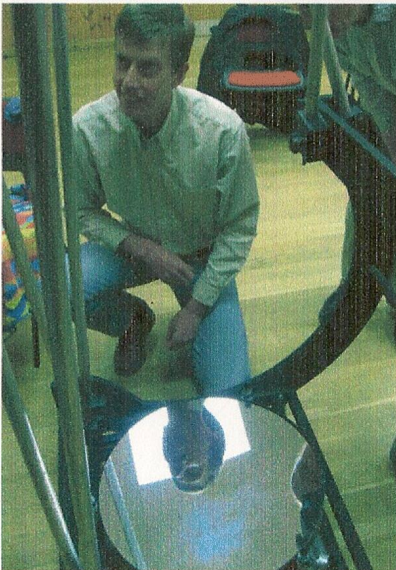
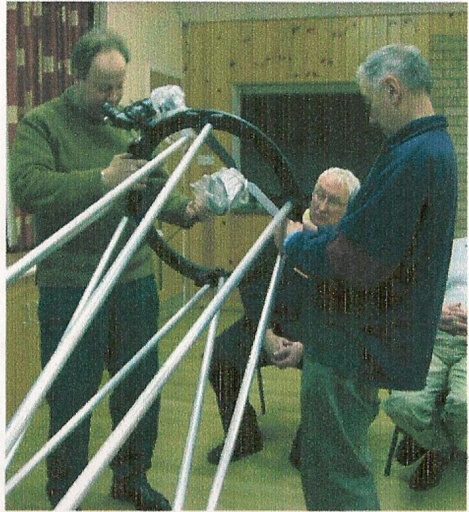
3rd January 2007: Second Light of the OASI Millennium Telescope

The Millennium Telescope was ready... but the sky wasn't! So sadly we didn't get to try out how well it performs - but led by Neil Morley we did see how the telescope is constructed, and members got a chance to get hands-on experience of assembling it and things to watch out for such as the difference between a long-short and a short-long pole. Lifting the mirror into its cradle is the most delicate task and it was left to master mirror grinder Mike Harlow to remove it from its special protective wrapping (an old towel of Paddy's by the look of it!) and place it onto the 18 point wiffle-tree suspension. In time the team aims to make a 'dustbin lid' cover to protect the mirror, enabling it to stay in situ and largely avoid the risk of damage during assembly - also speeding up the process. Neil also showed photos of various stages during telescope construction, and of other similar sized Dobsonian telescopes which has inspired or guided the design. So - disappointing not to see any astronomical objects but a great familiarisation exercise for the dozen or so members who came. As you will see in the revised workshop schedule following, we will have another attempt to find a clear sky on 14th February 2007 (Note - Gerry's talk is therefore now in March).

Below: Neil Morley with the telescope base, showing the 18 point wiffle-tree mirror mounting, bearing system etc.



Below: The importance of knowing which pole goes where – or else you get very confused later in the process!



Tea and biscuits were provided as usual by Pete and Nicky...



The workshops run on (usually) the first Wednesday of the month, starting at 7:45pm.

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

<p>14th February 07 Note – this is a 2nd Wednesday!</p>	<p>OASI Millennium Telescope Again! - another attempt to get a clear night for members to admire the view through the Millennium Telescope.</p>	<p>Neil Morley and the Millennium Telescope Construction Team</p>
<p>7th March 07 Note – this talk was going to be on 14th Feb – it has moved</p>	<p>Using the ETX and other telescopes This talk will be interactive and will include some advice for absolute beginners who are thinking of buying a telescope - which you will be free to disregard as you see fit!</p>	<p>Gerry Pilling and supporting cast of – well, whoever turns up.</p>
<p>4th April 07</p>	<p>Discovering RA and Dec The whys and wherefores of Right Ascension and Declination, which we use to give the position of astronomical objects</p>	<p>Paddy O'Sullivan</p>

Mike Whybray [redacted] (Mobile) [redacted] (Home)

IDAS Historical Information In OASI Library

The Ipswich and District Astronomical Society (IDAS) was a predecessor of OASI.

In 1948, approximately 25 members of the Ipswich and District Natural History Society (IDNHS) visited Orwell Park Observatory. Mr N H Wilkinson, then Headmaster of Orwell Park School, together with Mr R L T Clarkson and Mr D J Fulcher, members of IDNHS, hosted the visit. The visit was a great success, and approximately a month later at a meeting in Ipswich Museum meeting room chaired by Clarkson, those present agreed to form an astronomical section of IDNHS. Fulcher was elected leader of the new section. The new section first met in early 1949, and by the early 1950s it had separated from IDNHS and become IDAS. Clarkson became the first president of IDAS and Fulcher its first honorary secretary.

IDAS' activities included: lecture meetings and film meetings; star parties at members' homes; telescope construction; visiting Orwell Park Observatory to use the 10" refractor; visiting Cambridge University Observatories and Norwich Astronomical Society; and publishing a monthly newsletter, *The Stargazer*.

Initially, IDAS thrived. During 1951, an IDAS film show was attended by over 100 people and by the end of 1951 membership had grown to 91. IDAS' membership fees started at 3/6 per annum and rose to 7/6 by the late 1950s. Total revenue during the early 1950s was approximately £50 *per annum* (a considerable sum in those days!)

In February 1954, Clarkson was honoured when the lunar crater Gassendi A was renamed *Clarkson* in honour of his work on mapping the Moon. (Clarkson contributed his work to the BAA Lunar Section.) Subsequently, the International Astronomical Union rationalised lunar naming and returned the crater to its original name. The crater, which is 33km in diameter, is easily visible with a small telescope.

IDAS' decline began in September 1955, when the then honorary secretary, Mr C R Munford, left the district and the post could not be filled. Without an honorary secretary, IDAS was unable to run a full programme of events, membership gradually declined, and in mid-1957 the Society ceased to function.

Several members of IDAS later joined OASI. Among them was John Barbrook, currently a member of OASI. John has kept his collection of IDAS newsletters and other literature, spanning the period 1951-57. I have scanned these onto a CD ROM and printed them out. Both the CD and paper printout are stored in a folder in the OASI library and may be borrowed by members of OASI. Thanks are due to John for making the IDAS material available.

James Appleton
29 December 2006



**Institute of
Astronomy,
Madingley Road,
Cambridge.**

**OASI members are
invited to come along
to the second SPA
Convention.**



The Hoyle Building at the IoA, Cambridge

Admission to the event is **FREE**, and there is plenty of car parking space.

The main themes for the day will be **ASTRO IMAGING** and **PLANETARY ASTRONOMY** with Nik Szymanek, Mike Hezlewood and Ian Phelps.

The main lecture is by Prof Fred Taylor (University of Oxford) on "**VENUS AND THE VENUS EXPRESS MISSION**". The SPA are asking for requests for tickets for the Fred Taylor Lecture to ensure that the capacity of the lecture theatre is not exceeded. To reserve your seat for this lecture, send your name, SPA membership no. (if applicable) and full postal address to:

SPA Convention, [REDACTED], Keyworth, Nottingham. NG12 5DU.
or e-mail the same details to secretary@popastro.com

Also...

- Displays by SPA Observing Sections
- Society for the History of Astronomy
- Trade Stands
- SPA Merchandise
- Grand Prize Raffle

Schedule of the Day

- 10:00am - Welcome by SPA President, Ian Crawford
- 10:15am - Talk - "Pixel Magic - Getting the best from your Astro Photography"
- 11:00am - Coffee Break - Chance to tour the Trade Stands
- 11:30am - Interactive Forum - All your Astro Photography questions answered on starting up and processing your results (with demonstrations)
- 12:30pm - Lunch Break - Join one of the tours to view the historic Institute of Astronomy Telescopes and an opportunity to observe Venus, if clear skies!
- 1:30pm - Talk - "Saturn and the Terran Planets"
- 2:30pm - Tea Break - Make sure you visit the SPA Merchandise Stand
- 3:00pm - Main Lecture - "VENUS AND THE VENUS EXPRESS MISSION"
- 4:00pm - Late Tea Break - Last chance to tour the Trade Stands
- 4:30pm - Talk - "Instruments for Planetary Observing"
- 5:15pm - Draw of Raffle
- 5:30pm - Convention closes

AGM 2007



This year's AGM (held on Saturday 13th January) was a rather better attended event than we have become used to in recent years, a sign of a keener level of interest in the running of the society or perhaps a reflection of the level of concern regarding our access and occupation at Orwell Park..!

To deal with the latter point first, Ken Goward (who despite his best efforts to get unseated, was re-elected to the Chair) explained that a major meeting was to take place some time in February between representatives of the society and those of the Orwell Park School Governors and Business management. In the – *hopefully* – unlikely event of anything arising that could fundamentally alter our operations at Orwell Park, the whole membership would be consulted at an Extraordinary General Meeting.

Due to changed domestic circumstances, Garry Coleman stood down from the Treasurer's post and Mike Harlow was elected for the second time as Treasurer. In Garry's final report he stated that our overall surplus over expenditure for 2006 was just a fiver, an improvement over recent years! He urged all tax paying members to sign the gift aid declaration on their membership renewal forms as this was the major reason for not showing an overall loss.

Ted Sampson also stood down from the Committee after a successful eight-year stint in which time he has transformed OASI's approach to the training of telescope operators and the coaching of those new to astronomy via the Astronomy Workshops, now ably taken over by Mike Whybray. Peter Richards was elected onto full membership of the Committee and all other Officers and Committee members remain in place.

Suggestions were sought from the floor regarding potential new equipment acquisitions and it was generally felt that if we could somehow find the funds, the purchase of a Coronado Personal Solar Telescope (PST) would be desirable. A period of general discussion followed regarding problems encountered by members trying to gain access to the Observatory and this useful exercise resulted in some constructive suggestions to be taken forward when the above mentioned school meeting takes place.

Finally, our thanks – *as ever* – go to Pete Richards and Nicky Gillard for their timely provision of teas and biscuits before the general discussion period!

NB We hope to feature an illustrated report on the highly successful **BBA/OASI Back to Basics Workshop** – our first 40th anniversary event - in the next edition.

50 YEARS OF THE SKY AT NIGHT

Can there be many or even any amateur astronomers these days who have not in some way had their fascination for the science encouraged by the writings and TV appearances of Sir Patrick Moore? Many professional astronomers, too, will say that Sir Patrick has been a major influence on their lives and careers.

To celebrate the 50th anniversary of the BBC's 'Sky at Night' programme on 13th February the Royal Mail will be releasing a special set of stamps featuring images of deep sky objects selected by Sir Patrick from his 'Caldwell' catalogue. Patrick's first surname is actually Caldwell and he devised the catalogue to show his own favourite objects. The programme is now in the Guinness Book of Records for the longest run with the same presenter – in all those 50 years Patrick has missed just one edition, when he suffered a spout of food poisoning after eating a Duck Egg!

The first four stamps are Hubble images and the latter two are ground based from American astronomers Robert Gendler and John Kormendy. Viz:

1st Class – Saturn Nebula C55

A favourite of amateur astronomers named after the Saturn-like shape of the nebula. Discovered by William Herschel in 1782, the Saturn Nebula is about 1,400 light years from the Sun and can be found in the constellation of Aquarius.

1st Class – Eskimo Nebula C39

A planetary nebula with a bright central star. Discovered by William Herschel in 1787 the Eskimo Nebula is about 4,000 light years from the Sun and can be found in the constellation of Gemini.

50p – Cat's Eye Nebula C6

A bright and complex planetary nebula with a bright central star forming the glint in the Cat's Eye. Discovered by William Herschel in 1786, the Cat's Eye Nebula is about 3,000 light years from the Sun and can be found in the constellation of Draco.

50p - Helix Nebula C63

Easily seen with binoculars, the helical structure gives this nebula its name. Its central star is a very hot dwarf. At 450 light years from the Sun it is the closest nebula to the Earth and can be found in the constellation of Aquarius.

72p – Flaming star Nebula C31

The distinctive purple colour of the nebula is caused by ionising radiation from the Flaming Star, AE Aurigae, a runaway star from the Orion Nebula. The Flaming Star Nebula is 1,600 light years from the Sun and can be found in the constellation of Auriga.

72p - The Spindle C53

A lenticular galaxy with a bright nucleus, The Spindle contains a black hole that is about one billion times the size of the Sun. Visible with powerful binoculars The Spindle is 32 million light years from the Sun near the constellation of Sextans.



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Presentation packs, first day covers etc will be available from Post Office branches or via the Royal Mail orderline ☎ 08457 641 641 or on-line at www.royalmail.com

OASI Committee Contacts & Responsibilities

Kenneth J. Goward FRAS	Chairman	☎		Press & Publicity with Secretary.
Roy Gooding	Secretary	☎		MAIN POINT OF SOCIETY CONTACT Press Publicity with Chairman. Observatory Decoration. Visits by potential new members.
Mike Harlow	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.
Peter Richards	Committee	☎		Lecture Meetings. School Lighting liaison. Email Distribution Lists.
Eric Sims	Committee	☎		Newsletter.
Mike Whybray	Committee	☎		Librarian & Workshops.
Paul Whiting FRAS	Committee	☎		Visits by outside groups.
Bill Barton FRAS	Committee	☎		Safety & Security.

Diary for February

Monday 12 th & 19 th FROM 8.30PM	SMALL TELESCOPES OBSERVING NIGHTS (STONS) Target: Gemini ☎ Paddy O'Sullivan [REDACTED]
Wednesday 14th 7.45pm Nacton Village Hall	ASTRONOMY WORKSHOP A second chance to use the OASI 19" Millennium Telescope. (See article inside) ☎ Mike Whybray [REDACTED]
Wednesday 7 th 14 th 21 st 28 th FROM 8PM	OBSERVATORY CLUB NIGHTS ☎ Martin Cook [REDACTED] (mobile) [REDACTED] ☎ Roy Gooding [REDACTED] (mobile) [REDACTED]
Thursday 7.45pm	VISIT BY OUTSIDE GROUP ☎ Paul Whiting FRAS [REDACTED] 15th - 3rd Woodbridge Brownies Date to be advised - Ipswich Girls Brigade

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

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]



Would members please note that until further notice, access fobs will only activate the car park gate and Observatory tower doors from 8pm.

Presentation packs, first day covers etc. will be available from the Society Office, or via the Royal Mail ordering system.